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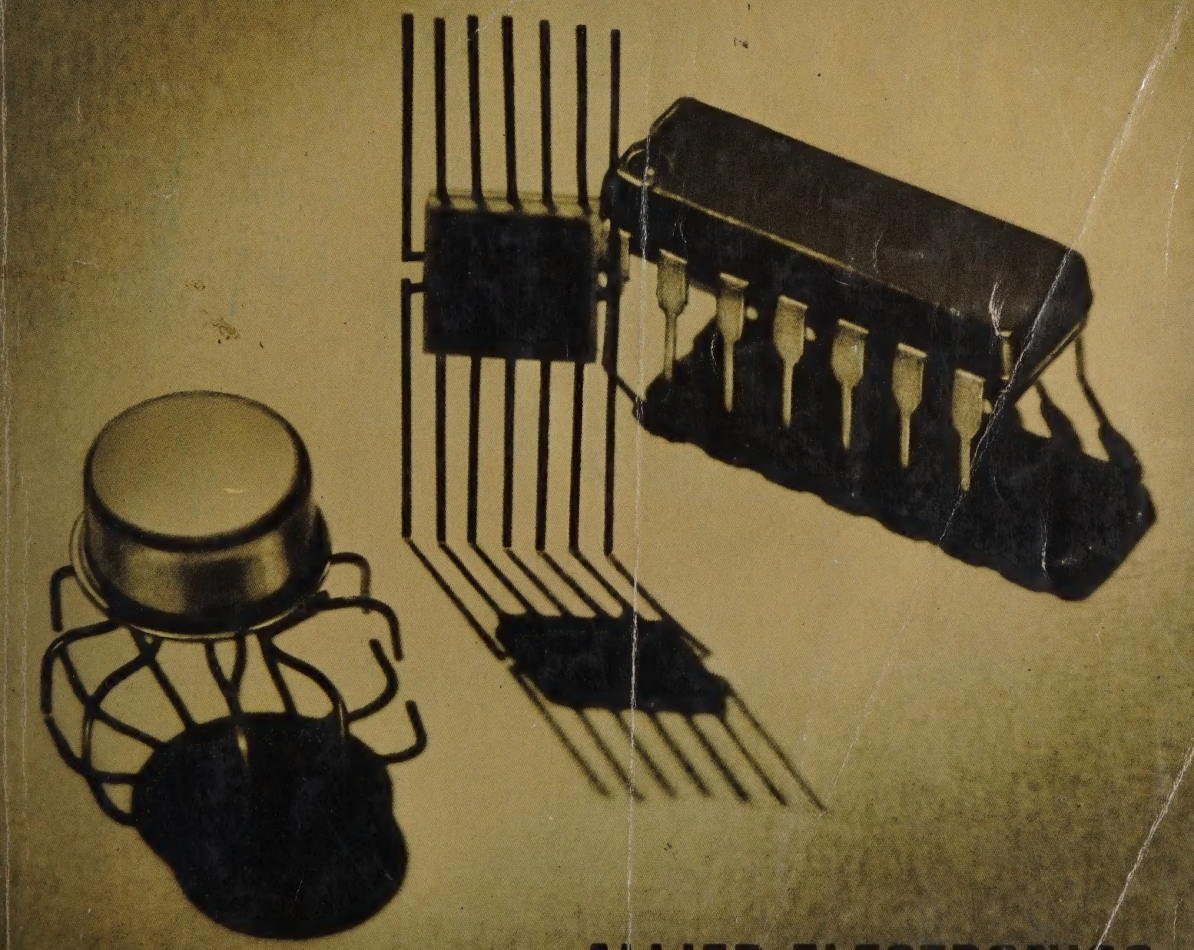
1971 INDUSTRIAL CATALOG

OUR 50TH YEAR • CATALOG 710 • INDEX: PAGE 606



ALLIED ELECTRONICS

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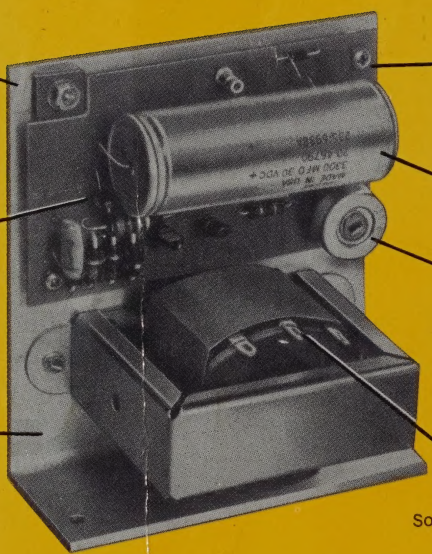

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Allied Electronics distributes all Wanlass power products for any requirement. Ask your Allied man for details on items not listed in the pages of this catalog.

WANLASS POWER

*Allied price, 50-up units.

See Wanlass Listings on Pages 410, 411

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Buyer's Guide

Make this 1971 Catalog your buying guide for electronics throughout the year. You'll find complete lines of just about everything you need. You pay OEM prices and get fastest service.

Handy Reference Directory

• CURRENT OEM PRICES • STOCKED IN DEPTH

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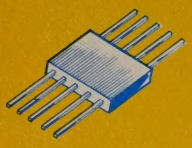
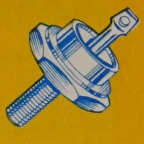

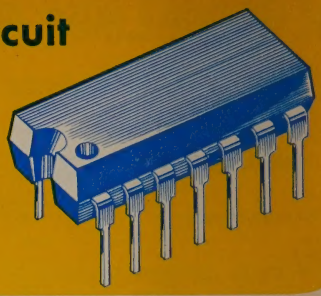

- We have the nation's most complete inventory
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- New types stocked as soon as released
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We have included specifications on many of the units listed in our Integrated Circuit and Semiconductor Directory. Starting on Page 41 you'll find useful descriptions and engineering parameters. It's another Allied convenience to assist you in ordering "exactly" what you want.

INTEGRATED CIRCUIT DIRECTORY (See Page 7)

Features complete lines of integrated circuits from these leading manufacturers: RCA, Texas Instruments, Motorola, Philco-Ford, Sylvania and Sprague. Full specifications begin on page 41.

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He's an expert on your electronic needs, knows how to serve and advise you. He's backed by the world's most complete and up-to-the-minute stocks. He'll see that your order is shipped promptly at the lowest OEM prices in effect at time of shipment. Contact him for price and delivery information on large production quantities. There are 16 Allied facilities to serve you —see page 3 or back cover for locations, phone and Telex numbers.

IMPORTANT ORDERING INFORMATION

Be Sure to Specify the Manufacturer's Name and Type Number When Ordering. As New Types Are Released by Manufacturers, Allied Electronics Will Stock Them. At Our Discretion, We Ship the Better Tolerance Device at the Same Price.

SEMICONDUCTORS

Mfrs. Name Key	Manufacturer	Mfrs. Name Key	Manufacturer
ECC	Electronic Controls Corp.	ST	Sarkes-Tarzian
IR	International Rectifier	SYL	Sylvania
MOT	Motorola	TI	Texas Instruments
RCA	RCA Corporation	VA	Varo
SPR	Sprague	...	.....

INTEGRATED CIRCUITS

Mfr's Name Key	Manufacturer	Mfr's Name Key	Manufacturer
MOT	Motorola	SYL	Sylvania
PHI	Philco-Ford	SPR	Sprague
RCA	RCA Corporation	TI	Texas Instruments

PAGE GUIDE TO ENGINEERING SPECS

We have included the most-often-asked-for specifications on most of the units listed in the Semiconductor and Integrated Circuit Directory.

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All Semiconductor and Integrated Circuit Orders Are Billed At Lowest Prices in Effect at Time of Shipment

INTEGRATED CIRCUIT ACCESSORIES

We have complete stocks of IC sockets, breadboards and test sockets. American Pamcor sockets are on page 104. Augat sockets are on page 104, 323 and 324. Cinch-Jones sockets are on page 326. Sockets by Elco are on 325.

At Our Discretion, We Ship the Better Tolerance Device at the Same Price

SEE PAGE 17 FOR SEMICONDUCTORS

RCA Type No.	EACH 1-9	10-99	100-999	1000-Up
CA3000	4.56	3.80	2.76	2.30
CA3001	6.66	5.55	4.00	3.35
CA3002	4.45	3.71	2.70	2.25
CA3004	4.45	3.71	2.70	2.25
CA3005	2.98	2.48	1.80	1.50
CA3006	6.96	5.80	4.20	3.50
CA3007	6.42	5.35	3.90	3.25
CA3008	4.17	3.47	2.52	1.96
CA3008A	6.72	5.60	4.08	3.40
CA3010	3.14	2.61	1.90	1.58
CA3010A	5.75	4.79	3.48	2.90
CA3011	1.77	1.47	1.07	.89
CA3012	2.19	1.82	1.32	1.10
CA3013	2.58	2.15	1.56	1.30
CA3014	2.98	2.48	1.80	1.50
CA3015	4.75	3.96	2.88	2.40
CA3015A	7.73	6.44	4.68	3.90
CA3016	5.75	4.79	3.48	2.90
CA3016A	8.70	7.25	5.30	4.40
CA3018	1.95	1.62	1.18	.98
CA3018A	2.67	2.22	1.62	1.35
CA3019	1.95	1.62	1.18	.98
CA3020	3.07	2.56	1.86	1.55
CA3020A	3.92	3.26	2.37	1.98
CA3021	3.77	3.14	2.28	1.90
CA3022	3.17	2.64	1.92	1.60
CA3023	3.07	2.56	1.86	1.55
CA3026	2.47	2.06	1.50	1.25
CA3028A	1.77	1.47	1.07	.89
CA3028B	2.47	2.06	1.50	1.25
CA3029	1.95	1.62	1.18	.98
CA3029A	3.77	3.14	2.28	1.90
CA3030	3.14	2.61	1.90	1.58
CA3030A	5.75	4.79	3.48	2.90
CA3033	5.75	4.79	3.48	2.90
CA3033A	9.70	8.09	5.88	4.90
CA3035	2.98	2.48	1.80	1.50
CA3035V1	2.98	2.48	1.80	1.50
CA3036	1.77	1.47	1.07	.89
CA3037	3.77	3.14	2.28	1.90
CA3037A	5.75	4.79	3.48	2.90
CA3038	5.75	4.79	3.48	2.90
CA3038A	7.72	6.44	4.68	3.90
CA3039	1.93	1.61	1.17	.98
CA3040	5.84	4.87	3.54	2.95
CA3041	2.47	2.06	1.50	1.25
CA3042	2.47	2.06	1.50	1.25
CA3043	3.37	2.81	2.04	1.70
CA3044	2.77	2.31	1.66	1.40
CA3044V1	2.77	2.31	1.68	1.40
CA3045	2.97	2.47	1.80	1.50
CA3046	1.94	1.61	1.17	.98
CA3047	3.13	2.61	1.90	1.58
CA3047A	5.75	4.79	3.48	2.90
CA3048	4.85	4.04	2.94	2.45
CA3049	3.86	3.22	2.34	1.95
CA3050	4.45	3.71	2.70	2.25
CA3051	3.27	2.72	1.98	1.65
CA3052	3.77	3.14	2.28	1.90
CA3053	.97	.81	.59	.49
CA3054	2.47	2.06	1.50	1.25
CA3055	5.83	4.86	3.54	2.95
CA3059	3.84	3.20	2.35	1.95
CA3060	11.79	9.82	7.14	5.95
CA3064	2.77	2.31	1.68	1.40
CA3065	2.77	2.31	1.68	1.40
CA3075	2.77	2.31	1.68	1.40
CA3076	3.17	2.64	1.92	1.60
CD2100	7.44	6.20	4.50	3.75
CD2101	7.80	6.50	4.75	3.95
CD2150	4.75	3.96	2.88	2.40
CD2151	4.75	3.96	2.88	2.40
CD2152	4.75	3.96	2.88	2.40
CD2153	6.24	5.20	3.80	3.15
CD2154	6.24	5.20	3.80	3.15
CD2155D	27.84	23.20	19.20	16.00
CD2200	6.24	5.20	3.80	3.15
CD2200D	6.24	5.20	3.80	3.15
CD2201	6.54	5.45	3.95	3.30
CD2201D	6.54	5.45	3.95	3.30
CD2202	6.54	5.45	3.95	3.30
CD2202D	6.54	5.45	3.95	3.30
CD2203	8.34	6.95	5.05	4.20
CD2203D	8.34	6.95	5.05	4.20
CD2204	4.45	3.71	2.70	2.25
CD2204D	4.45	3.71	2.70	2.25
CD2205	6.24	5.20	3.80	3.15
CD2205D	6.24	5.20	3.80	3.15
CD2500E	13.38	11.14	8.10	6.75
CD2501E	13.38	11.14	8.10	6.75
CD2502E	13.82	11.60	9.60	8.00
CD2503E	13.82	11.60	9.60	8.00
CD4000	9.90	8.25	6.20	5.00
CD4000D	7.92	6.60	4.80	4.00
CD4001	11.40	9.50	6.90	5.75
CD4001D	9.42	7.85	5.70	4.75
CD4002	10.92	9.10	6.60	5.50
CD4002D	8.94	7.45	5.40	4.50
CD4004	19.14	15.95	13.20	11.00
CD4004T	17.40	14.50	12.00	10.00
CD4005	19.14	15.95	13.20	11.00
CD4005D	17.40	14.50	12.00	10.00
CD4007	7.92	6.60	4.80	4.00
CD4007D	5.94	4.95	3.60	3.00
CD4006	31.80	26.50	21.90	18.25
CD4006D	30.00	25.00	20.70	17.25
CD4008	29.58	24.65	20.40	17.00

RCA Type No.	EACH 1-9	10-99	100-999	1000-Up
CD4008D	27.84	23.20	19.20	16.00
CD4009D	13.86	11.55	8.40	7.00
CD4010D	13.86	11.55	8.40	7.00
CD4011	11.40	9.50	6.90	5.75
CD4011D	9.42	7.85	5.70	4.75
CD4012	10.92	9.10	6.60	5.50
CD4012D	8.94	7.45	5.40	4.50
CD4014D	23.65	19.72	16.32	13.60
CD4015	25.44	21.20	17.50	14.60
CD4015D	23.67	19.72	16.32	13.60
CD4016	16.27	13.56	11.22	9.35
CD4016D	14.53	12.11	10.02	8.35
CD4017D	24.00	20.00	16.55	13.80
CD4018D	26.10	21.75	18.00	15.00
CD4019D	13.86	11.55	8.40	7.00

Texas Ins. Type No.	EACH 1-9	10-24	25-99	100-Up
ECL2500N	7.37	6.14	4.87	4.18
ECL2501N	7.37	6.14	4.87	4.18
ECL2502N	10.18	8.48	6.72	5.76
ECL2503N	10.18	8.48	6.72	5.76
ECL2504N	10.18	8.48	6.72	5.76
ECL2505N	8.91	7.42	5.88	5.04
ECL2506N	13.99	11.66	9.24	7.92
ECL2507N	12.97	10.81	8.57	7.34
ECL2508N	15.77	13.14	10.42	8.93
ECL2509N	11.70	9.75	7.73	6.62
ECL2510N	13.99	11.66	9.24	7.92
ECL2511N	9.79	8.16	6.47	5.54
ECL2512N	19.33	16.11	12.77	10.94
ECL2513N	11.70	9.75	7.73	6.62
ECL2520N	8.52	7.10	5.63	4.82
ECL2521N	9.16	7.63	6.05	5.18
ECL2522N	9.16	7.63	6.05	5.18
ECL2523N	9.16	7.63	6.05	5.18
ECL2530N	7.37	6.14	4.87	4.18
ECL2531N	7.63	6.36	5.04	4.32
ECL2536N	9.79	8.16	6.47	5.54
ECL2537N	9.79	8.16	6.47	5.54
ECL2540N	9.79	8.16	6.47	5.54

RCA Type No.	EACH
KC4000	5.95
KC4001	6.50
KC4002	4.95
KC4003	8.95
KC4004	10.95
KC4005	7.95
KC4006	7.95
KC4007	10.95
KC4008	10.95
KC4009	10.95
KC4010	10.95
KC4500	4.75
KD2105	9.95
KD2106	2.75
KD2117	4.40

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC301F	15.18	12.65	10.15	8.45
MC301G	13.86	11.55	9.25	7.70
MC302F	17.82	14.85	11.90	9.90
MC302G	16.44	13.70	11.00	9.15
MC303F	20.04	16.70	13.40	11.15
MC303G	18.72	15.60	12.50	10.40
MC304F	10.08	8.40	6.70	5.60
MC304G	8.70	7.25	5.80	4.85
MC305F	10.08	8.40	6.70	5.60
MC305G	8.70	7.25	5.80	4.85
MC306F	13.56	11.30	9.05	7.55
MC306G	12.24	10.20	8.15	6.80
MC307F	13.56	11.30	9.05	7.55
MC307G	12.24	10.20	8.15	6.80
MC308F	22.56	18.80	15.05	12.55
MC308G	21.24	17.70	14.15	11.80
MC309F	16.44	13.70	11.00	9.15
MC309G	15.12	12.60	10.10	8.40
MC310F	16.44	13.70	11.00	9.15
MC310G	15.12	12.60	10.10	8.40
MC311F	16.44	13.70	11.00	9.15
MC311G	15.12	12.60	10.10	8.40
MC312AF	20.04	16.70	13.40	11.15
MC312AG	18.72	15.60	12.50	10.40
MC312F	20.04	16.70	13.40	11.15
MC312G	18.72	15.60	12.50	10.40
MC313F	22.02	18.35	14.70	12.25
MC314F	26.34	21.95	17.60	14.65
MC314G	25.02	20.85	16.70	13.90
MC315F	29.22	24.35	19.50	16.25
MC315G	27.90	23.25	18.60	15.50
MC316F	13.56	11.30	9.05	7.55
MC316G	12.24	10.20	8.15	6.80
MC317F	13.56	11.30	9.05	7.55
MC317G	12.24	10.20	8.15	6.80
MC318F	13.56	11.30	9.05	7.55
MC318G	12.24	10.20	8.15	6.80
MC351F	7.74	6.45	5.65	5.15
MC351G	5.46	4.55	4.00	3.65
MC352AF	7.74	6.45	5.65	5.15
MC352AG	5.46	4.55	4.00	3.65
MC352F	7.74	6.45	5.65	5.15

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Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC352G	5.46	4.55	4.00	3.65
MC353F	9.54	7.95	7.20	6.25
MC353G	7.14	5.95	5.20	4.75
MC354F	5.34	4.45	4.15	3.45
MC354G	2.94	2.45	2.15	1.95
MC355F	5.76	4.80	4.45	3.75
MC355G	3.36	2.80	2.45	2.25
MC356F	6.66	5.55	5.15	4.35
MC356G	4.26	3.55	3.15	2.85
MC357F	6.66	5.55	5.15	4.35
MC357G	4.26	3.55	3.15	2.85
MC358AF	13.80	11.50	10.35	9.10
MC358AG	11.40	9.50	8.35	7.60
MC358F	13.80	11.50	10.35	9.10
MC358G	11.40	9.50	8.35	7.60
MC359F	6.84	5.70	5.25	4.45
MC359G	4.44	3.70	3.25	2.95
MC360F	6.84	5.70	5.25	4.45
MC360G	4.44	3.70	3.25	2.95
MC361F	6.84	5.70	5.25	4.45
MC361G	4.44	3.70	3.25	2.95
MC362AF	8.22	6.85	6.05	5.50
MC362AG	6.00	5.00	4.40	4.00
MC362F	8.22	6.85	6.05	5.50
MC362G	6.00	5.00	4.40	4.00
MC363F	8.82	7.35	6.50	5.90
MC364F	14.64	12.20	10.70	9.75
MC364G	12.90	10.75	9.45	8.60
MC365F	13.26	11.05	9.75	8.85
MC365G	11.04	9.20	8.10	7.35
MC366F	9.72	8.10	7.15	6.50
MC366G	7.50	6.25	5.50	5.00
MC367F	9.00	7.50	6.60	6.00
MC367G	6.72	5.60	4.95	4.50
MC368F	9.00	7.50	6.60	6.00
MC368G	6.72	5.60	4.95	4.50
MC369F	8.70	7.25	6.40	5.80
MC369G	6.54	5.45	4.80	4.35
MC400F	5.10	4.25	3.40	2.85
MC400L	4.86	4.05	3.25	2.70
MC400P	2.70	2.70	2.25	1.90
MC401F	5.10	4.25	3.40	2.85
MC401L	5.28	4.40	3.55	2.95
MC401P	2.70	2.70	2.25	1.90
MC402F	5.10	4.25	3.40	2.85
MC402L	4.86	4.05	3.25	2.70
MC402P	2.70	2.70	2.25	1.90
MC403F	5.10	4.25	3.40	2.85
MC403L	4.86	4.05	3.25	2.70
MC403P	2.70	2.70	2.25	1.90
MC404F	5.10	4.25	3.40	2.85
MC404L	5.28	4.40	3.55	2.95
MC404P	2.70	2.70	2.25	1.90
MC405F	5.10	4.25	3.40	2.85
MC405L	5.28	4.40	3.55	2.95
MC405P	2.70	2.70	2.25	1.90
MC406F	5.10	4.25	3.40	2.85
MC406L	5.28	4.40	3.55	2.95
MC406P	2.70	2.70	2.25	1.90
MC407F	5.82	4.85	3.90	3.25
MC407L	5.28	4.40	3.55	2.95
MC407P	2.94	2.94	2.45	2.10
MC408F	5.10	4.25	3.40	2.85
MC408L	4.86	4.05	3.25	2.70
MC408P	2.70	2.70	2.25	1.90
			1000-4999 Ea.	1.75
MC409F	3.66	3.05	2.45	2.05
MC409L	3.30	2.75	2.20	1.85
MC409P	1.92	1.92	1.60	1.37
			1000-4999 Ea.	1.25
MC410F	3.66	3.05	2.45	2.05
MC410L	3.30	2.75	2.20	1.85
MC410P	1.92	1.92	1.60	1.37
			1000-4999 Ea.	1.25
MC411F	3.66	3.05	2.45	2.05
MC411L	3.30	2.75	2.20	1.85
MC411P	1.92	1.92	1.60	1.37
			1000-4999 Ea.	1.25
MC412F	5.10	4.25	3.40	2.85
MC412L	4.86	4.05	3.25	2.70
MC412P	2.70	2.70	2.25	1.90
			1000-4999 Ea.	1.75

SEE PAGE 17 FOR SEMICONDUCTORS

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Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC413F	5.82	4.85	3.90	3.25
MC413L	5.28	4.40	3.55	2.95
MC413P	2.94	2.94	2.45	2.10
			1000-4999 Ea.	1.90
MC414F	5.82	4.85	3.90	3.25
MC414L	5.28	4.40	3.55	2.95
MC414P	2.94	2.94	2.45	2.10
			1000-4999 Ea.	1.90
MC415F	6.84	5.70	4.55	3.80
MC415L	7.74	6.45	5.15	4.30
MC415P	3.84	3.84	3.20	2.70
			1000-4999 Ea.	2.45
MC416F	6.84	5.70	4.55	3.80
MC416L	7.74	6.45	5.15	4.30
MC416P	3.84	3.84	3.20	2.70
			1000-4999 Ea.	2.45
MC417F	6.84	5.70	4.55	3.80
MC417L	7.74	6.45	5.15	4.30
MC417P	3.84	3.84	3.20	2.70
			1000-4999 Ea.	2.45
MC418F	6.84	5.70	4.55	3.80
MC418L	7.74	6.45	5.15	4.30
MC418P	3.84	3.84	3.20	2.70
			1000-4999 Ea.	2.45
MC419F	5.82	4.85	3.90	3.25
MC419L	5.82	4.85	3.90	3.25
MC419P	2.94	2.94	2.45	2.10
			1000-4999 Ea.	1.90
MC420F	5.10	4.25	3.40	2.85
MC420L	5.94	4.95	3.95	3.30
MC420P	2.94	2.94	2.45	2.10
			1000-4999 Ea.	1.90
MC421F	7.08	5.90	4.75	3.95
MC421L	6.36	5.30	4.25	3.55
MC421P	3.48	3.48	2.90	2.45
			1000-4999 Ea.	2.25
MC422F	10.50	8.75	7.00	5.85
MC422L	10.50	8.75	7.00	5.85
MC422P	5.28	5.28	4.40	3.75
			1000-4999 Ea.	3.40
MC423F	10.50	8.75	7.00	5.85
MC423L	10.50	8.75	7.00	5.85
MC423P	5.28	5.28	4.40	3.75
			1000-4999 Ea.	3.40
MC424F	10.50	8.75	7.00	5.85
MC424L	10.50	8.75	7.00	5.85
MC424P	5.28	5.28	4.40	3.75
			1000-4999 Ea.	3.40
MC425F	5.82	4.85	3.90	3.25
MC425L	5.28	4.40	3.55	2.95
MC425P	3.30	3.30	2.75	2.30
			1000-4999 Ea.	2.10
MC426F	5.82	4.85	3.90	3.25
MC426L	5.82	4.85	3.90	3.25
MC426P	3.30	3.30	2.75	2.30
			1000-4999 Ea.	2.10
MC427F	5.10	4.25	3.40	2.85
MC427L	5.10	4.25	3.40	2.85
MC427P	2.70	2.70	2.25	1.90
			1000-4999 Ea.	1.75
MC428F	5.10	4.25	3.40	2.85
MC428L	5.10	4.25	3.40	2.85
MC428P	2.04	2.04	1.70	1.44
			1000-4999 Ea.	1.30
MC450F	4.20	3.50	2.80	2.35
MC450L	3.84	3.20	2.60	2.15
MC450P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC451F	4.20	3.50	2.80	2.35
MC451L	4.32	3.60	2.90	2.40
MC451P	2.40	2.40	2.00	1.70
			1000-4999 Ea.	1.55
MC452F	4.20	3.50	2.80	2.35
MC452L	3.84	3.20	2.60	2.15
MC452P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC453F	4.20	3.50	2.80	2.35
MC453L	3.84	3.20	2.60	2.15
MC453P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC454F	4.20	3.50	2.80	2.35
MC454L	4.32	3.60	2.90	2.40
MC454P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC455F	4.20	3.50	2.80	2.35
MC455L	4.32	3.60	2.90	2.40
MC455P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC456F	4.20	3.50	2.80	2.35
MC456L	4.32	3.60	2.90	2.40
MC456P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC457F	4.92	4.10	3.30	2.75
MC457L	4.32	3.60	2.90	2.40
MC457P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC458F	4.20	3.50	2.80	2.35
MC458L	3.84	3.20	2.60	2.15
MC458P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC459F	3.66	3.05	2.45	2.05
MC459L	3.30	2.75	2.20	1.85
MC459P	1.92	1.92	1.60	1.37
			1000-4999 Ea.	1.25
MC460F	3.66	3.05	2.45	2.05
MC460L	3.30	2.75	2.20	1.85
MC460P	1.92	1.92	1.60	1.37
			1000-4999 Ea.	1.25
MC461F	3.66	3.05	2.45	2.05
MC461L	3.30	2.75	2.20	1.85
MC461P	1.92	1.92	1.60	1.37
			1000-4999 Ea.	1.25
MC462F	4.20	3.50	2.80	2.35
MC462L	3.84	3.20	2.60	2.15
MC462P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC463F	4.92	4.10	3.30	2.75
MC463L	4.32	3.60	2.90	2.40
MC463P	2.40	2.40	2.00	1.70
			1000-4999 Ea.	1.55
MC464F	4.92	4.10	3.30	2.75
MC464L	4.32	3.60	2.90	2.40
MC464P	2.40	2.40	2.00	1.70
			1000-4999 Ea.	1.55
MC465F	5.76	4.80	3.85	3.20
MC465L	6.18	5.15	4.15	3.45
MC465P	3.12	3.12	2.60	2.20
			1000-4999 Ea.	2.00
MC466F	5.76	4.80	3.85	3.20
MC466L	6.18	5.15	4.15	3.45
MC466P	3.12	3.12	2.60	2.20
			1000-4999 Ea.	2.00
MC467F	5.76	4.80	3.85	3.20
MC467L	6.18	5.15	4.15	3.45
MC467P	3.12	3.12	2.60	2.20
			1000-4999 Ea.	2.00
MC468F	5.76	4.80	3.85	3.20
MC468L	6.18	5.15	4.15	3.45
MC468P	3.12	3.12	2.60	2.20
			1000-4999 Ea.	2.00
MC469F	4.92	4.10	3.30	2.75
MC469L	4.92	4.10	3.30	2.75
MC469P	2.40	2.40	2.00	1.70
			1000-4999 Ea.	1.55
MC470F	4.20	3.50	2.80	2.35
MC470L	4.68	3.90	3.10	2.60
MC470P	2.40	2.40	2.00	1.70
			1000-4999 Ea.	1.55
MC471F	5.82	4.85	3.90	3.25
MC471L	5.10	4.25	3.40	2.85
MC471P	2.88	2.88	2.40	2.05
			1000-4999 Ea.	1.85
MC472F	8.82	7.35	5.90	4.90
MC472L	8.82	7.35	5.90	4.90
MC472P	4.38	4.38	3.65	3.10
			1000-4999 Ea.	2.80
MC473F	8.82	7.35	5.90	4.90
MC473L	8.82	7.35	5.90	4.90
MC473P	4.38	4.38	3.65	3.10
			1000-4999 Ea.	2.80
MC474F	8.82	7.35	5.90	4.90
MC474L	8.82	7.35	5.90	4.90
MC474P	4.38	4.38	3.65	3.10
			1000-4999 Ea.	2.80
MC475F	4.92	4.10	3.30	2.75
MC475L	4.32	3.60	2.90	2.40
MC475P	2.64	2.64	2.20	1.85
			1000-4999 Ea.	1.70
MC476F	4.92	4.10	3.30	2.75
MC476L	4.92	4.10	3.30	2.75
MC476P	2.64	2.64	2.20	1.85
			1000-4999 Ea.	1.70
MC477F	4.20	3.50	2.80	2.35
MC477L	4.20	3.50	2.80	2.35
MC477P	2.16	2.16	1.80	1.55
			1000-4999 Ea.	1.40
MC478F	4.20	3.50	2.80	2.35
MC478L	4.68	3.90	3.25	2.60
MC478P	2.04	2.04	1.70	1.44
			1000-4999 Ea.	1.30
MC500F	7.74	6.45	5.15	4.30
MC500L	7.74	6.45	5.15	4.30
MC501F	7.74	6.45	5.15	4.30
MC501L	7.74	6.45	5.15	4.30
MC502F	7.74	6.45	5.15	4.30
MC502L	7.74	6.45	5.15	4.30
MC503F	7.74	6.45	5.15	4.30
MC503L	7.74	6.45	5.15	4.30
MC504F	7.74	6.45	5.15	4.30
MC504L	7.74	6.45	5.15	4.30
MC505F	7.74	6.45	5.15	4.30
MC505L	7.74	6.45	5.15	4.30
MC506F	7.74	6.45	5.15	4.30
MC506L	7.74	6.45	5.15	4.30
MC507F	8.88	7.40	5.95	4.95
MC507L	8.88	7.40	5.95	4.95
MC508F	7.74	6.45	5.15	4.30
MC508L	7.74	6.45	5.15	4.30
MC509F	5.46	4.55	3.65	3.05
MC509L	5.46	4.55	3.65	3.05
MC510F	5.46	4.55	3.65	3.05
MC510L	5.46	4.55	3.65	3.05
MC511F	5.46	4.55	3.65	3.05
MC511L	5.46	4.55	3.65	3.05
MC512F	7.74	6.45	5.15	4.30
MC512L	7.74	6.45	5.15	4.30
MC513F	8.88	7.40	5.95	4.95
MC513L	8.88	7.40	5.95	4.95
MC514F	8.88	7.40	5.95	4.95
MC514L	8.88	7.40	5.95	4.95
MC515F	10.50	8.75	7.00	5.85
MC515L	10.50	8.75	7.00	5.85
MC516F	10.50	8.75	7.00	5.85
MC516L	10.50	8.75	7.00	5.85
MC517F	10.50	8.75	7.00	5.85
MC517L	10.50	8.75	7.00	5.85
MC518F	10.50	8.75	7.00	5.85
MC518L	10.50	8.75	7.00	5.85
MC519F	8.88	7.40	5.95	4.95
MC519L	8.88	7.40	5.95	4.95
MC520F	7.74	6.45	5.15	4.30
MC520L	7.74	6.45	5.15	4.30
MC521F	8.88	7.70	6.20	5.15
MC521L	8.88	7.70	6.20	5.15
MC522F	16.08	13.40	10.75	8.95
MC522L	16.08	13.40	10.75	8.95
MC523F	...	13.40	10.75	8.95
MC523L	...	13.40	10.75	8.95
MC524F	...	13.40	10.75	8.95
MC524L	...	13.40	10.75	8.95
MC525F	8.88	7.40	5.95	4.95
MC525L	8.88	7.40	5.95	4.95
MC526F	8.88	7.40	5.95	4.95
MC526L	8.88	7.40	5.95	4.95
MC527F	7.74	6.45	5.15	4.30
MC527L	7.74	6.45	5.15	4.30
MC528F	7.74	6.45	5.15	4.30
MC528L	7.74	6.45	5.15	4.30
MC550F	6.48	5.40	4.30	3.60
MC550L	6.48	5.40	4.30	3.60
MC551F	6.48	5.40	4.30	3.60
MC551L	6.48	5.40	4.30	3.60
MC552F	6.48	5.40	4.30	3.60
MC552L	6.48	5.40	4.30	3.60
MC553F	6.48	5.40	4.30	3.60
MC553L	6.48	5.40	4.30	3.60
MC554F	6.48	5.40	4.30	3.60
MC554L	6.48	5.40	4.30	3.60
MC555F	6.48	5.40	4.30	3.60
MC555L	6.48	5.40	4.30	3.60
MC556F	6.48	5.40	4.30	3.60
MC556L	6.48	5.40	4.30	3.60
MC557F	7.44	6.20	5.00	4.15
MC557L	7.44	6.20	5.00	4.15
MC558F	6.48	5.40	4.30	3.60
MC558L	6.48	5.40	4.30	3.60
MC559F	5.46	4.55	3.65	3.05
MC559L	5.46	4.55	3.65	3.05
MC560F	5.46	4.55	3.65	3.05
MC560L	5.46	4.55	3.65	3.05
MC561F	5.46	4.55	3.65	3.05
MC561L	5.46	4.55	3.65	3.05
MC562F	6.48	5.40	4.30	3.60
MC562L	6.48	5.40	4.30	3.60
MC563F	7.44	6.20	5.00	4.15
MC563L	7.44	6.20	5.00	4.15
MC564F	7.44	6.20	5.00	4.15
MC564L	7.44	6.20	5.00	4.15
MC565F	8.82	7.35	5.90	4.90
MC565L	8.82	7.35	5.90	4.90
MC566F	8.82	7.35	5.90	4.90
MC566L	8.82	7.35	5.90	4.90
MC567F	8.82	7.35	5.90	4.90
MC567L	8.82	7.35	5.90	4.90
MC568F	8.82	7.35	5.90	4.90
MC568L	8.82	7.35	5.90	4.90
MC569F	7.44	6.20	5.00	4.15
MC569L	7.44	6.20	5.00	4.15
MC570F	6.48	5.40	4.30	3.60
MC570L	6.48	5.40	4.30	3.60
MC571F	7.80	6.50	5.20	4.35
MC571L	7.80	6.50	5.20	4.35
MC572F	13.38	11.15	8.95	7.45
MC572L	13.38	11.15	8.95	7.45
MC575F	7.44	6.20	5.00	4.15
MC575L	7.44	6.20	5.00	4.15
MC576F	7.44	6.20	5.00	4.15
MC576L	7.44	6.20	5.00	4.15
MC577F	6.48	5.40	4.30	3.60
MC577L	6.48	5.40	4.30	3.60
MC578F	6.48	5.40	4.30	3.60
MC578L	6.48	5.40	4.30	3.60

Motorola Type No.	EACH 1-49	50-999	1000-Up
MC660L	3.36	2.24	1.46
MC660P	2.10	1.40	1.06
MC661L	3.24	2.16	1.40

Motorola Type No.	EACH 1-49	50-999	1000-Up
MC661P	1.96	1.33	1.01
MC662L	3.81	2.54	1.65
MC662P	2.28	1.52	1.16
MC663L	7.02	4.68	3.04
MC663P	5.03	3.35	2.55
MC664L	4.68	3.12	2.06
MC664P	3.23	2.15	1.63
MC665L	4.79	3.19	2.07
MC665P	2.78	1.85	1.40
MC666L	4.79	3.19	2.07
MC666P	3.08	2.05	1.56
MC667L	6.35	4.23	2.75
MC667P	4.73	3.15	2.40
MC668L	3.24	2.16	1.40
MC668P	1.96	1.33	1.01
MC669L	2.43	1.62	1.05
MC669P	1.76	1.17	.89
MC670L	3.24	2.16	1.40
MC670P	1.96	1.33	1.01
MC671L	3.36	2.24	1.46
MC671P	2.10	1.40	1.06
MC672L	3.36	2.24	1.46
MC672P	2.10	1.40	1.06
MC673L	3.60	2.40	1.56
MC673P	2.30	1.53	1.16
MC674L	3.53	2.35	1.52
MC674P	2.34	1.49	1.13
MC675L	6.54	4.36	2.83
MC675P	4.82	3.21	2.44
MC677L	4.50	3.00	1.95
MC677P	2.63	1.75	1.33
MC678L	4.32	2.88	1.87
MC678P	2.52	1.68	1.27
MC679L	4.79	3.19	2.36
MC679P	3.54	2.36	1.75
MC680L	3.45	2.30	1.70
MC680P	2.15	1.43	1.15
MC681L	3.65	2.43	1.80
MC681P	2.24	1.49	1.20
MC700G	1.86	1.24	.92
MC701G	2.25	1.50	1.11
MC702G	1.86	1.24	.92
MC703G	1.86	1.24	.92
MC704G	2.07	1.38	1.02
MC705G	2.25	1.50	1.11
MC706G	2.25	1.50	1.11
MC707G	1.86	1.24	.92
MC708G	2.25	1.50	1.11
MC709G	1.86	1.24	.92
MC710G	1.86	1.24	.92
MC711G	1.86	1.24	.92
MC712G	2.25	1.50	1.11
MC713G	2.84	1.89	1.40
MC714G	1.86	1.24	.92
MC715G	2.07	1.38	1.02
MC715P	1.50	1.00	.75
MC717P	1.62	1.08	.81
MC718G	2.07	1.38	1.02
MC718P	1.50	1.00	.75
MC719P	1.62	1.08	.81
MC720G	2.84	1.89	1.40
MC721G	1.86	1.24	.92
MC722G	3.32	2.21	1.64
MC722P	1.95	1.30	.95
MC723G	2.84	1.89	1.40
MC723P	1.95	1.30	.95
MC724AP	1.89	1.26	.93
MC724P	1.62	1.08	.81
MC725P	1.62	1.08	.81
MC726G	3.32	2.21	1.64
MC726P	2.03	1.35	1.00
MC727G	1.86	1.24	.92
MC728G	1.86	1.24	.92
MC729G	1.86	1.24	.92
MC764P	2.55	1.70	1.25
MC767AP	4.89	3.26	2.42
MC767P	5.10	3.40	2.50
MC770P	3.68	2.45	1.80
MC771P	2.70	1.80	1.35
MC774G	3.32	2.21	1.64
MC775P	2.03	1.35	1.00
MC776P	3.00	2.00	1.50
MC777P	5.10	3.40	2.50
MC778P	2.85	1.90	1.40
MC779P	2.85	1.90	1.40
MC780P	3.40	3.40	2.50
MC781G	2.31	1.54	1.14
MC782G	3.32	2.21	1.64
MC783P	2.33	1.55	1.14
MC784P	2.19	1.46	1.08
MC785AP	1.89	1.26	.93
MC785P	1.64	1.09	.81
MC786P	1.64	1.09	.81
MC787P	2.85	1.90	1.40
MC788P	2.03	1.35	1.00
MC789AP	1.89	1.26	.93
MC789P	1.62	1.08	.81
MC790P	3.00	2.00	1.50
MC791P	3.38	2.25	1.65
MC792P	1.64	1.09	.81
MC793P	1.64	1.09	.81
MC794P	5.10	3.40	2.50
MC796P	5.10	3.40	2.50
MC797P	5.10	3.40	2.50
MC798P	1.82	1.21	.90
MC799G	2.31	1.54	1.14
MC799P	1.62	1.08	.81
MC800G	2.13	1.42	1.05
MC801G	2.51	1.67	1.24
MC802G	2.13	1.42	1.05
MC803G	2.13	1.42	1.05
MC804G	2.30	1.53	1.13
MC805G	2.51	1.67	1.24

Motorola Type No.	EACH 1-49	50-999	1000-Up
MC806G	2.51	1.67	1.24
MC807G	2.13	1.42	1.05
MC808G	2.51	1.67	1.24
MC809G	2.13	1.42	1.05
MC810G	2.13	1.42	1.05
MC811G	2.13	1.42	1.05
MC812G	2.51	1.67	1.24
MC813G	3.18	2.12	1.57
MC814G	2.13	1.42	1.05
MC815G	2.30	1.53	1.13
MC815P	1.73	1.15	.86
MC816G	3.18	2.12	1.57
MC816P	2.10	1.40	1.02
MC817P	1.76	1.17	.87
MC818G	2.30	1.53	1.13
MC818P	1.62	1.08	.81
MC819P	1.76	1.17	.87
MC820G	3.18	2.12	1.57
MC821G	2.13	1.42	1.05
MC822G	3.72	2.48	1.84
MC822P	2.10	1.40	1.02
MC824AP	1.51	1.26	.93
MC824P	1.76	1.17	.87
MC825G	2.51	1.67	1.24
MC825P	1.76	1.17	.87
MC826G	3.72	2.48	1.84
MC826P	1.68	1.40	1.02
MC827G	2.13	1.42	1.05
MC828G	2.13	1.42	1.05
MC829G	2.13	1.42	1.05

Motorola Type No.	EACH 1-9	10-24	25-99	100-999
MC830G	4.32	3.60	2.90	2.40
MC830L	4.32	3.60	2.90	2.40
MC830P	1.73	1.73	1.15	1.15
			1000-Up Ea.	.85
MC831G	6.30	5.25	4.20	3.50
MC831L	6.30	5.25	4.20	3.50
MC831P	4.50	4.50	3.00	3.00
			1000-Up Ea.	2.25
MC832G	4.86	4.05	3.25	2.70
MC832L	4.86	4.05	3.25	2.70
MC832P	2.48	2.48	1.65	1.65
			1000-Up Ea.	1.25
MC833G	5.40	4.50	3.60	3.00
MC833L	5.64	4.70	3.80	3.15
MC833P	1.55	1.55	1.03	1.03
			1000-Up Ea.	.76
MC834L	5.22	4.35	3.50	2.90
MC834P	3.00	3.00	2.00	2.00
			1000-Up Ea.	1.50
MC835L	5.22	4.35	3.50	2.90
MC835P	3.00	3.00	2.00	2.00
			1000-Up Ea.	1.50
MC836L	5.22	4.35	3.50	2.90
MC836P	1.91	1.91	1.27	1.27
			1000-Up Ea.	.94
MC837L	5.22	4.35	3.50	2.90
MC837P	3.00	3.00	2.00	2.00
			1000-Up Ea.	1.50
MC838L	18.00	15.00	12.00	10.00
MC838P	11.63	11.63	7.55	7.55
			1000-Up Ea.	6.70
MC839L	18.00	15.00	12.00	10.00
MC839P	11.63	11.63	7.55	7.55
			1000-Up Ea.	6.70
MC840L	5.22	4.35	3.50	2.90
MC840P	3.00	3.00	2.00	2.00
			1000-Up Ea.	1.50
MC841L	5.22	4.35	3.50	2.90
MC841P	3.00	3.00	2.00	2.00
			1000-Up Ea.	1.50
MC843G	16.02	13.70	10.70	8.90
MC844G	4.86	4.05	3.25	2.70
MC844L	4.86	4.05	3.25	2.70
MC844P	1.73	1.73	1.15	1.15
			1000-Up Ea.	.85
MC845G	6.30	5.25	4.20	3.50
MC845L	6.30	5.25	4.20	3.50
MC845P	2.43	2.43	1.62	1.62
			1000-Up Ea.	1.20
MC846G	4.32	3.60	2.90	2.40
MC846L	4.32	3.60	2.90	2.40
MC846P	1.73	1.73	1.15	1.15
			1000-Up Ea.	.85
MC847P	2.03	2.03	1.35	1.35
			1000-Up Ea.	1.00
MC848G	6.30	5.25	4.20	3.50
MC848L	6.30	5.25	4.20	3.50
MC848P	2.43	2.43	1.62	1.62
			1000-Up Ea.	1.20
MC849G	4.32	3.60	2.90	2.40
MC849L	4.32	3.60	2.90	2.40
MC849P	2.48	2.48	1.65	1.65
			1000-Up Ea.	1.25
MC850G	11.37	9.90	7.90	6.60
MC850L	11.37	9.90	7.90	6.60
MC850P	6.75	6.75	4.50	4.50
			1000-Up Ea.	3.35
MC851G	13.68	11.40	9.10	7.60
MC851L	13.92	11.60	9.30	7.75
MC851P	6.75	6.75	4.50	4.50
			1000-Up Ea.	3.35
MC852L	10.08	8.40	6.70	5.60
MC852P	3.15	3.15	2.10	2.10
			1000-Up Ea.	1.55
MC853L	10.08	8.40	6.70	5.60
MC853P	3.15	3.15	2.10	2.10
			1000-Up Ea.	1.55
MC855L	10.08	8.40	6.70	5.60
MC855P	3.15	3.15	2.10	2.10
			1000-Up Ea.	1.55

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them.

Motorola Type No.	EACH 1-9	10-24	25-99	100-999
MC856L	10.08	8.40	6.70	5.60
MC856P	3.15	3.15	2.10	2.10
			1000-Up Ea.	1.55
MC857L	7.74	6.45	5.15	4.30
MC857P	4.05	4.05	2.70	2.70
			1000-Up Ea.	2.00
MC858L	7.74	6.45	5.15	4.30
MC858P	4.05	4.05	2.70	2.70
			1000-Up Ea.	2.00
MC860L	15.12	12.60	10.05	8.40
MC860P	9.15	9.15	6.10	6.10
			1000-Up Ea.	4.50
MC861G	4.32	3.60	2.90	2.40
MC861L	4.32	3.60	2.90	2.40
MC861P	2.48	2.48	1.65	1.65
			1000-Up Ea.	1.25
MC862G	4.32	3.60	2.90	2.40
MC862L	4.32	3.60	2.90	2.40
MC862P	1.73	1.73	1.15	1.15
			1000-Up Ea.	.85
MC863G	4.32	3.60	2.90	2.40
MC863L	4.32	3.60	2.90	2.40
MC863P	2.48	2.48	1.65	1.65
			1000-Up Ea.	1.25
MC864P	2.70	2.70	1.80	1.80
			1000-Up Ea.	1.34

Motorola Type No.	EACH 1-24	25-999	1000-4999
MC867P	5.48	3.65	2.70
MC867AP	5.43	3.62	2.42
MC870P	3.97	2.65	1.95
MC871P	2.93	1.95	1.45
MC874G	3.72	2.48	1.84
MC875P	2.18	1.45	1.07
MC876P	3.23	2.15	1.60
MC877P	5.48	3.65	2.70
MC878P	3.00	2.00	1.50
MC879P	3.00	2.00	1.50
MC880P	5.48	3.65	2.70
MC881G	2.60	1.73	1.28
MC882G	3.72	2.48	1.84
MC883P	2.48	1.65	1.22
MC884P	2.33	1.55	1.16
MC885P	1.76	1.17	.87
MC885AP	1.89	1.26	.93
MC886P	1.76	1.17	.87
MC887P	3.00	2.00	1.50
MC888P	2.18	1.45	1.07
MC889P	1.76	1.17	.87
MC889AP	1.89	1.26	.93
MC890P	3.23	2.15	1.60
MC891P	3.53	2.35	1.75
MC892P	1.76	1.17	.87
MC893P	1.76	1.17	.87
MC894P	5.48	3.65	2.70
MC896P	5.48	3.65	2.70
MC897P	5.48	3.65	2.70
MC898P	1.95	1.30	.97
MC899G	2.60	1.73	1.28
MC899P	1.76	1.17	.87

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC900G	6.00	5.00	4.00	3.35
MC901G	5.46	4.55	3.65	3.05
MC902G	5.94	4.95	3.95	3.30
MC903G	5.46	4.55	3.65	3.05
MC904G	6.72	5.60	4.50	3.75
MC905G	6.84	5.70	4.55	3.80
MC906G	6.84	5.70	4.55	3.80
MC907G	5.46	4.55	3.65	3.05
MC908G	6.72	5.60	4.50	3.75
MC909G	6.00	5.00	4.00	3.35
MC910G	5.64	4.70	3.80	3.15
MC911G	5.46	4.55	3.65	3.05
MC912G	6.72	5.60	4.50	3.75
MC913G	7.20	6.00	4.80	4.00
MC914G	5.64	4.70	3.80	3.15
MC915G	5.64	4.70	3.80	3.15
MC916G	7.56	6.30	5.05	4.20
MC918G	5.64	4.70	3.80	3.15
MC920G	7.56	6.30	5.05	4.20
MC921G	5.10	4.25	3.40	2.85
MC922G	7.56	6.30	5.05	4.20
MC926G	7.56	6.30	5.05	4.20

SEE PAGE 17 FOR SEMICONDUCTORS

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them.

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC927G	5.64	4.70	3.80	3.15
MC928G	5.46	4.55	3.65	3.05
MC929G	5.46	4.55	3.65	3.05
MC930F	7.80	6.50	5.20	4.35
MC930G	7.80	6.50	5.20	4.35
MC930L	7.80	6.50	5.20	4.35
MC931F	10.80	9.00	7.20	6.00
MC931G	10.80	9.00	7.20	6.00
MC931L	10.80	9.00	7.20	6.00
MC932F	8.52	7.10	5.70	4.75
MC932G	8.52	7.10	5.70	4.75
MC932L	8.52	7.10	5.70	4.75
MC933F	6.54	5.45	4.40	3.65
MC933G	6.54	5.45	4.40	3.65
MC933L	6.54	5.45	4.40	3.65
MC934F	9.36	7.80	6.25	5.20
MC934L	9.36	7.80	6.25	5.20
MC935F	9.36	7.80	6.25	5.20
MC935L	9.36	7.80	6.25	5.20
MC936F	9.36	7.80	6.25	5.20
MC936L	9.36	7.80	6.25	5.20
MC937F	9.36	7.80	6.25	5.20
MC937L	9.36	7.80	6.25	5.20
MC938F	32.40	27.00	21.60	18.00
MC938L	32.40	27.00	21.60	18.00
MC939F	32.40	27.00	21.60	18.00
MC939L	32.40	27.00	21.60	18.00
MC940F	9.36	7.80	6.25	5.20
MC940L	9.36	7.80	6.25	5.20
MC941F	9.36	7.80	6.25	5.20
MC941L	9.36	7.80	6.25	5.20
MC943G	27.00	22.50	18.00	15.00
MC944F	8.52	7.10	5.70	4.75
MC944G	8.52	7.10	5.70	4.75
MC944L	8.52	7.10	5.70	4.75
MC945F	10.80	9.00	7.20	6.00
MC945G	10.80	9.00	7.20	6.00
MC945L	10.80	9.00	7.20	6.00
MC946F	7.80	6.50	5.20	4.35
MC946G	7.80	6.50	5.20	4.35
MC946L	7.80	6.50	5.20	4.35
MC947F	6.54	5.45	4.40	3.65
MC947L	6.54	5.45	4.40	3.65
MC948F	10.80	9.00	7.20	6.00
MC948G	10.80	9.00	7.20	6.00
MC948L	10.80	9.00	7.20	6.00
MC949F	7.80	6.50	5.20	4.35
MC949G	7.80	6.50	5.20	4.35
MC949L	7.80	6.50	5.20	4.35
MC950F	14.88	12.40	10.00	8.30
MC950G	14.88	12.40	10.00	8.30
MC950L	14.88	12.40	10.00	8.30
MC951F	24.30	20.25	16.20	13.50
MC951G	22.20	18.50	14.80	12.35
MC951L	24.30	20.25	16.20	13.50
MC952F	17.28	14.40	11.50	9.60
MC952L	17.28	14.40	11.50	9.60
MC953F	17.28	14.40	11.50	9.60
MC953L	17.28	14.40	11.50	9.60
MC955F	17.28	14.40	11.50	9.60
MC955L	17.28	14.40	11.50	9.60
MC956F	17.28	14.40	11.50	9.60
MC956L	17.28	14.40	11.50	9.60
MC957F	13.68	11.40	9.10	7.60
MC957L	13.68	11.40	9.10	7.60
MC958F	13.68	11.40	9.10	7.60
MC958L	13.68	11.40	9.10	7.60
MC961F	7.80	6.50	5.20	4.35
MC960L	19.68	16.40	13.10	10.90
MC961G	7.80	6.50	5.20	4.35
MC961L	7.80	6.50	5.20	4.35
MC962F	7.80	6.50	5.20	4.35
MC962G	7.80	6.50	5.20	4.35
MC962L	7.80	6.50	5.20	4.35
MC963F	7.80	6.50	5.20	4.35
MC963G	7.80	6.50	5.20	4.35
MC963L	7.80	6.50	5.20	4.35
MC964G	7.56	6.30	5.05	4.20
MC981G	10.44	8.70	6.95	5.80
MC982G	7.56	6.30	5.05	4.20
MC999G	10.44	8.70	6.95	5.80

Motorola Type No.	EACH 1-49	50-999	1000-Up
MC1001P	2.25	1.50	1.10
MC1002P	2.25	1.50	1.10
MC1003P	2.25	1.50	1.10
MC1004P	2.33	1.55	1.15
MC1005P	2.33	1.55	1.15
MC1006P	2.33	1.55	1.15
MC1007P	2.40	1.60	1.20
MC1008P	2.40	1.60	1.20
MC1009P	2.40	1.60	1.20
MC1010P	2.55	1.70	1.25
MC1011P	2.55	1.70	1.25
MC1012P	2.55	1.70	1.25
MC1013P	4.35	2.90	2.15
MC1014P	4.73	3.15	2.35
MC1015P	4.73	3.15	2.35
MC1016P	4.73	3.15	2.35
MC1017P	4.95	3.30	2.45
MC1018P	4.95	3.30	2.45
MC1019P	6.38	4.25	3.15
MC1020P	2.25	1.50	1.10
MC1021P	6.38	4.25	3.15
MC1022P	6.75	4.50	3.35
MC1023P	9.75	6.50	4.80
MC1024P	2.40	1.60	1.20
MC1025P	2.33	1.55	1.15
MC1026P	9.75	6.50	4.80
MC1027P	9.75	6.50	4.80
MC1028P	16.88	11.25	8.35
MC1029P	4.73	3.15	2.35
MC1030P	7.20	4.80	3.55
MC1031P	7.20	4.80	3.55
MC1032P	7.20	4.80	3.55
MC1033P	4.73	3.15	2.55
MC1034P	15.53	10.35	7.65
MC1035P	2.70	1.80	1.35
MC1036P	20.25	13.50	10.00
MC1037P	20.25	13.50	10.00
MC1038P	16.80	11.20	8.30
MC1039P	7.73	5.15	3.80
MC1040P	9.75	6.50	4.80
MC1042P	11.48	7.65	5.65
MC1043P	11.18	7.45	5.50
MC1044P	11.63	7.75	5.75
MC1046P	11.48	7.65	5.65
MC1047P	5.85	3.90	2.90
MC1048P	5.85	3.90	2.90

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC1050F	6.36	5.30	4.25	3.55
MC1051F	6.36	5.30	4.25	3.55
MC1052F	6.36	5.30	4.25	3.55
MC1070F	17.10	14.25	11.40	9.50
MC1070P	9.75	9.75	6.50	6.50
			1000-Up Ea.	4.80
MC1110G	45.00	37.50	31.25	25.00
MC1124L	7.14	5.95	4.75	3.95
MC1125G	4.44	3.70	3.05	2.45
MC1141G	34.20	28.50	23.70	18.95
MC1150L	35.10	29.25	23.40	19.50
MC1151L	30.60	25.50	20.40	17.00
MC1155L	7.92	6.60	5.50	4.40
MC1160G	32.40	27.00	22.50	18.00
MC1161G	16.20	13.50	11.25	9.00
MC1170L	24.72	20.60	17.15	13.70
MC1201L	2.94	2.45	2.00	1.65
MC1202F	4.92	4.10	3.30	2.75
MC1202L	2.94	2.45	2.00	1.65
MC1203F	4.92	4.10	3.30	2.75
MC1203L	2.94	2.45	2.00	1.65
MC1204F	5.10	4.25	3.40	2.85
MC1204L	3.06	2.55	2.05	1.70
MC1205F	5.10	4.25	3.40	2.85
MC1205L	3.06	2.55	2.05	1.70
MC1206F	5.10	4.25	3.40	2.85
MC1206L	3.06	2.55	2.05	1.70
MC1207F	5.28	4.40	3.55	2.95
MC1207L	3.24	2.70	2.15	1.80
MC1208F	5.28	4.40	3.55	2.95
MC1208L	3.24	2.70	2.15	1.80
MC1209F	5.28	4.40	3.55	2.95
MC1209L	3.24	2.70	2.15	1.80
MC1210F	5.46	4.55	3.65	3.05
MC1210L	3.42	2.85	2.30	1.90
MC1211F	5.46	4.55	3.65	3.05
MC1211L	3.42	2.85	2.30	1.90
MC1212F	5.46	4.55	3.65	3.05
MC1212L	3.42	2.85	2.30	1.90
MC1213F	9.00	7.50	6.00	5.00
MC1213L	5.76	4.80	3.85	3.20
MC1214F	10.32	8.60	6.90	5.75
MC1214L	6.18	5.15	4.15	3.45
MC1215F	10.32	8.60	6.90	5.75
MC1215L	6.18	5.15	4.15	3.45
MC1216F	10.32	8.60	6.90	5.75
MC1216L	6.18	5.15	4.15	3.45
MC1217F	10.68	8.90	7.15	5.95
MC1217L	6.54	5.45	4.40	3.65
MC1218F	10.68	8.90	7.15	5.95
MC1218L	6.54	5.45	4.40	3.65
MC1219F	13.68	11.40	9.10	7.60
MC1219L	8.34	6.95	5.60	4.65
MC1220F	4.92	4.10	3.30	2.75
MC1220L	2.94	2.45	2.00	1.65
MC1221F	13.68	11.40	9.10	7.60

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC1221L	8.34	6.95	5.60	4.65
MC1222F	11.22	9.35	7.50	6.25
MC1222L	8.88	7.40	5.95	4.95
MC1224F	5.28	4.40	3.55	2.95
MC1224L	3.24	2.70	2.15	1.80
MC1225F	5.10	4.25	3.40	2.85
MC1225L	3.06	2.55	2.05	1.70
MC1226F	17.10	14.25	11.40	9.50
MC1226L	12.48	10.40	8.35	6.95
MC1229F	9.90	8.25	6.60	5.50
MC1229L	6.18	5.15	4.15	3.45
MC1230F	13.92	11.60	9.30	7.75
MC1230L	9.54	7.95	6.35	5.30
MC1231F	13.92	11.60	9.30	7.75
MC1231L	9.54	7.95	6.35	5.30
MC1233F	10.32	8.60	6.90	5.75
MC1233L	6.18	5.15	4.15	3.45
MC1235F	5.40	4.50	3.60	3.00
MC1235L	3.60	3.00	2.40	2.00
MC1238F	27.00	22.50	18.00	15.00
MC1238L	22.20	18.50	14.80	12.35
MC1239L	10.14	8.45	6.80	5.65
MC1240L	13.86	11.55	9.25	7.70
MC1246L	15.12	12.60	10.10	8.40
MC1247F	11.82	9.85	7.85	6.55
MC1247L	7.80	6.50	5.20	4.35
MC1248F	11.82	9.85	7.85	6.55
MC1248L	7.80	6.50	5.20	4.35
MC1270L	13.86	11.55	9.25	7.70
MC1302L	6.30	5.25	4.35	3.50
MC1303L	2.64	2.20	1.75	1.60
MC1304P	4.86	4.05	3.25	2.90
MC1305P	4.86	4.05	3.25	2.90
MC1306P	1.06	.88	.70	.63
MC1307P	2.46	2.05	1.65	1.47
MC1314G	3.84	3.20	2.70	2.15
MC1325P	4.50	3.75	3.10	2.50
MC1414L	11.70	9.75	8.10	6.50
MC1429G	4.68	3.90	2.65	1.95
MC1430G	6.30	5.25	4.35	3.50
MC1430P	6.30	5.25	4.35	3.50
MC1431G	6.30	5.25	4.35	3.50
MC1431P	6.30	5.25	4.35	3.50
MC1433G	4.68	3.90	2.65	1.95
MC1433L	9.90	8.25	6.85	5.50
MC1435G	8.10	6.75	5.60	4.50
MC1435L	8.10	6.75	5.60	4.50
MC1436G	32.40	27.00	22.50	18.00
MC1437L	7.80	6.50	4.40	3.25
MC1438R	11.70	9.75	8.10	6.50
MC1439G	4.32	3.60	2.45	1.80
MC1439L	3.24	2.70	2.25	1.80
MC1440G	3.60	3.00	2.00	1.50
MC1440L	14.40	12.00	10.00	8.00
MC1441L	23.40	19.50	16.25	13.00
MC1445G	7.08	5.90	4.95	3.95
MC1445L	7.08	5.90	4.95	3.95
MC1446L	50.40	42.00	35.00	28.00
MC1454G	3.84	3.30	2.75	2.20
MC1456CG	3.42	2.85	2.35	1.90
MC1456G	27.00	22.50	18.75	15.00
MC1458G	7.20	6.00	5.00	4.00
MC1460G	6.30	5.25	4.35	3.50
MC1460R	8.10	6.75	5.60	4.50
MC1461G	8.10	6.75	5.60	4.50
MC1461R	9.90	8.25	7.85	5.50
MC1463R	12.48	10.40	8.70	6.95
MC1466L	15.30	12.75	10.60	8.50
MC1469R	8.10	6.75	5.60	4.50
MC1488L	12.60	10.50	8.75	7.00
MC1489L	10.80	9.00	7.50	6.00
MC1495L	14.40	22.50	18.75	15.00
MC1510G	14.40	12.00	10.00	8.00
MC1511G	16.14	13.45	11.80	10.75
MC1512G	18.36	15.30	13.50	12.25
MC1514L	23.40	19.50	16.25	13.00
MC1519G	60.00	50.00	40.00	30.00
MC1520G	11.70	9.75	8.10	6.50
MC1524G	84.00	70.00	55.00	40.00
MC1525G	14.40	12.00	10.00	8.00
MC1526G	72.00	60.00	48.00	36.00
MC1529G	13.50	11.25	9.35	7.50
MC1530G	15.30	12.75	10.60	8.50
MC1531G	15.30	12.75	10.60	8.50
MC1533G	15.30	12.75	10.60	8.50
MC1533L	15.30	12.75	10.60	8.50
MC1535G	15.30	12.75	10.60	8.50
MC1537L	21.60	18.00	15.00	12.00
MC1538R	25.20	21.00	17.50	14.00
MC1539G	13.50	11.25	9.35	7.50
MC1539L	13.50	11.25	9.35	7.50
MC1540G	27.00	22.50	18.75	15.00
MC1540L	27.00	22.50	18.75	15.00
MC1541L	32.40	27.00	22.50	18.00
MC1543L	32.40	27.00	22.50	18.00
MC1545F	11.70	9.75	8.10	6.50
MC1545G	9.90	8.25	6.85	5.50
MC1545L	9.90	8.25	6.85	5.50
MC1546L	68.40	57.00	47.50	38.00
MC1545G	9.90	8.25	6.85	5.50
MC1545L	9.90	8.25	6.85	5.50
MC1550G	1.80	1.50	1.00	.75
MC1552G	10.80	9.00	7.50	6.00
MC1553G	10.80	9.00	7.50	6.00
MC1554G	17.10	14.25	11.85	9.50
MC1556G	50.40	42.00	35.00	28.00
MC1558G	9.00	7.50	6.25	5.00

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC1560G	27.00	22.50	18.75	15.00
MC1560R	36.00	30.00	25.00	20.00
MC1561C	36.00	30.00	25.00	20.00
MC1561R	45.00	37.50	31.25	25.00
MC1563R	30.48	25.40	21.20	16.95
MC1566L	44.10	36.75	30.60	25.40
MC1569R	13.92	11.60	9.70	7.75
MC1580L	15.78	13.15	10.95	8.75
MC1581L	14.82	12.35	10.30	8.25
MC1582L	15.78	13.15	10.95	8.75
MC1583L	13.50	11.25	9.40	7.50
MC1584L	13.50	11.25	9.40	7.50
MC1590G	6.72	5.60	4.70	3.75
MC1595L	21.60	18.00	15.00	12.00
MC1596G	8.64	7.20	6.00	4.80
MC1596L	8.64	7.20	6.00	4.80
MC1650L	39.48	32.90	26.35	21.95
MC1660L	15.30	12.75	10.20	8.50
MC1661L	15.30	12.75	10.20	8.50
MC1662L	16.68	13.90	11.10	9.25
MC1663L	16.68	13.90	11.10	9.25
MC1664L	16.68	13.90	11.10	9.25
MC1665L	16.68	13.90	11.10	9.25
MC1667L	30.60	25.50	20.40	17.00
MC1668L	38.22	31.85	25.50	21.25
MC1669L	38.22	31.85	25.50	21.25
MC1670L	27.42	22.85	18.30	15.25
MC1671L	27.42	22.85	18.30	15.25
MC1672L	18.90	15.75	12.60	10.50
MC1673L	18.90	15.75	12.60	10.50
MC1674L	18.90	15.75	12.60	10.50
MC1675L	18.90	15.75	12.60	10.50
MC1692L	16.68	13.90	11.10	9.25
MC1666L	30.60	25.50	20.40	17.00
MC1709CF	4.50	3.75	3.00	2.50
MC1709CG	3.36	2.80	2.20	1.85
MC1709CL	3.36	2.80	2.20	1.85
MC1709F	11.10	9.25	7.40	6.15
MC1709G	6.84	5.70	4.55	3.80
MC1709L	6.84	5.70	4.55	3.80
MC1710CF	6.84	5.70	4.55	3.80
MC1710CG	3.36	2.80	2.20	1.85
MC1710CL	3.36	2.80	2.20	1.85
MC1710F	9.72	8.10	6.50	5.40
MC1710G	6.84	5.70	4.55	3.80
MC1710L	6.84	5.70	4.55	3.80
MC1711CF	3.36	2.80	2.20	1.85
MC1711CG	3.36	2.80	2.20	1.85
MC1711CL	4.06	3.38	2.70	2.25
MC1711F	16.02	13.35	10.70	8.90
MC1711G	6.84	5.70	4.55	3.80
MC1711L	6.84	5.70	4.55	3.80
MC1712CF	3.36	2.80	2.20	1.85
MC1712CG	3.36	2.80	2.20	1.85
MC1712CL	4.06	3.38	2.70	2.25
MC1712F	10.26	8.55	6.85	5.70
MC1712G	9.48	7.90	6.30	5.25
MC1712L	9.48	7.90	6.30	5.25
MC1741G	7.20	6.00	5.00	4.00
MC1741L	7.20	6.00	5.00	4.00
MC1741CG	5.82	4.85	4.05	3.25
MC1741CL	5.82	4.85	4.05	3.25
MC1741CP	5.40	4.50	3.75	3.00
MC1800P	2.33	2.33	1.55	1.55
			1000-Up Ea.	1.15
MC1801L	4.32	3.60	2.90	2.40
MC1801P	2.33	2.33	1.55	1.55
			1000-Up Ea.	1.15
MC1802L	4.32	3.60	2.90	2.40
MC1802P	2.33	2.33	1.55	1.55
			1000-Up Ea.	1.15
MC1803L	4.32	3.60	2.90	2.40
MC1803P	2.33	2.33	1.55	1.55
			1000-Up Ea.	1.15
MC1804L	4.32	3.60	2.90	2.40
MC1804P	2.33	2.33	1.55	1.55
			1000-Up Ea.	1.15
MC1805L	4.32	3.60	2.90	2.40
MC1805P	2.33	2.33	1.55	1.55
			1000-Up Ea.	1.15
MC1806L	5.04	4.20	3.35	2.80
MC1806P	2.85	2.85	1.90	1.90
			1000-Up Ea.	1.44
MC1807L	5.04	4.20	3.35	2.80
MC1807P	2.85	2.85	1.90	1.90
			1000-Up Ea.	1.44
MC1808L	5.04	4.20	3.35	2.80
MC1808P	2.85	2.85	1.90	1.90
			1000-Up Ea.	1.44
MC1809L	5.04	4.20	3.35	2.80
MC1809P	2.85	2.85	1.90	1.90
			1000-Up Ea.	1.44
MC1810L	5.04	4.20	3.35	2.80
MC1810P	2.85	2.85	1.90	1.90
			1000-Up Ea.	1.44
MC1811L	5.04	4.20	3.35	2.80
MC1811P	2.85	2.85	1.90	1.90
			1000-Up Ea.	1.44
MC1812L	7.74	6.45	5.15	4.30
MC1812P	4.05	4.05	2.70	2.70
			1000-Up Ea.	2.00
MC1813P	11.93	11.93	7.95	7.95
			1000-Up Ea.	7.05
MC1814L	18.00	15.00	12.00	10.00
MC1814P	11.33	11.33	7.55	7.55
			1000-Up Ea.	6.70
MC1815L	6.30	5.25	4.20	3.50
MC1815P	4.50	4.50	3.00	3.00
			1000-Up Ea.	2.25
MC1816L	6.30	5.25	4.20	3.50
MC1816P	4.50	4.50	3.00	3.00
			1000-Up Ea.	2.25

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC1817P	9.90	9.90	6.60	6.60
			1000-Up Ea.	5.50
MC1818L	4.32	3.60	2.90	2.40
MC1818P	2.48	2.48	1.65	1.65
			1000-Up Ea.	1.25
MC1900L	7.80	6.50	5.20	4.35
MC1901L	7.80	6.50	5.20	4.35
MC1902L	7.80	6.50	5.20	4.35
MC1903L	7.80	6.50	5.20	4.35
MC1904L	7.80	6.50	5.20	4.35
MC1905L	7.80	6.50	5.20	4.35
MC1906L	9.06	7.55	6.50	5.05
MC1907L	9.06	7.55	6.50	5.05
MC1908L	9.06	7.55	6.50	5.05
MC1909L	9.06	7.55	6.50	5.05
MC1910L	9.06	7.55	6.50	5.05
MC1911L	9.06	7.55	6.50	5.05
MC1912L	13.68	11.40	9.10	7.60
MC1914L	32.40	27.00	21.60	18.00
MC1915L	10.80	9.00	7.20	6.00
MC1916L	10.80	9.00	7.20	6.00
MC1918L	7.80	6.50	5.20	4.35
MC2000L	6.48	5.40	4.30	3.60
MC2000P	3.90	3.90	2.60	2.20
			1000-Up Ea.	2.00
MC2001L	5.82	4.85	3.90	3.25
MC2001P	3.90	3.90	2.60	2.20
			1000-Up Ea.	2.00
MC2002L	3.30	2.75	2.20	1.85
MC2002P	3.00	3.00	2.00	1.70
			1000-Up Ea.	1.55
MC2003L	5.82	4.85	3.90	3.25
MC2003P	3.90	3.90	2.60	2.20
			1000-Up Ea.	2.00
MC2004L	6.48	5.40	4.30	3.60
MC2004P	3.90	3.90	2.60	2.20
			1000-Up Ea.	2.00
MC2005L	5.82	4.85	3.90	3.25
MC2005P	3.90	3.90	2.60	2.20
			1000-Up Ea.	2.00
MC2006L	3.30	2.75	2.20	1.85
MC2006P	3.00	3.00	2.00	1.70
			1000-Up Ea.	1.55
MC2007L	5.82	4.85	3.90	3.25
MC2007P	3.90	3.90	2.60	2.20
			1000-Up Ea.	2.00
MC2008L	5.82	4.85	3.90	3.25
MC2008P	4.28	4.28	2.85	2.40
			1000-Up Ea.	2.20
MC2009L	9.36	7.80	6.25	5.20
MC2009P	5.48	5.48	3.65	3.10
			1000-Up Ea.	2.80
MC2010L	9.36	7.80	6.25	5.20
MC2010P	5.48	5.48	3.65	3.10
			1000-Up Ea.	2.80
MC2011L	5.64	4.70	3.80	3.15
MC2011P	3.90	3.90	2.60	2.20
			1000-Up Ea.	2.00
MC2012L	5.64	4.70	3.80	3.15
MC2013L	7.02	5.85	4.70	3.90
MC2013P	4.28	4.28	2.85	2.40
			1000-Up Ea.	2.20
MC2023L	11.76	9.80	7.85	6.55
MC2023P	7.72	7.72	5.15	4.35
			1000-Up Ea.	3.95
MC2024L	11.76	9.80	7.85	6.55
MC2024P	7.72	7.72	5.15	4.35
			1000-Up Ea.	3.95
MC2025L	9.36	7.80	6.25	5.20
MC2025P	5.48	5.48	3.65	3.10
			1000-Up Ea.	2.80
MC2026L	9.36	7.80	6.25	5.20
MC2026P	5.48	5.48	3.65	3.10
			1000-Up Ea.	2.80
MC2028L	9.36	7.80	6.25	5.20
MC2028P	5.48	5.48	3.65	3.10
			1000-Up Ea.	2.80
MC2050L	5.04	4.20	3.35	2.80
MC2050P	3.30	3.30	2.20	1.85
			1000-Up Ea.	1.70
MC2051F	4.74	3.95	3.20	2.65
MC2051L	4.68	3.90	3.10	2.60
MC2051P	3.30	3.30	2.20	1.85
			1000-Up Ea.	1.70
MC2052F	3.66	3.05	2.45	2.05
MC2052L	3.30	2.75	2.20	1.85
MC2052P	3.00	3.00	2.00	1.70
			1000-Up Ea.	1.55
MC2053F	4.74	3.95	3.20	2.65
MC2053L	4.68	3.90	3.10	2.60
MC2053P	3.30	3.30	2.20	1.85
			1000-Up Ea.	1.70
MC2054F	4.74	3.95	3.20	2.65
MC2054L	5.04	4.20	3.35	2.80
MC2054P	3.30	3.30	2.20	1.85
			1000-Up Ea.	1.70
MC2055F	4.74	3.95	3.20	2.65
MC2055L	4.68	3.90	3.10	2.60
MC2055P	3.30	3.30	2.20	1.85
			1000-Up Ea.	1.70
MC2056F	3.66	3.05	2.45	2.05
MC2056L	3.30	2.75	2.20	1.85
MC2056P	3.00	3.00	2.00	1.70
			1000-Up Ea.	1.55
MC2057F	4.74	3.95	3.20	2.65
MC2057L	4.68	3.90	3.10	2.60
MC2057P	3.30	3.30	2.20	1.85
			1000-Up Ea.	1.70
MC2058L	5.10	4.25	3.40	2.85
MC2058P	3.83	3.83	2.55	2.15
			1000-Up Ea.	1.95
MC2059F	7.08	5.90	4.75	3.95
MC2059L	7.56	6.30	5.05	4.20
MC2059P	4.35	4.35	2.90	2.50
			1000-Up Ea.	2.25

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Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC2060F	7.08	5.90	4.75	3.95
MC2060L	7.56	6.30	5.05	4.20
MC2060P	4.35	4.35	2.90	2.50
			1000-Up Ea.	2.25
MC2061L	4.74	3.95	3.20	2.65
MC2061P	3.30	3.30	2.20	1.85
			1000-Up Ea.	1.70
MC2062L	4.74	3.95	3.20	2.65
MC2063F	4.74	3.95	3.20	2.65
MC2063L	5.76	4.80	3.85	3.20
MC2063P	3.60	3.60	2.40	2.05
			1000-Up Ea.	1.85
MC2065L	5.22	4.35	3.60	2.90
MC2065P	3.30	3.30	2.20	1.85
			1000-Up Ea.	1.70
MC2073L	9.78	8.15	6.55	5.45
MC2073P	6.45	6.45	4.30	3.60
			1000-Up Ea.	3.30
MC2074P	6.45	6.45	4.30	3.60
			1000-Up Ea.	3.30
MC2075F	8.16	6.80	5.45	4.55
MC2075L	7.56	6.30	5.05	4.20
MC2075P	4.35	4.35	2.90	2.50
			1000-Up Ea.	2.25
MC2076F	8.16	6.80	5.45	4.55
MC2076L	7.56	6.30	5.05	4.20
MC2076P	4.35	4.35	2.90	2.50
			1000-Up Ea.	2.25
MC2078F	8.16	6.80	5.45	4.55
MC2078L	7.56	6.30	5.05	4.20
MC2078P	4.35	4.35	2.90	2.50
			1000-Up Ea.	2.25
MC2100F	8.64	7.20	5.75	4.80
MC2100L	8.64	7.20	5.75	4.80
MC2101F	8.64	7.20	5.75	4.80
MC2101L	8.64	7.20	5.75	4.80
MC2102F	5.46	4.55	3.65	3.05
MC2102L	5.46	4.55	3.65	3.05
MC2103F	8.64	7.20	5.75	4.80
MC2103L	8.64	7.20	5.75	4.80
MC2104F	8.64	7.20	5.75	4.80
MC2104L	8.64	7.20	5.75	4.80
MC2105F	8.64	7.20	5.75	4.80
MC2105L	8.64	7.20	5.75	4.80
MC2106F	5.46	4.55	3.65	3.05
MC2106L	5.46	4.55	3.65	3.05
MC2107F	8.64	7.20	5.75	4.80
MC2107L	8.64	7.20	5.75	4.80
MC2109F	12.84	10.70	8.60	7.15
MC2109L	12.84	10.70	8.60	7.15
MC2110F	12.84	10.70	8.60	7.15
MC2110L	12.84	10.70	8.60	7.15
MC2111L	8.64	7.20	5.75	4.80
MC2112L	8.64	7.20	5.75	4.80
MC2113F	8.64	7.20	5.75	4.80
MC2113L	8.64	7.20	5.75	4.80
MC2123L	17.82	14.85	11.90	9.90
MC2124L	17.82	14.85	11.90	9.90
MC2125F	14.76	12.30	9.85	8.20
MC2125L	14.76	12.30	9.85	8.20
MC2126F	14.76	12.30	9.85	8.20
MC2126L	14.76	12.30	9.85	8.20
MC2128F	14.76	12.30	9.85	8.20
MC2128L	14.76	12.30	9.85	8.20
MC2150F	7.08	5.90	4.75	3.95
MC2150L	7.08	5.90	4.75	3.95
MC2151F	7.08	5.90	4.75	3.95
MC2151L	7.08	5.90	4.75	3.95
MC2152F	5.46	4.55	3.65	3.05
MC2152L	5.46	4.55	3.65	3.05
MC2153F	7.08	5.90	4.75	3.95
MC2153L	7.08	5.90	4.75	3.95
MC2154F	7.08	5.90	4.75	3.95
MC2154L	7.08	5.90	4.75	3.95
MC2155F	7.08	5.90	4.75	3.95
MC2155L	7.08	5.90	4.75	3.95
MC2156F	5.46	4.55	3.65	3.05
MC2156L	5.46	4.55	3.65	3.05
MC2157F	7.08	5.90	4.75	3.95
MC2157L	7.08	5.90	4.75	3.95
MC2159F	10.80	9.00	7.20	6.00
MC2159L	10.80	9.00	7.20	6.00
MC2160F	10.80	9.00	7.20	6.00
MC2160L	10.80	9.00	7.20	6.00
MC2161L	7.08	5.90	4.75	3.95
MC2162L	7.08	5.90	4.75	3.95
MC2163F	7.08	5.90	4.75	3.95
MC2163L	7.08	5.90	4.75	3.95

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Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC2165L	9.54	7.95	6.60	5.30
MC2175F	12.30	10.25	8.20	6.85
MC2175L	12.30	10.25	8.20	6.85
MC2176F	12.30	10.25	8.20	6.85
MC2176L	12.30	10.25	8.20	6.85
MC2178F	12.30	10.25	8.20	6.85
MC2178L	12.30	10.25	8.20	6.85
MC3000F	6.48	5.40	4.30	3.60
MC3000L	5.22	4.35	3.50	2.90
MC3000P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3001F	6.48	5.40	4.30	3.60
MC3001L	5.22	4.35	3.50	2.90
MC3001P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3002F	7.08	5.90	4.75	3.95
MC3002L	5.76	4.80	3.85	3.20
MC3002P	2.55	2.55	1.70	1.45
			1000-Up Ea.	1.31
MC3003F	7.08	5.90	4.75	3.95
MC3003L	5.76	4.80	3.85	3.20
MC3003P	2.55	2.55	1.70	1.45
			1000-Up Ea.	1.31
MC3004L	5.22	4.35	3.50	2.90
MC3004P	2.33	2.33	1.55	1.39
			1000-Up Ea.	1.19
MC3005F	6.48	5.40	4.30	3.60
MC3005L	5.22	4.35	3.50	2.90
MC3005P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3006F	6.48	5.40	4.30	3.60
MC3006L	5.22	4.35	3.50	2.90
MC3006P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3007L	5.22	4.35	3.50	2.90
MC3007P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3008P	3.45	3.45	2.30	1.95
			1000-Up Ea.	1.75
MC3010F	6.48	5.40	4.30	3.60
MC3010L	5.22	4.35	3.50	2.90
MC3010P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3011P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3012L	5.22	4.35	3.50	2.90
MC3012P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3015F	6.48	5.40	4.30	3.60
MC3015L	5.22	4.35	3.50	2.90
MC3015P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3016P	2.33	2.33	1.55	1.39
			1000-Up Ea.	1.19
MC3018P	1.78	1.78	1.18	.99
			1000-Up Ea.	.90
MC3019P	1.78	1.78	1.18	.99
			1000-Up Ea.	.90
MC3020F	7.08	5.90	4.75	3.95
MC3020L	5.76	4.80	3.85	3.20
MC3020P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3021P	3.98	3.98	2.65	2.25
			1000-Up Ea.	2.05
MC3022P	3.98	3.98	2.65	2.25
			1000-Up Ea.	2.05
MC3023P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3024P	3.00	3.00	2.00	1.70
			1000-Up Ea.	1.55
MC3025F	7.08	5.90	4.75	3.95
MC3025L	5.76	4.80	3.85	3.20
MC3025P	2.55	2.55	1.70	1.45
			1000-Up Ea.	1.31
MC3026F	7.08	5.90	4.75	3.95
MC3026L	5.76	4.80	3.85	3.20
MC3026P	2.55	2.55	1.70	1.45
			1000-Up Ea.	1.31
MC3028F	7.08	5.90	4.75	3.95
MC3028L	5.76	4.80	3.85	3.20
MC3028P	2.55	2.55	1.70	1.45
			1000-Up Ea.	1.31
MC3029F	7.08	5.90	4.75	3.95

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC3029L	5.76	4.80	3.85	3.20
MC3029P	2.55	2.55	1.70	1.45
			1000-Up Ea.	1.31
MC3030F	5.04	4.20	3.40	2.80
MC3030L	4.20	3.50	2.80	2.35
MC3030P	1.76	1.76	1.17	1.00
			1000-Up Ea.	.90
MC3031P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3032P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3033P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3034P	2.33	2.33	1.55	1.32
			1000-Up Ea.	1.19
MC3050F	8.94	7.45	5.95	4.95
MC3050L	8.34	6.95	5.60	4.65
MC3050P	3.68	3.68	2.45	2.10
			1000-Up Ea.	1.90
MC3051P	3.68	3.68	2.45	2.10
			1000-Up Ea.	1.90
MC3052F	8.94	7.45	5.95	4.95
MC3052L	8.34	6.95	5.60	4.65
MC3052P	3.68	3.68	2.45	2.10
			1000-Up Ea.	1.90
MC3053P	4.20	4.20	2.80	2.40
			1000-Up Ea.	2.15
MC3054P	3.75	3.75	2.50	2.15
			1000-Up Ea.	1.95
MC3055P	3.75	3.75	2.50	2.15
			1000-Up Ea.	1.95
MC3060F	12.48	10.40	8.35	6.95
MC3060L	12.48	10.40	8.35	6.95
MC3060P	5.93	5.93	3.95	3.40
			1000-Up Ea.	3.05
MC3061F	12.48	10.40	8.35	6.95
MC3061L	12.48	10.40	8.35	6.95
MC3061P	5.93	5.93	3.95	3.40
			1000-Up Ea.	3.05
MC3062F	12.48	10.40	8.35	6.95
MC3062L	12.48	10.40	8.35	6.95
MC3062P	5.93	5.93	3.95	3.40
			1000-Up Ea.	3.05
MC3100L	7.92	6.60	5.30	4.40
MC3101L	7.92	6.60	5.30	4.40
MC3102L	8.70	7.25	5.80	4.85
MC3103L	8.70	7.25	5.80	4.85
MC3104L	7.92	6.60	5.30	4.40
MC3105L	7.92	6.60	5.30	4.40
MC3106L	7.92	6.60	5.30	4.40
MC3107L	7.92	6.60	5.30	4.40
MC3108L	7.92	6.60	5.30	4.40
MC3110L	7.92	6.60	5.30	4.40
MC3111L	7.92	6.60	5.30	4.40
MC3112L	7.92	6.60	5.30	4.40
MC3115L	7.92	6.60	5.30	4.40
MC3116L	7.02	5.85	4.85	3.90
MC3118L	5.40	4.50	3.75	3.00
MC3119L	5.40	4.50	3.75	3.00
MC3120L	7.92	6.60	5.30	4.40
MC3121L	11.58	9.65	7.75	6.45
MC3122L	11.58	9.65	7.75	6.45
MC3123L	7.02	5.85	4.85	3.90
MC3124L	8.10	7.25	5.80	4.85
MC3125L	8.70	7.25	5.80	4.85
MC3126L	8.70	7.25	5.80	4.85
MC3128L	8.70	7.25	5.80	4.85
MC3129L	8.70	7.25	5.80	4.85
MC3130L	5.94	4.95	3.95	3.30
MC3131L	7.02	5.85	4.85	3.90
MC3132L	7.02	5.85	4.85	3.90
MC3133L	7.02	5.85	4.85	3.90
MC3134L	7.02	5.85	4.85	3.90
MC3150L	12.66	10.55	8.45	7.05
MC3151L	12.66	10.55	8.45	7.05
MC3152L	12.66	10.55	8.45	7.05
MC3153L	12.24	10.20	8.50	6.80
MC3154L	11.70	9.75	8.10	6.50
MC3155L	11.70	9.75	8.10	6.50
MC3160L	20.70	17.25	13.80	11.50
MC3161L	20.70	17.25	13.80	11.50
MC3162L	20.70	17.25	13.80	11.50
MC4000P	12.60	12.60	8.40	7.10
			1000-Up Ea.	6.45
MC4001P	9.98	9.98	6.65	5.60
			1000-Up Ea.	5.10
MC4002P	12.45	12.45	8.30	7.05
			1000-Up Ea.	6.40
MC4004F	31.86	26.55	21.25	17.20
MC4004L	21.24	17.70	14.15	11.80
MC4004P	16.80	16.80	11.20	9.45
			1000-Up Ea.	8.60
MC4005F	22.74	18.95	15.20	12.65
MC4005L	16.26	13.55	10.85	9.05
MC4005P	12.90	12.90	8.60	7.25
			1000-Up Ea.	6.60
MC4006F	23.04	19.20	15.35	12.80
MC4006L	13.50	11.25	9.00	7.50
MC4006P	11.10	11.10	7.40	6.25
			1000-Up Ea.	5.70
MC4007L	13.92	11.60	9.30	7.75
MC4007P	11.48	11.48	7.65	6.50
			1000-Up Ea.	5.90
MC4008L	13.98	11.65	9.15	7.75
MC4008P	11.40	11.40	7.60	6.45
			1000-Up Ea.	5.85
MC4010L	13.98	11.65	9.15	7.75
MC4010P	11.40	11.40	7.60	6.45
			1000-Up Ea.	5.85

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC4012L	20.64	17.20	13.20	11.50
MC4012P	14.10	14.10	9.40	7.95
			1000-Up Ea.	7.25
MC4015P	9.15	9.15	6.10	5.15
			1000-Up Ea.	4.70
MC4024P	3.90	3.90	2.60	2.20
			1000-Up Ea.	2.00
MC4023P	9.15	9.15	6.10	5.20
			1000-Up Ea.	4.70
MC4026P	6.15	6.15	4.10	3.45
			1000-Up Ea.	3.15
MC4027P	5.10	5.10	3.40	2.85
			1000-Up Ea.	2.60
MC4028P	6.90	6.90	4.60	3.90
			1000-Up Ea.	3.55
MC4029P	5.78	5.78	3.85	3.25
			1000-Up Ea.	2.95
MC4030P	6.90	6.90	4.60	3.90
			1000-Up Ea.	3.55
MC4031P	5.78	5.78	3.85	3.25
			1000-Up Ea.	2.95
MC4032P	4.80	4.80	3.20	2.70
			1000-Up Ea.	2.45
MC4038P	9.98	9.98	6.65	5.60
			1000-Up Ea.	5.10
MC4039P	9.98	9.98	6.65	5.60
			1000-Up Ea.	5.10
MC4040P	9.98	9.98	6.65	5.60
			1000-Up Ea.	5.10
MC4041P	9.98	9.98	6.65	5.60
			1000-Up Ea.	5.10
MC4042P	7.80	7.80	5.20	4.40
			1000-Up Ea.	4.00
MC4043P	11.70	11.70	7.80	6.60
			1000-Up Ea.	6.00
MC4044P	3.90	3.90	2.60	2.20
			1000-Up Ea.	2.00
MC4324L	8.52	7.10	5.90	4.75
MC4326L	11.88	9.90	8.25	6.60
MC4327L	9.18	7.65	6.40	5.10
MC4328L	13.68	11.40	9.50	7.60
MC4329L	10.44	8.70	7.25	5.80
MC4330L	13.68	11.40	9.50	7.60
MC4331L	10.44	8.70	7.25	5.80
MC4332L	8.76	7.30	6.10	4.90
MC4335L	15.84	13.20	11.00	8.80
MC4337L	15.84	13.20	11.00	8.80
MC4344L	8.52	7.10	5.90	4.75
MC5400F	5.64	4.70	3.95	3.15
MC5400L	5.64	4.70	3.95	3.15
MC5401F	5.64	4.70	3.95	3.15
MC5401L	5.64	4.70	3.95	3.15
MC5402F	6.48	5.40	4.50	3.60
MC5402L	6.48	5.40	4.50	3.60
MC5404L	7.02	5.85	4.85	3.90
MC5405L	7.02	5.85	4.85	3.90
MC5410F	5.64	4.70	3.95	3.15
MC5410L	5.64	4.70	3.95	3.15
MC5420F	5.64	4.70	3.95	3.15
MC5420L	5.64	4.70	3.95	3.15
MC5430F	5.64	4.70	3.95	3.15
MC5430L	5.64	4.70	3.95	3.15
MC5440F	6.48	5.40	4.50	3.60
MC5440L	6.48	5.40	4.50	3.60
MC5441AL	30.60	25.50	21.25	11.00
MC5442L	32.46	27.05	22.55	18.05
MC5443L	32.46	27.05	22.55	18.05
MC5444L	32.46	27.05	22.55	18.05
MC5446L	40.68	33.90	28.25	22.60
MC5447L	37.44	31.20	26.00	20.80
MC5450F	5.64	4.70	3.95	3.15
MC5450L	5.64	4.70	3.95	3.15
MC5451F	5.64	4.70	3.95	3.15
MC5451L	5.64	4.70	3.95	3.15
MC5453F	5.64	4.70	3.95	3.15
MC5453L	5.64	4.70	3.95	3.15
MC5454F	5.64	4.70	3.95	3.15
MC5454L	5.64	4.70	3.95	3.15
MC5460F	4.20	3.50	2.95	2.35
MC5460L	4.20	3.50	2.95	2.35
MC5472F	7.92	6.60	5.50	4.40
MC5472L	7.92	6.60	5.50	4.40
MC5473F	12.96	10.80	9.00	7.20
MC5473L	12.96	10.80	9.00	7.20
MC5475L	19.80	16.50	13.75	11.00
MC5476L	13.68	11.40	9.50	7.60
MC5479F	11.34	9.45	7.85	6.30
MC5479L	11.34	9.45	7.85	6.30
MC5480L	15.18	12.65	10.55	8.45
MC5483L	32.04	26.70	22.25	17.80
MC5490L	23.22	19.35	16.10	12.90
MC5491AL	25.44	21.20	16.80	14.30
MC5492L	23.22	19.35	16.10	12.90
MC5493L	23.22	19.35	16.10	12.90
MC5495L	27.90	23.25	19.35	15.50
MC7400F	4.50	3.75	3.00	2.50
MC7400L	3.78	3.15	2.50	2.10
MC7400P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99
MC7401F	4.50	3.75	3.00	2.50
MC7401L	3.78	3.15	2.50	2.10
MC7401P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99
MC7402F	4.86	4.05	3.25	2.70
MC7402L	4.20	3.50	2.80	2.35
MC7402P	2.22	2.22	1.48	1.26
			1000-Up Ea.	1.14
MC7403P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MC7404L	4.86	4.05	3.25	2.70
MC7404P	2.40	2.40	1.60	1.36
			1000-Up Ea.	1.23
MC7405L	4.86	4.05	3.25	2.70
MC7405P	2.40	2.40	1.60	1.36
			1000-Up Ea.	1.23
MC7410F	4.50	3.75	3.00	2.50
MC7410L	3.78	3.15	2.50	2.10
MC7411P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99
MC7420F	4.50	3.75	3.00	2.50
MC7420L	3.78	3.15	2.50	2.10
MC7420P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99
MC7430F	4.50	3.75	3.00	2.50
MC7430L	3.78	3.15	2.50	2.10
MC7430P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99
MC7440F	4.86	4.05	3.25	2.70
MC7440L	4.20	3.50	2.80	2.35
MC7440P	2.22	2.22	1.48	1.26
			1000-Up Ea.	1.14
MC7441AP	10.95	10.95	7.30	6.20
			1000-Up Ea.	5.60
MC7442P	10.13	10.13	6.75	5.70
			1000-Up Ea.	5.20
MC7443P	10.13	10.13	6.75	5.70
			1000-Up Ea.	5.20
MC7444P	10.13	10.13	6.75	5.70
			1000-Up Ea.	5.20
MC7446P	12.75	12.75	8.50	7.20
			1000-Up Ea.	6.55
MC7447P	11.70	11.70	7.80	6.60
			1000-Up Ea.	6.00
MC7450F	5.40	4.50	3.25	2.70
MC7450L	4.20	3.50	2.80	2.35
MC7450P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99
MC7451F	4.50	3.75	3.00	2.50
MC7451L	3.78	3.15	2.50	2.10
MC7451P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99
MC7453F	4.86	4.05	3.25	2.70
MC7453L	4.20	3.50	2.80	2.35
MC7453P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99
MC7454F	4.50	3.75	3.00	2.50
MC7454L	3.78	3.15	2.50	2.10
MC7454P	1.94	1.94	1.29	1.10
			1000-Up Ea.	.99
MC7460F	3.60	3.00	2.40	2.00
MC7460L	2.94	2.45	2.00	1.65
MC7460P	1.52	1.52	1.03	.88
			1000-Up Ea.	.79
MC7472F	6.30	5.25	4.20	3.50
MC7472L	6.12	5.10	4.10	3.40
MC7472P	2.63	2.63	1.75	1.50
			1000-Up Ea.	1.35
MC7473F	9.00	7.50	6.00	5.00
MC7473L	9.00	7.50	6.00	5.00
MC7473P	4.50	4.50	3.00	2.55
			1000-Up Ea.	2.30
MC7475L	20.88	17.40	13.90	11.60
MC7475P	6.75	6.75	4.50	3.85
			1000-Up Ea.	3.45
MC7476P	4.80	4.80	3.20	2.70
			1000-Up Ea.	2.45
MC7479F	8.82	7.35	5.90	4.90
MC7479L	8.64	7.20	5.75	4.80
MC7479P	3.83	2.55	2.55	2.15
			1000-Up Ea.	1.95
MC7480P	5.25	3.50	3.50	3.00
			1000-Up Ea.	2.70
MC7483P	11.80	11.80	7.87	6.65
			1000-Up Ea.	6.05
MC7490P	7.28	4.85	4.85	4.15
			1000-Up Ea.	3.75
MC7490L	17.82	14.85	11.90	9.90
MC7491AP	12.45	12.45	8.30	7.00
			1000-Up Ea.	6.35
MC7492P	7.28	7.28	4.85	4.15
			1000-Up Ea.	3.75
MC7493L	23.64	19.70	15.80	13.15
MC7493P	7.28	4.85	4.85	4.15
			1000-Up Ea.	3.75
MC7495P	8.55	8.55	5.70	4.85
			1000-Up Ea.	4.40
MC8300L	11.70	9.75	8.15	6.50
MC8301L	15.12	12.60	10.10	8.40
MC8304L	13.44	11.20	9.40	7.50
MC8309L	9.54	7.95	6.60	5.30
MC8312L	9.54	7.95	6.60	5.30
MC8300P	9.00	9.00	6.00	5.05
			1000-Up Ea.	4.60
MC8301P	11.55	11.55	7.70	6.50
			1000-Up Ea.	5.90
MC8304P	10.35	10.35	6.90	5.80
			1000-Up Ea.	5.30
MC8309P	7.28	7.28	4.85	4.10
			1000-Up Ea.	3.70
MC8312P	7.28	7.28	4.85	4.10
			1000-Up Ea.	3.70
MC8601F	12.00	10.00	8.30	6.65
MC8601F	12.00	10.00	8.30	6.65
MC8601P	8.40	8.40	5.60	4.75
			1000-Up Ea.	4.30
MC9300L	23.40	19.50	16.20	13.00
MC9301L	30.00	25.00	20.00	16.75
MC9304L	27.00	22.50	18.70	15.00
MC9309L	19.08	15.90	13.20	10.60
MC9312L	19.08	15.90	13.20	10.60
MC9601F	24.00	20.00	16.50	13.40
MC9601L	24.00	20.00	16.50	13.40

Motorola Type No.	EACH 1-49	50-999	1000-Up
MC9701P	3.68	2.45	1.80
MC9704P	5.10	3.40	2.50
MC9707P	3.68	2.45	1.80
MC9709P	3.68	2.45	1.80
MC9713P	2.10	1.40	1.05
MC9714P	2.33	1.55	1.15
MC9715P	1.95	1.30	.95
MC9718P	1.64	1.09	.81
MC9719AP	1.89	1.26	.93
MC9719P	1.64	1.09	.81
MC9720P	1.64	1.09	.81
MC9721P	1.64	1.09	.81
MC9722P	3.38	2.25	1.65
MC9760P	8.33	5.55	4.10
MC9801P	3.98	2.65	1.95
MC9804P	5.48	3.65	2.70
MC9807P	3.98	2.65	1.95
MC9809P	3.98	2.65	1.95
MC9813P	2.25	1.50	1.13
MC9814P	2.48	1.65	1.24
MC9815P	2.10	1.40	1.02
MC9818P	1.78	1.17	.87
MC9819AP	1.89	1.26	.93
MC9819P	1.78	1.17	.87
MC9820P	1.78	1.17	.87
MC9821P	1.78	1.17	.87
MC9822P	3.53	2.35	1.75
MC9860P	8.93	5.95	4.40

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MCI5482L	19.14	15.95	13.30	10.65
			1000-Up Ea.	7.13
MCI7482L	16.20	13.50	10.80	9.00
MCI7482P	7.13	7.13	4.75	4.05
			1000-Up Ea.	3.65
MC25482L	19.14	19.14	15.95	13.30
			1000-Up Ea.	19.14
MC27482L	16.20	13.50	10.80	9.00
MC27482P	9.75	9.75	6.50	5.50
			1000-Up Ea.	9.75
MCH1439G	21.60	18.00	15.00	12.00
MCH1539G	27.00	22.50	18.75	15.00
MFC4000	1.35	1.12	.94	.75
MFC4010	1.26	1.05	.87	.70
MFC4040	1.35	1.12	.94	.75
MFC4050	1.26	1.05	1.05	.81
MFC4060	1.41	1.17	1.17	.90
MFC6000	1.53	1.27	1.06	.85
MFC6010	1.08	.90	.75	.60
MFC6020	2.70	2.25	1.87	1.50
MFC6030	2.77	2.31	2.31	1.78
MFC6040	1.98	1.65	1.65	1.27
MFC8000	3.12	2.60	2.20	1.75
MFC8001	3.48	2.90	2.45	1.95
MFC8002	4.02	3.35	2.80	2.25
MFC8010	2.94	2.45	2.05	1.65
MFC8020	2.38	1.98	1.98	1.52
MFC8040	2.13	1.77	1.77	1.36
MFC8050	1.98	1.65	1.65	1.27
MFC9000	4.57	3.81	3.81	2.93
MFC9010	3.53	2.94	2.94	2.26
QK2201			Each	75.00
QK2202			Each	37.95

Philco Type No.	EACH 1-9	10-99	100-Up
PA7600-31	9.42	7.85	5.25
PA7601-31	16.56	13.80	9.20
PA7602-31	16.56	13.80	9.20
PA7605-39	16.56	13.80	9.20
PA7606-39	16.56	13.80	9.20
PA7702A-31	7.92	6.60	5.00
PA7702A-39	2.70	2.25	1.75
PA7709-31	5.52	4.60	3.80
PA7709-39	2.70	2.25	1.75
PA7709A-31	13.20	11.00	8.80
PA7710-31	5.70	4.75	3.90
PA7710-39	2.70	2.25	1.75
PA7711-31	5.70	4.75	3.90
PA7711-39	2.70	2.25	1.75
PA7712-31	7.92	6.60	5.00
PA7712-39	2.70	2.25	1.75
PA7741-31	8.58	7.15	5.95
PA7741-39	4.74	3.95	3.10
PA7751-39	9.60	8.00	6.60
PD7400	1.38	1.15	.75
PD7401	1.38	1.15	.75
PD7402	1.38	1.15	.75
PD7404	1.56	1.30	.85
PD7405	1.56	1.30	.85
PD7410	1.38	1.15	.75
PD7420	1.38	1.15	.75
PD7430	1.38	1.15	.75
PD7440	1.56	1.30	.85
PD7442	5.22	4.35	2.90
PD7450	1.38	1.15	.75
PD7451	1.38	1.15	.75
PD7453	1.38	1.15	.75
PD7454	1.38	1.15	.75
PD7460	1.20	1.00	.70
PD7470	2.16	1.80	1.20
PD7472	1.98	1.65	1.10
PD7473	2.88	2.40	1.60
PD7474	2.52	2.10	1.40
PD7475	4.14	3.45	2.30
PD7476	3.24	2.70	1.75
PD7482	4.86	4.05	2.70
PD7483	7.56	6.30	4.20
PD7490	4.86	4.05	2.70
PD7491A	5.76	4.80	3.20

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them.

Philco Type No.	EACH 1-9	10-99	100-Up
PD7493	4.86	4.05	2.70
PD7494	5.22	4.35	2.90
PD7495	5.22	4.35	2.90
PD7702A-31	7.92	6.60	5.00
PD7702A-39	2.70	2.25	1.75
PD7709-31	5.52	4.60	3.80
PD7709-39	2.70	2.25	1.75
PD7709A-31	13.20	11.00	8.80
PD7710-31	5.70	4.75	3.90
PD7710-39	2.70	2.25	1.75
PD7711-31	5.70	4.75	3.90
PD7711-39	2.70	2.25	1.75
PD7712-31	7.92	6.60	5.00
PD7712-39	2.70	2.25	1.75
PD7741-31	11.22	9.35	7.55
PD7741-39	5.46	4.55	3.20
PD74107	2.88	2.40	1.60
PD74121	4.08	3.40	2.90
PD74150	9.75	8.12	6.90
PD74154	7.44	6.20	5.30
PD9300-59	6.00	5.00	4.50
PD9301-59	7.50	6.25	5.80
PD9304-59	6.90	5.75	2.25
PD9306-59	18.90	15.75	13.20
PD9308-59	12.00	10.00	8.25
PD9309-59	4.80	4.00	3.60
PD9311-59	11.10	9.25	7.75
PD9312-59	4.80	4.00	3.60
PD9328-59	21.90	18.25	15.25
PD9930-59	1.02	.85	.70
PD9931-59	1.32	1.10	.95
PD9932-59	1.02	.85	.70
PD9933-59	1.02	.85	.70
PD9935-59	1.14	.95	.70
PD9936-59	1.14	.95	.70
PD9937-59	1.14	.95	.70
PD9941-59	2.28	1.90	1.45
PD9941A-59	2.28	1.90	1.45
PD9944-59	1.02	.85	.70
PD9945-59	1.32	1.10	.90
PD9946-59	1.02	.85	.70
PD9948-59	1.32	1.10	.90
PD9949-59	1.02	.85	.70
PD9950-59	3.12	2.60	1.54
PD9951-59	3.12	2.60	1.54
PD9951A-59	3.12	2.60	1.54
PD9961-59	1.02	.85	.70
PD9962-59	1.02	.85	.70
PD9963-59	1.02	.85	.70
PD9093-59	1.80	1.50	1.30
PD9094-59	1.80	1.50	1.30
PD9097-59	1.80	1.50	1.30
PD9099-59	1.80	1.50	1.30
PD9180-59	1.08	.90	.70
PD9112-59	6.24	5.20	4.60
PD9601-59	6.60	5.50	4.65
PH2001-59	9.12	7.60	3.80
PL4A01C	11.10	9.25	8.75
PL4C06C	3.42	2.90	2.40
PL4C07C	3.48	2.90	2.40
PL4G10C	9.72	8.10	6.75
PL4G11C	9.72	8.10	6.75
PL4S10C	11.28	9.40	8.90
PL4S16C	26.40	22.00	20.50
PL5R32C	4.80	4.00	3.75
PL5R64X4C	12.78	10.65	8.50
PL5R96C	5.10	4.25	4.00
PL5R100C	5.10	4.25	4.00
PL5R128C	5.70	4.75	4.45
PL5R198C	7.98	6.65	6.00
PL5R250C	12.78	10.65	8.50
PL5R256C	12.78	10.65	8.50
PL5R512C	17.70	14.75	12.75
PLR709-51	63.00	52.50	35.00
PLR930-51	36.00	30.00	20.00
PLR932-51	36.00	30.00	20.00
PLR944-51	36.00	30.00	20.00
PLR945-51	54.00	45.00	30.00
PLR962-51	36.00	30.00	20.00
PLR980-51	54.00	45.00	30.00
PM1024C	18.00	15.00	14.00
PMS16X4C	12.00	10.00	8.95
PMS256X1C	18.00	15.00	14.75
PMS1024C	18.00	15.00	14.00
PMS2048C	24.00	20.00	16.25
PMS2240C5	21.60	18.00	13.50

SEE PAGE 17 FOR SEMICONDUCTORS

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them.

Sylvania Type No.	EACH 1-9	10-24	25-99	100-Up
SF12-02	6.48	5.40	4.30	3.65
SF32-02	5.88	4.90	3.90	3.25
SF32-03	7.92	6.60	5.25	4.40
SF33-02	4.74	3.95	3.15	2.60
SF33-03	7.14	5.95	4.75	3.95
SF52-01	4.50	3.75	2.95	2.60
SF52-02	6.84	5.70	4.55	3.85
SF52-03	6.84	5.70	4.55	3.85
SF53-01	4.26	3.55	2.80	2.50
SF53-02	5.76	4.80	3.85	3.25
SF53-03	5.76	4.80	3.85	3.25
SF62-01	4.50	3.75	2.95	2.60
SF62-02	6.84	5.70	4.55	3.85
SF62-03	6.84	5.70	4.55	3.85
SF63-01	4.26	3.55	2.80	2.50
SF62-02	5.76	4.80	3.85	3.25
SF63-03	5.76	4.80	3.85	3.25
SF81-02	15.48	12.90	10.30	8.80
SF81-03	15.48	12.90	10.30	8.80
SF83-01	6.60	5.50	4.35	3.85
SF83-02	8.76	7.30	5.80	4.95
SF83-03	8.76	7.30	5.80	4.95
SF102-01	6.60	5.50	4.35	3.85
SF102-02	10.56	8.80	7.05	5.95
SF102-03	10.56	8.80	7.05	5.95
SF103-02	8.82	7.35	5.85	4.95
SF103-01	6.24	5.20	4.10	3.65
SF103-03	8.82	7.35	5.85	4.95
SF112-01	6.60	5.50	4.35	3.85
SF112-02	10.56	8.80	7.05	5.95
SF112-03	10.56	8.80	7.05	5.95
SF113-01	6.24	5.20	4.10	3.65
SF113-02	8.82	7.35	5.85	4.95
SF113-03	8.82	7.35	5.85	4.95
SF122-01	7.20	6.00	4.75	4.20
SF122-02	11.76	9.80	7.80	6.60
SF122-03	11.76	9.80	7.80	6.60
SF123-01	6.84	5.70	4.50	4.00
SF123-02	9.78	8.15	6.50	5.50
SF123-03	9.78	8.15	6.50	5.50
SF132-01	7.20	6.00	4.75	4.20
SF132-02	11.76	9.80	7.80	6.60
SF132-03	11.76	9.80	7.80	6.60
SF133-01	6.84	5.70	4.50	4.00
SF133-02	9.78	8.15	6.50	5.50
SF133-03	9.78	8.15	6.50	5.50
SF202-01	5.16	4.30	3.40	3.00
SF202-02	8.28	6.90	5.50	4.55
SF202-03	8.46	7.05	5.65	4.75
SF203-01	4.92	4.10	3.25	2.85
SF203-02	6.72	5.60	4.50	3.80
SF203-03	6.72	5.60	4.50	3.80
SF212-01	5.16	4.30	3.40	3.00
SF212-02	8.28	6.90	5.50	4.55
SF212-03	8.46	7.05	5.65	4.75
SF213-01	4.92	4.10	3.25	2.85
SF213-02	6.72	5.60	4.50	3.80
SF213-03	6.72	5.60	4.50	3.80
SF252-02	8.52	7.10	5.65	4.80
SF252-03	8.52	7.10	5.65	4.80
SF253-02	7.08	5.90	4.70	4.00
SF253-03	7.08	5.90	4.70	4.00
SF262-02	8.52	7.10	5.65	4.80
SF262-03	8.52	7.10	5.65	4.80
SF263-02	7.08	5.90	4.70	4.00
SF263-03	7.08	5.90	4.70	4.00
SF7472N	3.12	2.60	2.07	1.77
SF7473N	5.15	4.29	3.41	2.91
SF7474N	4.47	3.72	2.96	2.52
SG42-01	2.70	2.25	1.80	1.58
SG42-02	3.78	3.15	2.55	2.10
SG42-03	5.10	4.25	3.40	2.90
SG43-01	2.23	1.86	1.48	1.26
SG43-02	3.06	2.55	2.05	1.70
SG43-03	4.14	3.45	2.75	2.30
SG52-01	2.70	2.25	1.80	1.58
SG52-02	3.06	2.55	2.05	1.70
SG52-03	5.10	4.25	3.40	2.90
SG53-01	2.23	1.86	1.48	1.26
SG53-02	3.06	2.55	2.05	1.70
SG53-03	4.14	3.45	2.75	2.30
SG62-01	3.06	2.25	1.80	1.58

Sylvania Type No.	EACH 1-9	10-24	25-99	100-Up
SG62-02	3.78	3.15	2.55	2.10
SG62-03	5.10	4.25	3.40	2.90
SG63-01	2.23	1.86	1.48	1.26
SG63-02	3.06	2.55	2.05	1.70
SG63-03	4.14	3.45	2.75	2.30
SG72-01	2.70	2.25	1.80	1.58
SG72-02	3.78	3.15	2.55	2.10
SG72-03	5.10	4.25	3.40	2.90
SG73-01	2.23	1.86	1.48	1.26
SG73-02	3.06	2.55	2.05	1.70
SG73-03	4.14	3.45	2.75	2.30
SG82-01	3.81	3.17	2.53	2.17
SG82-02	5.88	4.90	3.90	3.30
SG82-03	5.88	4.90	3.90	3.30
SG83-01	3.12	2.60	2.05	1.85
SG83-02	4.74	3.95	3.10	2.65
SG83-03	4.86	4.05	3.20	2.70
SG92-01	2.70	2.25	1.80	1.58
SG92-02	3.78	3.15	2.55	2.10
SG92-03	5.10	4.25	3.40	2.90
SG93-01	2.23	1.86	1.48	1.26
SG93-02	3.06	2.55	2.05	1.70
SG93-03	4.14	3.45	2.75	2.30
SG102-01	2.70	2.25	1.80	1.58
SG102-02	3.78	3.15	2.55	2.10
SG102-03	5.10	4.25	3.40	2.90
SG103-01	2.23	1.86	1.48	1.26
SG103-02	3.06	2.55	2.05	1.70
SG103-03	4.14	3.45	2.75	2.30
SG112-01	2.70	2.25	1.80	1.58
SG112-02	3.78	3.15	2.55	2.10
SG112-03	5.10	4.25	3.40	2.90
SG113-01	2.23	1.86	1.48	1.26
SG113-02	3.06	2.55	2.05	1.70
SG113-03	4.14	3.45	2.75	2.30
SG122-01	2.70	2.25	1.80	1.58
SG122-02	3.78	3.15	2.55	2.10
SG122-03	5.10	4.25	3.40	2.90
SG123-01	2.23	1.86	1.48	1.26
SG123-02	3.06	2.55	2.05	1.70
SG123-03	4.14	3.45	2.75	2.30
SG132-01	3.46	2.88	2.30	1.97
SG132-02	5.40	4.50	3.65	3.05
SG132-03	5.64	4.70	3.75	3.15
SG133-01	3.31	2.76	2.19	1.90
SG133-02	4.38	3.65	2.90	2.40
SG133-03	4.56	3.80	3.00	2.50
SG142-01	2.70	2.25	1.80	1.58
SG142-02	3.78	3.15	2.55	2.10
SG142-03	5.10	4.25	3.40	2.90
SG143-01	2.23	1.86	1.48	1.26
SG143-02	3.06	2.55	2.05	1.70
SG143-03	4.14	3.45	2.75	2.30
SG152-01	2.34	1.95	1.55	1.35
SG152-02	3.24	2.70	2.15	1.80
SG152-03	3.66	3.05	2.40	2.05
SG153-02	3.24	2.70	2.15	1.80
SG153-01	2.34	1.95	1.55	1.35
SG153-03	3.66	3.05	2.40	2.05
SG162-01	3.46	2.88	2.30	1.97
SG162-02	5.40	4.50	3.65	3.05
SG162-03	5.64	4.70	3.75	3.15
SG163-01	3.31	2.76	2.19	1.90
SG163-02	4.38	3.65	2.90	2.40
SG163-03	4.56	3.80	3.00	2.50
SG172-01	2.34	1.95	1.55	1.35
SG172-02	3.24	2.70	2.15	1.80
SG172-03	3.66	3.05	2.40	2.05
SG173-01	2.34	1.95	1.55	1.35
SG173-02	3.24	2.70	2.15	1.80
SG173-03	3.66	3.05	2.40	2.05
SG182-01	2.34	1.95	1.55	1.35
SG182-02	3.24	2.70	2.15	1.80
SG182-03	3.66	3.05	2.40	2.05
SG183-01	2.34	1.95	1.55	1.35
SG183-02	3.24	2.70	2.15	1.80
SG183-03	3.66	3.05	2.40	2.05
SG192-01	2.70	2.25	1.80	1.58
SG192-02	3.78	3.15	2.55	2.10
SG192-03	5.10	4.25	3.40	2.90
SG193-01	2.23	1.86	1.48	1.26
SG193-02	3.06	2.55	2.05	1.70
SG193-03	4.14	3.45	2.75	2.30
SG202-01	3.00	2.50	2.00	1.75
SG202-02	4.62	3.85	3.10	2.60
SG202-03	5.64	4.70	3.75	3.15
SG203-01	2.80	2.33	1.85	1.58
SG203-02	3.72	3.10	2.50	2.05
SG203-03	4.59	3.82	3.00	2.50
SG212-01	3.00	2.50	2.00	1.75
SG212-02	4.62	3.85	3.10	2.60
SG212-03	5.64	4.70	3.75	3.15
SG213-01	2.80	2.33	1.85	1.58
SG213-02	3.72	3.10	2.50	2.05
SG213-03	4.56	3.80	3.00	2.50
SG222-01	7.98	6.65	5.25	4.50
SG222-02	5.70	4.75	3.80	3.20
SG222-03	5.64	4.70	3.75	3.15
SG223-01	2.80	2.33	1.85	1.58
SG223-02	4.74	3.95	3.15	2.65
SG223-03	4.56	3.80	3.00	2.50
SG232-01	2.34	1.95	1.55	1.35
SG232-02	3.24	2.70	2.15	1.80
SG232-03	3.66	3.05	2.40	2.05
SG233-01	2.34	1.95	1.55	1.35
SG233-02	3.24	2.70	2.15	1.80
SG233-03	3.66	3.05	2.40	2.05

Sylvania Type No.	EACH 1-9	10-24	25-99	100-Up
SG242-01	3.00	2.50	2.00	1.75
SG242-02	3.72	3.10	2.50	2.05
SG242-03	5.64	4.70	3.75	3.15
SG243-01	2.80	2.33	1.85	1.58
SG243-02	3.72	3.10	2.50	2.05
SG243-03	4.56	3.80	3.00	2.50
SG252-01	3.00	2.50	2.00	1.75
SG252-02	4.62	3.85	3.10	2.60
SG252-03	5.64	4.70	3.75	3.15
SG253-01	2.80	2.33	1.85	1.58
SG253-02	3.72	3.10	2.50	2.05
SG253-03	4.56	3.80	3.00	2.50
SG262-01	3.00	2.50	2.00	1.75
SG262-02	4.62	3.85	3.10	2.60
SG262-03	5.64	4.70	3.75	3.15
SG263-01	2.80	2.33	1.85	1.58
SG263-02	3.72	3.10	2.50	2.05
SG263-03	4.56	3.80	3.00	2.50
SG272-01	2.34	1.95	1.55	1.35
SG272-02	3.24	2.70	2.15	1.80
SG272-03	3.66	3.05	2.40	2.05
SG273-01	2.34	1.95	1.55	1.35
SG273-02	3.24	2.70	2.15	1.80
SG273-03	3.66	3.05	2.40	2.05
SG282-01	3.81	3.17	2.53	2.17
SG282-02	5.46	4.55	3.65	3.05
SG282-03	5.64	4.70	3.75	3.15
SG283-01	3.12	2.60	2.05	1.85
SG283-02	3.24	2.70	2.15	1.80
SG283-03	4.56	3.80	3.00	2.50
SG292-01	3.00	2.50	2.00	1.75
SG292-02	3.78	3.15	2.55	2.10
SG292-03	5.64	4.70	3.75	3.15
SG293-01	2.80	2.33	1.85	1.68
SG293-02	3.06	2.55	2.05	1.70
SG293-03	4.56	3.80	3.00	2.50
SG302-01	3.00	2.50	2.00	1.75
SG302-02	4.62	3.85	3.10	2.60
SG302-03	5.64	4.70	3.75	3.15
SG303-01	2.80	2.33	1.85	1.58
SG303-02	4.62	3.85	3.10	2.60
SG303-03	4.56	3.80	3.00	2.25
SG312-01	3.00	2.50	2.00	1.75
SG312-02	4.62	3.85	3.10	2.60
SG312-03	5.64	4.70	3.75	3.15
SG313-01	2.80	2.33	1.85	1.50
SG313-02	3.72	3.10	2.50	2.03
SG313-03	4.56	3.80	3.00	2.50
SG320-02	7.38	6.15	4.90	4.10
SG320-03	11.40	9.50	6.00	5.00
SG321-02	5.82	4.85	3.85	3.20
SG321-03	7.08	5.90	4.70	3.95
SG322-01	3.00	2.50	2.00	1.75
SG322-02	4.62	3.85	3.10	2.60
SG322-03	5.64	4.70	3.75	3.15
SG323-01	2.80	2.33	1.85	1.58
SG323-02	3.72	3.10	2.50	2.05
SG323-03	4.56	3.80	3.00	2.50
SG342-01	3.00	2.50	2.00	1.75
SG342-02	4.62	3.85	3.10	2.60
SG342-03	5.64	4.70	3.75	3.15
SG343-01	2.80	2.33	1.85	1.58
SG343-02	3.72	3.10	2.50	2.05
SG343-03	4.56	3.80	3.00	2.50
SG351-02	7.32	6.10	4.85	4.05
SG351-03	9.90	8.25	6.55	5.45
SG353-01	3.46	2.88	2.30	1.97
SG353-02	4.56	3.80	3.05	2.55
SG353-03	4.92	4.10	3.25	2.75
SG372-01	3.46	2.88	2.30	1.97
SG372-02	4.86	4.05	3.20	2.70
SG372-03	5.64	4.70	3.80	3.20
SG373-01	2.80	2.33	1.85	1.58
SG373-02	3.84	3.20	2.55	2.10
SG373-03	4.56	3.80	3.00	2.50
SG382-01	3.81	3.17	2.53	2.17
SG382-02	5.46	4.55	3.65	3.05
SG382-03	6.24	5.20	4.15	3.45
SG383-01	3.12	2.60	2.05	1.85
SG383-02	4.38	3.65	2.85	2.45
SG383-03	4.98	4.15	3.30	2.75
SG7400N	1.53	1.27	1.01	.85
SG7402N	1.74	1.45	1.16	.97
SG7410N	1.53	1.27	1.01	.85
SG7420N	1.53	1.27	1.01	.85
SG7430N	1.53	1.27	1.01	.85
SG7440N	1.74	1.45	1.16	.97
SG7450N	1.53	1.27	1.01	.85
SG7451N	1.53	1.27	1.01	.85
SG7453N	1.53	1.27	1.01	.85
SG7454N	1.53	1.27	1.01	.85
SG7460N	1.38	1.15	.92	.77
SM10-02	11.94	9.95	7.95	6.75
SM10-03	11.94	9.95	7.95	6.75
SM11-02	9.12	7.60	6.05	5.15
SM11-03	9.12	7.60	6.05	5.15
SM12-01	6.18	5.15	4.10	3.50
SM12-02	7.26	6.05	4.85	4.10
SM12-03	7.26	6.05	4.85	4.10
SM13-01	5.10	4.25	3.40	2.90
SM13-02	6.00	5.00	4.00	3.40
SM13-03	6.00	5.00	4.00	3.40
SM20-02	13.68	11.40	9.10	7.70
SM20-03	13.68	11.40	9.10	7.70
SM21-02	10.50	8.75	6.95	5.90
SM21-03	10.50	8.75	6.95	5.90
SM22-01	7.38	6.15	4.90	4.15

Sylvania Type No.	EACH 1-9	10-24	25-99	100-Up
SM22-02	8.22	6.85	5.50	4.65
SM22-03	8.22	6.85	5.50	4.65
SM23-01	6.06	5.05	4.05	3.45
SM23-02	6.84	5.70	4.55	3.85
SM23-03	6.84	5.70	4.55	3.85
SM30-02	13.68	11.70	9.10	7.70
SM30-03	13.68	11.40	9.10	7.70
SM31-02	10.50	8.75	6.95	5.90
SM31-03	10.50	8.75	6.95	4.90
SM32-01	7.38	6.15	4.90	4.15
SM32-02	8.22	6.85	6.50	4.65
SM32-03	8.22	6.85	5.50	4.65
SM33-01	6.06	5.05	4.05	3.45
SM33-02	6.84	5.70	4.55	3.85
SM33-03	6.84	5.70	4.55	3.85
SM41-02	8.82	7.35	5.85	4.95
SM41-03	8.82	7.35	5.85	4.95
SM43-01	5.52	4.60	3.65	3.10
SM43-02	5.76	4.80	3.85	3.25
SM43-03	5.76	4.80	3.85	3.25
SM61-02	15.84	13.20	10.55	8.95
SM61-03	15.84	13.20	10.55	8.95
SM63-01	6.60	5.50	4.40	3.70
SM63-02	7.92	6.60	5.30	4.45
SM63-03	7.92	6.60	5.30	4.45
SM71-02	14.76	12.30	10.55	8.95
SM71-03	15.84	13.20	10.55	8.95
SM73-01	6.60	5.50	4.40	3.70
SM73-02	7.92	6.60	5.30	4.45
SM73-03	7.92	6.60	5.30	4.45
SM81-02	29.46	24.55	19.60	16.71
SM81-03	29.46	24.55	19.60	16.71
SM82-01	9.72	8.10	6.45	5.45
SM82-02	19.68	16.40	13.05	11.16
SM82-03	19.68	16.40	13.05	11.16
SM83-01	8.04	6.70	5.35	4.55
SM83-02	18.72	15.60	12.45	10.60
SM83-03	18.72	15.60	12.45	10.60
SM90-02	30.36	25.30	20.15	17.10
SM90-03	30.36	25.30	20.15	17.10
SM91-02	30.36	25.30	20.15	17.10
SM91-03	30.36	25.30	20.15	17.10
SM92-01	13.50	11.25	9.00	7.60
SM92-02	15.18	12.65	10.10	8.55
SM92-03	15.18	12.65	10.10	8.55
SM93-01	13.50	11.25	9.00	7.60
SM93-02	15.18	12.65	10.10	8.55
SM93-03	15.18	12.65	10.10	8.55
SM113-01	8.22	6.85	5.50	4.65
SM113-02	15.66	13.05	10.40	8.80
SM113-03	15.66	13.05	10.40	8.80
SM121-02	23.52	19.60	15.60	13.20
SM121-03	23.52	19.60	15.60	13.20
SM123-01	7.14	5.95	4.75	4.05
SM123-02	11.76	9.80	7.80	6.60
SM123-03	11.76	9.80	7.80	6.60
SM131-02	23.52	19.60	15.60	13.20
SM131-03	23.52	19.60	15.60	13.20
SM133-01	7.14	5.95	4.75	4.05
SM133-02	11.76	9.80	7.80	6.60
SM133-03	11.76	9.80	7.80	6.60
SM143-01	11.46	9.55	7.60	6.45
SM143-02	15.66	13.05	10.40	8.80
SM143-03	15.66	13.05	10.40	8.80
SM153-01	11.46	9.55	7.60	6.45
SM153-02	15.66	13.05	10.40	8.80
SM153-03	15.66	13.05	10.40	8.80
SM163-01	7.38	6.15	4.90	4.15
SM163-02	11.76	9.80	7.80	6.60
SM163-03	11.76	9.80	7.80	6.60
SM173-01	7.38	6.15	4.90	4.15
SM173-02	11.76	9.80	7.80	6.60
SM173-03	11.76	9.80	7.80	6.60
SM183-01	13.74	11.45	9.10	7.70
SM183-02	32.28	26.90	21.45	18.15
SM183-03	32.28	26.90	21.45	18.15
SM193-01	13.74	11.45	9.10	7.70
SM193-02	32.28	26.90	21.45	18.15
SM193-03	32.28	26.90	21.45	18.15
SM203-01	10.32	8.60	6.85	5.80
SM204-01	10.32	8.60	6.85	5.80
SM211-02	27.42	22.85	18.20	15.40
SM211-03	27.42	22.85	18.20	15.40
SM213-01	8.16	6.80	5.40	4.60
SM213-02	13.74	11.45	9.10	7.70
SM213-03	13.74	11.45	9.10	7.70
SM221-02	27.42	22.85	18.20	15.40
SM221-03	27.42	22.85	18.20	15.40
SM223-01	8.16	6.80	5.40	4.60
SM223-02	13.74	11.45	9.10	7.70
SM223-03	13.74	11.45	9.10	7.70
SM233-01	8.88	7.40	6.25	5.70
SM243-01 (SM7442N)	8.01	6.67	5.31	4.53
SM253-01 (SM7443N)	11.40	9.50	7.57	6.45
SM293-01 (SM7444N)	11.40	9.50	7.57	6.45
SM7442N	8.01	6.67	5.31	4.53
SM7443N	11.40	9.50	7.57	6.45
SM7444N	11.40	9.50	7.57	6.45
SM7475N	6.57	5.47	4.36	3.72
SM7481N	8.03	6.69	5.33	4.54
SM7491N	10.26	8.55	6.81	5.81

Texas Ins. Type No.	EACH 1-9	10-24	25-99	100-Up
SN54H10S	8.74	7.28	5.80	4.95
SN54H20S	6.76	5.63	4.48	3.82
SN54H30S	6.76	5.63	4.48	3.82
SN54H40S	8.74	7.28	5.80	4.94
SN54H50S	7.97	6.64	5.28	4.50
SN54H55S	7.97	6.64	5.28	4.50
SN54H60S	5.97	4.97	3.96	3.37
SN54H61S	5.97	4.97	3.96	3.37
SN54H62S	5.97	4.97	3.96	3.37
SN54H71S	12.73	10.61	8.44	7.20
SN54H72S	12.73	10.61	8.44	7.20
SN54L00T	10.79	8.99	7.15	6.10
SN54L20T	10.79	8.99	7.15	6.10
SN54L71T	17.69	14.74	11.73	10.00
SN54L72T	17.69	14.74	11.73	10.00
SN74H00N	2.80	2.33	1.85	1.58
SN74H01N	2.80	2.33	1.85	1.58
SN74H04N	3.49	2.91	2.32	1.97
SN74H05N	3.49	2.91	2.32	1.97
SN74H10N	2.80	2.33	1.85	1.58
SN74H10S	5.83	4.86	3.87	3.30
SN74H11N	3.06	2.55	2.03	1.73
SN74H11S	5.83	4.86	3.87	3.30
SN74H20N	2.36	1.97	1.57	1.34
SN74H20S	4.50	3.75	2.99	2.55
SN74H21N	3.06	2.55	2.03	1.73
SN74H21S	5.83	4.86	3.87	3.30
SN74H22N	2.36	1.97	1.57	1.34
SN74H30N	2.36	1.97	1.57	1.34
SN74H30S	4.50	3.75	2.99	2.55
SN74H40N	3.06	2.55	2.03	1.73
SN74H40S	5.83	4.86	3.87	3.30
SN74H50N	2.80	2.33	1.85	1.58
SN74H50S	5.31	4.42	3.52	3.00
SN74H51N	2.80	2.33	1.85	1.58
SN74H52N	2.80	2.33	1.85	1.58
SN74H53N	2.80	2.33	1.85	1.58
SN74H53S	5.31	4.42	3.52	3.00
SN74H54N	2.80	2.33	1.85	1.58
SN74H55N	2.80	2.33	1.85	1.58
SN74H55S	5.31	4.42	3.52	3.00
SN74H60N	2.09	1.74	1.39	1.18
SN74H60S	3.99	3.32	2.64	2.25
SN74H61N	2.09	1.74	1.39	1.18
SN74H61S	3.99	3.32	2.64	2.25
SN74H62N	2.09	1.74	1.39	1.18
SN74H62S	3.99	3.32	2.64	2.25
SN74H71N	4.46	3.72	2.96	2.52
SN74H71S	8.49	7.07	5.63	4.80
SN74H72N	4.46	3.72	2.96	2.52
SN74H72S	8.49	7.07	5.63	4.80
SN74H73N	7.28	6.07	4.83	4.12
SN74H74N	5.64	4.69	3.79	3.18
SN74H76N	7.72	6.43	5.12	4.36
SN74H78N	7.28	6.07	4.83	4.12
SN74H101N	4.46	3.72	2.96	2.52
SN74H102N	4.47	3.72	2.96	2.52
SN74H103N	7.28	6.07	4.83	4.12
SN74H106N	7.72	6.43	5.12	4.36
SN74H108N	7.28	6.07	4.83	4.12
SN74H183N	11.08	9.23	7.35	6.27
SN74L00N	1.73	1.44	1.17	.99
SN74L04N	2.15	1.79	1.46	1.23
SN74L10N	1.73	1.44	1.17	.99
SN74L20N	1.73	1.44	1.17	.99
SN74L30N	1.73	1.44	1.17	.99
SN74LS1N	1.73	1.44	1.17	.99
SN74LS4N	1.73	1.44	1.17	.99
SN74L55N	1.73	1.44	1.17	.99
SN74L71N	2.42	2.02	1.64	1.39
SN74L72N	2.42	2.02	1.64	1.39
SN74L73N	3.94	3.28	2.66	2.25
SN74L74N	3.43	2.86	2.33	1.97
SN74L78N	3.94	3.28	2.66	2.25
SN74L85N	10.33	8.61	6.99	5.92
SN74L86N	3.61	3.01	2.44	2.07
SN74L91N	9.44	7.87	6.40	5.41
SN74L93N	7.75	6.46	5.25	4.44
SN74L95N	8.70	7.25	5.89	4.98
SN74L98N	9.45	7.87	6.40	5.41
SN74L99N	9.45	7.87	6.40	5.41
SN74S00N	4.67	3.89	3.10	2.64
SN74S03N	4.67	3.89	3.10	2.64
SN74S04N	5.61	4.67	3.72	3.17
SN74S10N	4.67	3.89	3.10	2.64
SN74S11N	4.67	3.89	3.10	2.64
SN74S20N	4.67	3.89	3.10	2.64
SN74S22N	4.67	3.89	3.10	2.64
SN74S122N	12.64	10.53	8.38	7.15
SN724L	14.58	12.15	9.70	8.25
SN724N	9.90	8.25	6.60	5.60
SN5440S	7.32	6.10	4.86	4.14
SN5450S	6.37	5.31	4.23	3.60
SN5451S	6.37	5.31	4.23	3.60
SN5453S	6.37	5.31	4.23	3.60
SN5454S	6.37	5.31	4.23	3.60
SN5460S	4.78	3.98	3.17	2.70
SN5470S	9.57	7.97	6.34	5.41
SN5474S	12.73	10.61	8.44	7.20
SN5480S	12.14	14.28	11.37	9.70
SN5482S	21.58	17.98	14.31	12.20
SN5490S	26.14	21.78	17.35	14.79
SN7400N	1.87	1.56	1.24	1.06
SN7400S	4.25	3.54	2.82	2.40
SN7401N	1.87	1.56	1.24	1.06
SN7402N	1.87	1.56	1.24	1.06
SN7403N	1.87	1.56	1.24	1.06
SN7404N	2.33	1.94	1.55	1.32
SN7405N	2.33	1.94	1.55	1.32
SN7406N	4.20	3.50	2.79	2.38
SN7407N	4.20	3.50	2.79	2.38
SN7408N	2.04	1.70	1.35	1.15
SN7409N	2.04	1.70	1.35	1.15
SN7410N	1.87	1.56	1.24	1.06
SN7410S	4.25	3.54	2.82	2.40
SN7413N	2.92	2.43	1.93	1.65
SN7416N	3.50	2.92	2.32	1.98

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Texas Ins. Type No.	EACH 1-9	10-24	25-99	100-Up
SN7417N	3.50	2.92	2.32	1.98
SN7420N	1.87	1.56	1.24	1.06
SN7420S	3.59	2.99	2.38	2.03
SN7426N	2.23	1.86	1.48	1.26
SN7430N	1.87	1.56	1.24	1.06
SN7430S	3.59	2.99	2.38	2.03
SN7437N	2.61	2.17	1.73	1.47
SN7438N	2.61	2.17	1.73	1.47
SN7440N	2.04	1.70	1.35	1.15
SN7440S	4.87	4.06	3.23	2.76
SN7441AN	10.35	8.63	6.88	5.86
SN7442N	8.00	6.67	5.31	4.53
SN7443N	11.40	9.50	7.57	6.45
SN7444N	11.40	9.50	7.57	6.45
SN7445N	14.50	12.10	9.64	8.22
SN7446N	11.95	9.96	7.93	6.76
SN7447N	11.02	9.20	7.33	6.25
SN7448N	9.50	7.92	6.31	5.38
SN7450N	1.87	1.56	1.24	1.06
SN7451N	1.87	1.56	1.24	1.06
SN7453N	1.87	1.56	1.24	1.06
SN7454N	1.87	1.56	1.24	1.06
SN7460N	1.67	1.39	1.11	.95
SN7470N	2.98	2.48	1.97	1.68
SN7472N	2.60	2.17	1.73	1.47
SN7473N	4.27	3.56	2.84	2.42
SN7474N	3.73	3.11	2.48	2.11
SN7475N	6.58	5.48	4.36	3.72
SN7476N	4.48	3.73	2.97	2.53
SN7480N	5.04	4.20	3.34	2.85
SN7481N	8.02	6.69	5.33	4.54
SN7482N	7.46	6.22	4.95	4.22
SN7483N	11.85	9.87	7.86	6.70
SN7484N	8.20	6.84	5.44	4.64
SN7486N	3.35	2.79	2.22	1.89
SN7490N	7.28	6.07	4.84	4.12
SN7491AN	10.25	8.55	6.81	5.81
SN7492N	7.29	6.07	4.84	4.12
SN7493N	7.29	6.07	4.84	4.12
SN7494N	8.22	6.85	5.46	4.65
SN7495N	8.22	6.85	5.46	4.65
SN7496N	9.88	8.23	6.55	5.59
SN7528N	7.62	6.35	6.35	5.64
SN7529N	5.94	4.95	4.95	4.37
SN15830N	1.08	1.08	.90	.75
SN15831N	1.38	1.38	1.15	1.02
SN15832N	1.08	1.08	.90	.75
SN15833N	1.08	1.08	.90	.75
SN15834N	1.18	1.18	.98	.85
SN15835N	1.18	1.18	.98	.85
SN15836N	1.18	1.18	.98	.85
SN15837N	1.18	1.18	.98	.85
SN15838N	1.18	1.18	.98	.85
SN15844N	1.08	1.08	.90	.75
SN15845N	1.38	1.38	1.15	1.02
SN15846N	1.08	1.08	.90	.75
SN15848N	1.38	1.38	1.15	1.02
SN15849N	1.08	1.08	.90	.75
SN15850N	4.50	4.50	3.75	3.50
SN15851N	4.50	4.50	3.75	3.50
SN15857N	1.08	1.08	.90	.75
SN15858N	1.08	1.08	.90	.75
SN15861N	1.08	1.08	.90	.75
SN15862N	1.08	1.08	.90	.75
SN15863N	1.08	1.08	.90	.75
SN15930N	2.02	1.68	1.50	1.08
SN15931N	2.95	2.46	2.10	1.65
SN15932N	2.02	1.68	1.50	1.08
SN15933N	1.81	1.51	1.36	1.06
SN15936N	2.22	1.85	1.65	1.19
SN15937N	2.22	1.85	1.65	1.19
SN15944N	2.02	1.68	1.50	1.08
SN15945N	2.95	2.46	2.10	1.65
SN15946N	2.02	1.68	1.50	1.08
SN15948N	2.95	2.46	2.10	1.65
SN15949N	2.02	1.68	1.50	1.08
SN15950N	6.06	5.05	4.50	3.24
SN15951N	6.06	5.05	4.50	3.24
SN15961N	2.02	1.68	1.50	1.08
SN15962N	2.02	1.68	1.50	1.08
SN15963N	2.02	1.68	1.50	1.08
SN52702AN	2.40	2.00	2.00	1.85
SN52702N	1.92	1.60	1.60	1.45
SN52709N	1.80	1.50	1.50	1.35
SN52709AN	2.16	1.80	1.80	1.65
SN52709BN	2.34	1.95	1.95	1.60
SN52710N	1.92	1.60	1.60	1.45
SN52711N	2.10	1.75	1.75	1.60

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Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them.

Texas Ins. Type No.	EACH 1-9	10-24	25-99	100-Up
SN72702N	1.26	1.05	1.05	.90
SN72709N	1.20	1.00	1.00	.85
SN72710N	1.26	1.05	1.05	.90
SN72711N	1.32	1.10	1.10	.95
SN72720N	1.80	1.50	1.50	1.35
SN72741N	2.70	2.25	2.25	2.00
SN72741P	2.16	1.80	1.80	1.50
SN74100N	9.32	7.78	6.19	5.28
SN74104N	3.27	2.72	2.17	1.85
SN74105N	3.27	2.72	2.17	1.85
SN74107N	4.27	3.56	2.84	2.42
SN74121N	5.21	4.34	3.46	2.95
SN74141N	10.35	8.63	6.88	5.86
SN74145N	8.40	7.00	5.57	4.75
SN74150N	12.30	10.25	8.17	6.96
SN74151N	6.14	5.12	4.08	3.48
SN74152N	9.40	7.84	6.24	5.32
SN74153N	5.61	4.67	3.72	3.17
SN74154N	9.40	7.84	6.24	5.32
SN74155N	5.34	4.45	3.55	3.03
SN74156N	5.34	4.45	3.55	3.03
SN74180N	7.46	6.22	4.95	4.22
SN74181N	29.15	24.30	19.35	16.50
SN74182N	6.42	5.35	4.29	3.63
SN74192N	13.62	11.34	9.03	7.70
SN74193N	13.62	11.34	9.03	7.70
SN75107N	4.32	3.60	3.60	3.05
SN75108N	4.32	3.60	3.60	3.05
SN75109N	4.44	3.70	3.70	3.15
SN75110N	4.68	3.90	3.90	3.30
SN75303N	6.96	5.80	5.80	4.35
SN75324N	8.40	7.00	7.00	6.20
SN75450N	1.78	1.48	1.48	1.26
SN75451P	1.38	1.15	1.15	.97
SN151800N	1.08	1.08	.90	.75
SN151801N	1.08	1.08	.90	.75
SN151802N	1.08	1.08	.90	.75
SN151803N	1.08	1.08	.90	.75
SN151804N	1.08	1.08	.90	.75
SN151805N	1.08	1.08	.90	.75
SN151810N	1.08	1.08	.90	.75
SN151811N	1.08	1.08	.90	.75
SN158093N	1.87	1.87	1.56	1.36
SN158094N	1.87	1.87	1.56	1.36
SN158097N	1.87	1.87	1.56	1.36
SN158099N	1.87	1.87	1.56	1.36
SN159093N	3.63	3.02	2.70	1.95
SN159094N	3.63	3.02	2.70	1.95
SN159097N	3.63	3.02	2.70	1.95
SN159099N	3.63	3.02	2.70	1.95
TMS2400JC	40.32	33.60	20.40	17.50
TMS2403JC	36.00	30.00	18.10	15.60
TMS2404JC	36.00	30.00	18.10	15.60
TMX2600JC	43.20	36.00	21.70	18.80
TMS3000LR	12.72	10.60	6.40	5.50
TMS3001LR	13.20	11.00	6.65	5.75
TMS3002LR	14.40	12.00	7.25	6.25
TMS3003LR	16.80	14.00	8.70	7.50
TMS3012JR	52.32	43.60	26.40	22.70
TMS3016LR	10.32	8.60	5.20	4.50
TMS3021LR	12.36	10.30	6.25	5.40
TMS3406	15.00	12.50	7.55	6.50
TMS4003JC	49.20	41.00	27.80	24.00
TMS4103JC	38.88	32.40	19.60	16.90
TMS4177JC	43.20	36.00	21.70	18.80
TMS4178JC	43.20	36.00	21.70	18.80
TMS4179JC	43.20	36.00	21.70	18.80
TMS4300JC	72.00	60.00	36.20	31.20
TMS4305JC	72.00	60.00	36.20	31.20
TMS4880JC	86.40	72.00	43.50	37.50
TMS4881JC	86.40	72.00	43.50	37.50
TMS6005JR	23.04	19.20	11.60	10.00
TMS6009JR	25.80	21.50	13.00	11.25
TMX2000JC	100.80	84.00	50.70	43.70
TMX2200JC	86.40	72.00	43.50	37.50
TMX3026JR	29.40	24.50	14.80	12.75
TMX3028LR	23.76	19.80	11.96	10.31
TMX3304LR	20.16	16.80	10.20	8.75
TMX3305LR	20.16	16.80	10.20	8.75
TMX4006JC	86.40	72.00	43.50	37.50
TMX4500JC	72.00	60.00	36.20	31.20
TMX4600JC	57.60	48.00	29.00	25.00

Texas Ins. Type No.	EACH 1-9	10-24	25-99	100-Up
TMX4700JC	57.60	48.00	29.00	25.00

Sprague Type No.	EACH 1-9	10-24	25-99	100-Up
UD4001	66.34	55.28	55.28	46.07
UD4024	52.36	47.80	47.80	39.90
UD4036	89.59	74.66	74.66	62.22
UD4037	77.19	64.32	64.32	53.60
UD4074	102.96	85.80	68.65	57.20
UD4080	102.96	85.80	68.65	57.20

Sprague Type No.	EACH 1-9	10-99	100-Up
UD4131	25.78	21.84	18.20
UD4146	32.41	27.01	22.51
UD4156	39.88	33.23	27.69
UD4174	27.30	22.75	15.20
UD4175	36.24	30.20	20.10
UD4181	18.00	15.00	12.50

Sprague Type No.	EACH 1-9	10-24	25-99	100-Up
US74H00A	2.80	2.33	1.85	1.58
US74H01A	2.80	2.33	1.85	1.58
US74H04A	3.49	2.91	2.32	1.97
US74H05A	3.49	2.91	2.32	1.97
US74H08A	3.06	2.55	2.03	1.73
US74H10A	2.84	2.33	1.85	1.58
US74H11A	3.06	2.55	2.03	1.73
US74H20A	2.37	1.97	1.57	1.34
US74H21A	3.06	2.55	2.03	1.73
US74H22A	2.36	1.97	1.57	1.34
US74H30A	2.37	1.97	1.57	1.34
US74H40A	3.06	2.55	2.03	1.73
US74H50A	2.80	2.33	1.85	1.58
US74H51A	2.80	2.33	1.85	1.58
US74H52A	2.80	2.33	1.85	1.58
US74H53A	2.80	2.33	1.85	1.58
US74H54A	2.80	2.33	1.85	1.58
US74H55A	2.80	2.33	1.85	1.58
US74H60A	2.09	1.74	1.39	1.18
US74H61A	2.09	1.74	1.39	1.18
US74H62A	2.09	1.74	1.39	1.18
US74H71A	4.47	3.72	2.96	2.52
US74H72A	4.47	3.72	2.96	2.52
US74H73A	7.28	6.07	4.83	4.12
US74H74A	5.64	4.69	3.74	3.18
US74H76A	7.72	6.43	5.12	4.36
US74H78A	7.28	6.07	4.83	4.12
US74H571A	7.82	6.52	5.21	4.50
US74H572A	7.82	6.52	5.21	4.50
US7400A	2.23	1.86	1.48	1.26
US7401A	2.23	1.86	1.48	1.26
US7402A	2.56	2.13	1.70	1.45
US7403A	2.40	1.86	1.48	1.26
US7404A	2.80	2.33	1.85	1.58
US7405A	2.80	2.33	1.85	1.58
US7408A	2.80	2.50	2.00	1.70
US7409A	2.80	2.33	1.85	1.58
US7410A	2.23	1.86	1.48	1.26
US7411A	2.33	2.50	2.00	1.70
US7418A	2.80	2.33	1.85	1.58
US7420A	1.90	1.58	1.26	1.07
US7427A	2.80	2.33	1.85	1.58
US7429A	2.80	2.33	1.85	1.58
US7430A	1.90	1.58	1.26	1.07
US7432A	2.33	1.94	1.55	1.32
US7438A	2.33	1.94	1.55	1.32
US7440A	3.27	2.13	1.70	1.45
US7441B	12.42	15.40	12.25	10.50
US7442A	8.00	6.67	5.31	4.53
US7443A	11.40	9.50	7.57	6.45
US7444A	11.40	9.50	7.57	6.45
US7445A	14.50	12.10	9.64	8.22
US7446A	11.95	9.96	7.93	6.76
US7447A	11.02	9.20	7.33	6.25
US7448A	9.50	7.92	6.31	5.38
US7450A	2.23	1.86	1.48	1.26
US7451A	2.23	1.86	1.48	1.26
US7453A	2.23	1.86	1.48	1.26
US7454A	2.23	1.86	1.48	1.26
US7459A	2.33	1.94	1.55	1.32
US7460A	1.67	1.39	1.10	.94
US7470A	3.36	2.80	2.23	1.90
US7472A	3.12	2.60	2.07	1.77
US7473A	5.15	4.29	3.41	2.91
US7474A	4.46	3.72	2.96	2.52
US7475B	7.86	6.56	5.22	4.45
US7476B	5.40	4.51	3.59	3.06
US7480A	6.03	5.02	3.99	3.40
US7482A	8.94	7.45	5.93	5.05
US7483B	14.20	11.82	9.41	8.02
US7486A	3.35	2.79	2.22	1.89
US7490A	9.20	7.66	6.10	5.20
US7491A	12.45	10.38	8.26	7.05
US7492A	9.20	7.66	6.10	5.20
US7493A	9.20	7.66	6.10	5.20
US7494A	9.85	8.21	6.54	5.57
US7495A	9.85	8.21	6.54	5.57
US7496A	11.80	9.84	7.84	6.68
US74107A	5.15	4.29	3.41	2.91
US74121A	5.21	4.34	3.46	2.95

Sprague Type No.	EACH 1-9	10-24	25 99	100-Up
US74145A	8.40	7.00	5.57	4.75

Sprague Type No.	EACH 1-9	10-99	100-Up
UT1000	45.15	37.62	31.35
UT1001	57.24	47.70	39.75
UT1001A	62.76	52.30	43.65
UT1002	152.87	127.39	106.16

Sprague Type No.	EACH 1-9	10-24	25-99	100-Up
UT1041	30.12	25.10	20.10	16.75

Sprague Type No.	EACH 1-9	10-99	100-Up
UT1051	19.44	16.20	13.50
UT1057	77.16	64.30	53.60
UT1062	69.47	57.89	48.24

Sprague Type No.	EACH 1-9	10-24	25-99	100-Up
UT1070	54.72	45.60	36.45	30.40
UT1071	60.36	50.30	40.25	33.55
UT1072	66.96	55.80	44.60	37.20
UT1078	22.08	18.40	18.40	12.25
UT1079	50.64	42.20	42.20	28.10
UT1080	41.70	34.75	34.75	23.15

SEMICONDUCTOR LISTINGS BEGIN ON THE NEXT PAGE

SEE PAGE 7 FOR INTEGRATED CIRCUITS

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N21B	SYL	.97	.81	.70	.64
1N21C	SYL	1.01	.84	.72	.66
1N21D	SYL	2.53	2.10	1.80	1.65
1N21E	SYL	3.79	3.16	2.70	2.48
1N21F	SYL	7.56	6.30	5.40	4.95
1N21WE	SYL	3.79	3.16	2.70	2.48
1N23B	SYL	.97	.81	.70	.64
1N23C	SYL	1.01	.84	.72	.66
1N23D	SYL	2.53	2.10	1.80	1.65
1N23E	SYL	3.79	3.16	2.70	2.48
1N23F	SYL	7.56	6.30	5.40	4.95
1N23G	SYL	12.60	10.50	9.00	8.25
1N23WE	SYL	3.79	3.16	2.70	2.48
1N23WE/ JAN	SYL	3.79	3.16	2.70	2.48
1N25	SYL	4.24	3.53	3.03	2.74
1N26	SYL	7.80	6.50	5.60	5.10
1N26C	SYL	37.40	31.15	27.80	25.50
1N34A*	RCA			Each	.55
1N34A	SYL	.36	.30	.30	.23
				1000-Up Ea.	.14
1N35	SYL	1.90	1.58	1.58	1.21
1N38A	SYL	.59	.49	.49	.38
1N38B	SYL	.59	.49	.49	.38
1N48	SYL	.36	.30	.30	.20
1N53	SYL	27.84	23.20	19.80	18.25
1N54A	SYL	.50	.42	.42	.32
1N55A	SYL	.48	.40	.40	.31
1N58A	SYL	.67	.55	.55	.41
1N60	RCA			Each	.55
1N60	SYL	.36	.30	.30	.23
				1000-Up Ea.	.18
1N63	SYL	.43	.36	.36	.28
1N64	SYL	.36	.30	.30	.23
				1000-Up Ea.	.18
1N65	SYL	.58	.48	.48	.35
1N67A	SYL	.34	.28	.28	.21
1N68A	SYL	.34	.28	.28	.21
1N69A	SYL	.36	.30	.30	.23
1N78A	SYL	5.40	4.50	3.85	3.54
1N78B	SYL	6.00	5.00	4.30	3.93
1N81A	SYL	.58	.48	.48	.36
1N82A	RCA			Each	1.60
1N82AG	SYL	1.09	.59	.41	.34
1N87	SYL	.24	.20	.16	.12
1N90	SYL	.40	.33	.33	.22
1N91	MOT	1.08	.90	.90	.60
1N92	MOT	2.34	1.95	1.95	1.30
1N93	MOT	3.24	2.70	2.70	1.80
1N98	SYL	.37	.31	.31	.24

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N99	SYL	.60	.50	.39
1N100	SYL	.38	.32	.27
1N116	SYL	.59	.49	.36
1N118A	SYL	.28	.23	.20
1N126	SYL	.36	.30	.24
1N128	SYL	.38	.32	.25
1N191	SYL	.42	.35	.28
1N192	SYL	.41	.34	.26
1N198	SYL	.42	.35	.28
1N198B	SYL	1.24	1.03	.78
1N248B	MOT	1.80	1.50	1.00
1N249B	MOT	1.98	1.65	1.10
1N249C	MOT	2.84	1.95	1.30
1N250B	MOT	2.83	2.40	1.60
1N250C	MOT	3.24	2.70	1.80
1N251	SYL	.78	.65	.43
1N252	SYL	.78	.65	.43
1N256	TI	2.59	2.16	1.44
1N270	RCA			Each .48
1N270	SYL	.38	.32	.25
			1000-Up Ea.	.11
1N276	SYL	.37	.31	.24
1N277	SYL	.41	.34	.26.14
1N279	SYL	.35	.29	.22
1N281	SYL	.37	.31	.24
			1000-Up Ea.	.14
1N283	SYL	.61	.51	.40

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
1N294	SYL	.41	.34	.26	.15
1N295	RCA			Each	.55
1N295	SYL	.42	.35	.27	.15

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N358A	SYL	18.00	15.00	12.85	11.80
1N415G	SYL	12.60	10.50	9.00	8.25
1N416G	SYL	12.60	10.50	9.00	8.25

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N429	IR	6.00	5.00	4.10
1N429	MOT	6.80	5.45	4.10
1N430A	IR	27.84	23.20	19.95
1N440B	IR	.79	.66	.44
1N440B	RCA	.64	.53	.38
			1000-Up Ea.	.32
1N441B	IR	.83	.69	.46
1N441B	RCA	.72	.60	.43
			1000-Up Ea.	.36

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N442B	IR	.95	.79	.53
1N442B	RCA	.79	.66	.51
			1000-Up Ea.	.43
1N442B	TI	.95	.79	.53
1N443B	IR	1.16	.97	.65
1N443B	RCA	.95	.79	.58
			1000-Up Ea.	.48
1N444B	IR	1.26	1.05	.70
1N444B	RCA	1.10	.92	.67
			1000-Up Ea.	.56
1N444B	TI	1.26	1.05	.70
1N445B	IR	1.70	1.42	.95
1N445B	RCA	1.35	1.12	.82
			1000-Up Ea.	.68

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
1N456	SYL	.50	.42	.28	.18
1N456A	SYL	.50	.42	.28	.18
1N457	SYL	.54	.45	.30	.19
1N457A	SYL	.54	.45	.30	.19
1N458	SYL	.58	.48	.32	.21
1N458A	SYL	.58	.48	.32	.21
1N459	SYL	.61	.51	.34	.21
1N459A	SYL	.61	.51	.34	.21
1N461	SYL	.50	.42	.28	.18
1N461A	SYL	.50	.42	.28	.18
1N462	SYL	.53	.44	.29	.19
1N462A	SYL	.53	.44	.29	.19
1N463	SYL	.65	.54	.36	.22
1N463A	SYL	.65	.54	.36	.22
1N464	SYL	.64	.53	.35	.21
1N464A	SYL	.64	.53	.35	.21
1N482	SYL	.79	.66	.40	.19
1N482A	SYL	.83	.69	.46	.19
1N482B	SYL	.83	.69	.46	.19
1N483	SYL	.84	.70	.47	.19
1N483A	SYL	.84	.70	.47	.19
1N483B	SYL	.84	.70	.47	.19
1N484	SYL	.84	.70	.47	.22
1N484A	SYL	.84	.70	.47	.22
1N484B	SYL	.84	.70	.47	.22
1N485	SYL	1.08	.90	.60	.24
1N485A	SYL	1.08	.90	.60	.24
1N485B	SYL	1.08	.90	.60	.24
1N486A	SYL	1.08	.90	.60	.26
1N486B	SYL	1.08	.90	.60	.26
1N487A	SYL	1.69	1.41	.94	.38
1N488	SYL	1.40	1.17	.78	.45
1N488A	SYL	2.14	1.78	1.19	.49

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N497	SYL	.47	.39	.30
1N498	SYL	.53	.44	.35
1N500	SYL	.66	.53	.41
1N536	IR	.50	.42	.29
1N536	RCA	.43	.36	.27
			1000-Up Ea.	.22
1N537	RCA	.48	.40	.29
			1000-Up Ea.	.24
1N538	IR	.62	.52	.34
1N538	RCA	.54	.45	.32
			1000-Up Ea.	.27
1N539	IR	.71	.59	.39
1N539	RCA	.60	.50	.36
			1000-Up Ea.	.30
1N540	IR	.80	.67	.43
1N540	RCA	.67	.56	.41
			1000-Up Ea.	.34
1N547	IR	1.14	.95	.60
1N547	RCA	.95	.79	.57
			1000-Up Ea.	.48
1N560	IR	2.16	1.80	1.20
1N625	SYL	.52	.43	.29
1N626	SYL	.54	.45	.30
1N627	SYL	.72	.60	.39
1N628	SYL	.86	.72	.47
1N629	SYL	.97	.81	.54
1N634	SYL	.62	.52	.41
1N643A	SYL	1.80	1.50	1.00
1N645	SYL	1.68	1.40	.80
1N645A	TI	1.98	1.65	1.10
1N646	TI	1.92	1.60	1.05
1N647	SYL	2.04	1.70	1.10
1N647	TI	2.04	1.70	1.10
1N648	TI	2.16	1.80	1.20
1N649	SYL	2.70	2.25	1.40
1N659	SYL	.70	.58	.39
1N659	TI	.67	.56	.36
1N660	TI	.78	.65	.34
1N661	TI	1.18	.98	.68
1N662	SYL	1.10	.92	.44
1N663	SYL	1.44	1.20	.80

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
1N695	SYL	.36	.30	.24	.14

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N702	IR	1.20	1.00	.80
1N702A	IR	1.20	1.00	.85
1N703	IR	1.20	1.00	.80

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Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N703A	IR	1.20	1.00	.85
1N704	IR	1.20	1.00	.80
1N704A	IR	1.20	1.00	.85
1N705	IR	1.20	1.00	.80
1N705A	IR	1.20	1.00	.85
1N706	IR	1.20	1.00	.80
1N706A	IR	1.20	1.00	.85
1N707	IR	1.20	1.00	.80
1N707A	IR	1.20	1.00	.85
1N708	IR	1.20	1.00	.80
1N708A	IR	1.20	1.00	.85
1N709	IR	1.20	1.00	.80
1N709A	IR	1.20	1.00	.85
1N710	IR	1.20	1.00	.80
1N710A	IR	1.20	1.00	.85
1N711	IR	1.20	1.00	.80
1N711A	IR	1.20	1.00	.85
1N712	IR	1.20	1.00	.80
1N712A	IR	1.20	1.00	.85
1N713	IR	1.20	1.00	.80
1N713A	IR	1.20	1.00	.85
1N714	IR	1.20	1.00	.80
1N714A	IR	1.20	1.00	.85
1N715	IR	1.20	1.00	.80
1N715A	IR	1.20	1.00	.85
1N718	IR	1.20	1.00	.80
1N718A	IR	1.20	1.00	.85
1N721	IR	1.20	1.00	.80
1N721A	IR	1.20	1.00	.85
1N722	IR	1.20	1.00	.80
1N722A	IR	1.20	1.00	.85
1N723	IR	1.20	1.00	.80
1N723A	IR	1.20	1.00	.85
1N746	IR	1.20	1.00	.80
1N746	MOT	2.40	2.00	1.50
1N746A	IR	1.20	1.00	.85
1N746A	MOT	3.30	2.75	2.05
1N747	IR	1.20	1.00	.80
1N747	MOT	2.40	2.00	1.50
1N747A	IR	1.20	1.00	.85
1N747A	MOT	3.30	2.75	2.05
1N748	IR	1.20	1.00	.80
1N748	MOT	2.40	2.00	1.50
1N748A	IR	1.20	1.00	.85
1N748A	MOT	3.30	2.75	2.05
1N749	IR	1.20	1.00	.80
1N749	MOT	2.40	2.00	1.50
1N749A	IR	1.20	1.00	.85
1N749A	MOT	3.30	2.75	2.05
1N750	IR	1.20	1.00	.80
1N750	MOT	2.40	2.00	1.50
1N750A	IR	1.20	1.00	.85
1N750A	MOT	3.30	2.75	2.05
1N751	IR	1.20	1.00	.80
1N751	MOT	2.40	2.00	1.50
1N751A	IR	1.20	1.00	.85
1N751A	MOT	3.30	2.75	2.05
1N752	IR	1.20	1.00	.80
1N752	MOT	2.40	2.00	1.50
1N752A	IR	1.20	1.00	.85
1N752A	MOT	3.30	2.75	2.05
1N753	IR	1.20	1.00	.80
1N753	MOT	2.40	2.00	1.50
1N753A	IR	1.20	1.00	.85
1N753A	MOT	3.30	2.75	2.05
1N754	IR	1.20	1.00	.80
1N754	MOT	2.40	2.00	1.50
1N754A	IR	1.20	1.00	.85
1N754A	MOT	3.30	2.75	2.05
1N755	IR	1.20	1.00	.80
1N755	MOT	2.40	2.00	1.50
1N755A	IR	1.20	1.00	.85
1N755A	MOT	3.30	2.75	2.05
1N756	IR	1.20	1.00	.80
1N756	MOT	2.40	2.00	1.50
1N756A	IR	1.20	1.00	.85
1N756A	MOT	3.30	2.75	2.05
1N757	IR	1.20	1.00	.80
1N757	MOT	2.40	2.00	1.50
1N757A	IR	1.20	1.00	.85
1N757A	MOT	3.30	2.75	2.05
1N758	IR	1.20	1.00	.80

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Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N758	MOT	2.40	2.00	1.50
1N758A	IR	1.20	1.00	.85
1N758A	MOT	3.30	2.75	2.05
1N759	IR	1.20	1.00	.80
1N759	MOT	2.40	2.00	1.50
1N759A	IR	1.20	1.00	.85
1N759A	MOT	3.30	2.75	2.05
1N763	MOT	2.58	2.15	1.60
1N764	MOT	2.58	2.15	1.60
1N764	TI	1.08	.90	.60
1N765	TI	1.08	.90	.60
1N766	TI	1.08	.90	.60
1N770	SYL	.58	.48	.38
			1000-5000 Ea.	.16
1N816	SYL	.62	.52	.35
			1000-5000 Ea.	.18

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N821	IR	2.76	2.30	2.30	1.85
1N821	MOT	3.30	2.75	2.35	1.90
1N821A	MOT	3.66	3.05	2.60	2.10
1N823	IR	3.66	3.05	3.05	2.45
1N823	MOT	4.32	3.60	3.10	2.50
1N823A	MOT	4.68	3.90	3.35	2.70
1N825	IR	5.52	4.60	4.60	3.70
1N825	MOT	6.96	5.80	5.00	4.00
1N825A	MOT	7.70	6.50	5.60	4.50
1N826	IR	7.92	6.60	6.60	5.25
1N827	IR	10.50	8.75	8.75	7.50
1N827	MOT	13.02	10.85	9.35	7.50
1N827A	MOT	15.66	13.05	11.25	9.00
1N828	IR	13.28	11.04	11.04	9.00
1N829	IR	13.50	11.25	11.25	10.10
1N829	MOT	19.56	16.30	14.05	11.25
1N829A	MOT	23.46	19.55	16.85	13.50
1N830A	SYL	4.62	3.85	3.30	3.00
1N831	SYL	8.22	6.85	5.85	5.40
1N905A	SYL	1.08	1.55	1.55	1.09
1N914	SYL	.54	.45	.45	.30
1N914A	SYL	.60	.50	.50	.33
1N914B	SYL	1.62	1.35	1.35	.90
1N916	SYL	.90	.75	.75	.50
1N916A	SYL	.90	.75	.75	.50
1N935	IR	1.92	1.60	1.60	1.45
1N935	MOT	2.76	2.30	2.00	1.60
1N935A	IR	2.16	1.80	1.80	1.60
1N935A	MOT	3.12	2.60	2.25	1.80
1N935B	MOT	4.26	3.55	3.05	2.45
1N936	IR	2.28	1.90	1.90	1.70
1N936	MOT	3.30	2.75	2.35	1.90
1N936A	IR	2.94	2.45	2.45	2.20
1N936A	MOT	4.26	3.55	3.05	2.45
1N936B	IR	3.48	2.90	2.90	2.60
1N936B	MOT	5.04	4.20	3.60	2.90
1N937	IR	4.43	3.70	3.70	3.30
1N937	MOT	6.42	5.35	4.60	3.70
1N937A	IR	5.10	4.25	4.25	3.85
1N937A	MOT	7.38	6.15	5.30	4.25
1N937B	MOT	8.52	7.10	6.10	4.90
1N938	IR	5.75	4.80	4.80	4.30
1N938	MOT	8.34	6.95	6.00	4.80
1N938A	IR	6.24	5.20	5.20	4.70
1N938A	MOT	9.06	7.55	6.50	5.20
1N938B	MOT	12.00	10.00	8.60	6.90
1N938B/USN	MOT	16.02	13.35	11.75	9.40
1N939	IR	14.90	12.40	12.40	11.15
1N939	MOT	21.60	18.00	15.50	12.40
1N939A	MOT	30.42	25.35	21.85	17.50
1N939B	MOT	32.82	27.35	23.55	18.85
1N941	MOT	3.84	3.20	2.75	2.20
1N941A	MOT	4.08	3.40	2.90	2.34
1N942	MOT	4.20	3.50	3.00	2.40
1N942A	MOT	5.22	4.35	3.75	3.00
1N943	MOT	8.28	6.90	5.95	4.75
1N943A	MOT	8.34	6.95	6.00	4.80
1N944	MOT	12.18	10.15	8.75	7.00
1N945	MOT	32.04	26.70	23.00	18.40
1N946	MOT	71.16	59.30	51.10	40.90
1N946A	MOT	84.36	70.30	60.60	48.50

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N946B	MOT	92.40	77.00	66.35	53.10

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N957	MOT	2.58	2.15	1.60
1N957A	IR	1.20	1.00	.80
1N957A	MOT	2.82	2.35	1.75
1N957B	IR	1.20	1.00	.85
1N957B	MOT	3.54	2.95	2.20
1N958	MOT	2.58	2.15	1.60
1N958A	IR	1.20	1.00	.80
1N958B	IR	1.20	1.00	.85
1N958B	MOT	3.54	2.95	2.20
1N959A	IR	1.20	1.00	.80
1N959B	IR	1.20	1.00	.85
1N959B	MOT	3.54	2.95	2.20
1N960	MOT	2.58	2.15	1.60
1N960A	IR	1.20	1.00	.80
1N960B	IR	1.20	1.00	.85
1N960B	MOT	3.54	2.95	2.20
1N961	MOT	2.58	2.15	1.60
1N961A	IR	1.20	1.00	.80
1N961A	MOT	2.82	2.35	1.75
1N961B	IR	1.20	1.00	.85
1N961B	MOT	3.54	2.95	2.20
1N962	MOT	2.58	2.15	1.60
1N962A	MOT	2.82	2.35	1.75
1N962B	IR	1.20	1.00	.85
1N962B	MOT	3.54	2.95	2.20
1N963	MOT	2.58	2.15	1.60
1N963A	IR	1.20	1.00	.80
1N963A	MOT	2.82	2.35	1.75
1N963B	IR	1.20	1.00	.85
1N963B	MOT	3.54	2.95	2.20
1N964	MOT	2.58	2.15	1.60
1N964A	IR	1.20	1.00	.80
1N964A	MOT	2.82	2.35	1.75
1N964B	MOT	3.54	2.95	2.20
1N965	MOT	2.58	2.15	1.60
1N965A	IR	1.20	1.00	.80
1N965A	MOT	2.82	2.35	1.75
1N965B	IR	1.20	1.00	.85
1N965B	MOT	3.54	2.95	2.20
1N966	MOT	2.58	2.15	1.60
1N966A	IR	1.20	1.00	.80
1N966A	MOT	2.82	2.35	1.75
1N966B	IR	1.20	1.00	.85
1N966B	MOT	3.54	2.95	2.20
1N967	MOT	2.58	2.15	1.60
1N967A	IR	1.20	1.00	.80
1N967A	MOT	2.82	2.35	1.75
1N967B	IR	1.20	1.00	.85
1N967B	MOT	3.54	2.95	2.20
1N968	MOT	2.58	2.15	1.60
1N968A	IR	1.20	1.00	.80
1N968A	MOT	2.82	2.35	1.75
1N968B	IR	1.20	1.00	.85
1N968B	MOT	3.54	2.95	2.20
1N969	MOT	2.58	2.15	1.60
1N969A	IR	1.20	1.00	.80
1N969B	IR	1.20	1.00	.85
1N969B	MOT	3.54	2.95	2.20
1N970	MOT	2.58	2.15	1.60
1N970A	IR	1.20	1.00	.80
1N970B	IR	1.20	1.00	.85
1N970B	MOT	3.54	2.95	2.20
1N971	MOT	2.58	2.15	1.60
1N971A	IR	1.20	1.00	.80
1N971A	MOT	2.82	2.35	1.75
1N971B	IR	1.20	1.00	.85
1N971B	MOT	3.54	2.95	2.20
1N972A	IR	1.20	1.00	.80
1N972B	IR	1.20	1.00	.85
1N972B	MOT	3.54	2.95	2.20
1N973A	MOT	2.82	2.35	1.75
1N973B	IR	1.20	1.00	.85
1N974	MOT	2.58	2.15	1.60
1N974A	MOT	2.82	2.35	1.75
1N974B	MOT	3.54	2.95	2.20
1N975	MOT	2.58	2.15	1.60
1N975B	MOT	3.54	2.95	2.20
1N976	MOT	2.58	2.15	1.60
1N976A	MOT	2.81	2.35	1.75
1N976B	MOT	3.54	2.95	2.20
1N977	MOT	2.58	2.15	1.60
1N977A	MOT	2.82	2.35	1.75
1N977B	MOT	3.54	2.95	2.20
1N978	MOT	2.58	2.15	1.60
1N978A	MOT	2.82	2.35	1.75
1N978B	MOT	3.54	2.95	2.20
1N979	MOT	2.58	2.15	1.60
1N979A	MOT	2.82	2.35	1.75
1N979B	MOT	3.54	2.95	2.20
1N980	MOT	2.58	2.15	1.60
1N980A	MOT	2.81	2.35	1.75
1N980B	MOT	3.54	2.95	2.20
1N981	MOT	2.58	2.15	1.60
1N981B	MOT	3.54	2.95	2.20
1N982	MOT	2.58	2.15	1.60
1N982A	MOT	2.82	2.35	1.75
1N984A	MOT	2.82	2.35	1.75
1N985	MOT	3.12	2.60	1.95
1N985A	MOT	3.60	3.00	2.25
1N985B	MOT	4.38	3.65	2.75
1N987	MOT	3.12	2.60	1.95
1N987A	MOT	3.60	3.00	2.25
1N987B	MOT	4.38	3.65	2.75

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N988	MOT	3.12	2.60	1.95
1N988A	MOT	3.60	3.00	2.25
1N988B	MOT	4.38	3.65	2.75
1N989A	MOT	3.60	3.00	2.25
1N989B	MOT	4.38	3.65	2.75
1N990	MOT	3.12	2.60	1.95
1N990A	MOT	3.60	3.00	2.25
1N992	MOT	3.12	2.60	1.95
1N992A	MOT	3.60	3.00	2.25
1N992B	MOT	4.38	3.65	2.75
1N995	SYL	.36	.30	.24
			1000-5000 Ea.	.12

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N1081	ST	.72	.60	.55	.51
1N1082	ST	.78	.65	.57	.53
1N1083	ST	.84	.70	.61	.57
1N1084	ST	.90	.75	.63	.59
1N1085A	ST	4.00	3.34	2.86	2.66
1N1086A	ST	4.80	4.00	3.43	3.20
1N1088A	ST	6.42	5.35	4.67	4.27

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N1095	IR	.91	.76	.51
1N1095	RCA	.73	.61	.48
			1000-Up Ea.	.40
1N1096	IR	1.15	.96	.64
1N1096	TI	1.16	.97	.64

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N1108	ST	3.78	3.15	2.71	2.54
1N1109	ST	4.80	4.00	3.43	3.20
1N1110	ST	5.76	4.75	4.15	3.86
1N1111	ST	6.79	5.65	4.86	4.53
1N1113	ST	8.82	7.35	6.30	5.87

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N1115	IR	1.25	1.04	.69
1N1116	IR	1.32	1.10	.75
1N1117	IR	1.68	1.40	.95
1N1118	IR	2.04	1.70	1.15
1N1119	IR	2.16	1.80	1.20
1N1120	IR	2.88	2.40	1.74
1N1124A	IR	2.64	2.20	1.45
1N1124A	TI	2.23	1.86	1.24
1N1125	IR	3.30	2.75	1.82
1N1125A	TI	2.70	2.25	1.50
1N1126A	IR	4.62	3.85	2.58
1N1126A	TI	3.66	3.05	2.05
1N1135	IR	4.50	3.75	3.35
1N1137	IR	6.60	5.50	4.50
1N1140	IR	6.78	5.65	5.10
1N1142	IR	10.00	8.35	7.50

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N1150A	ST	7.14	5.95	5.31	4.68
1N1183	IR	2.34	1.95	1.95	1.30
1N1183	MOT	2.16	1.80	1.80	1.20

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N1183A	RCA	2.59	2.15	1.56
			1000-Up Ea.	1.30
1N1183RA	RCA	2.59	2.15	1.56
			1000-Up Ea.	1.30
1N1184	IR	2.88	2.40	1.60
1N1184	MOT	2.52	2.10	1.40
1N1184A	RCA	2.98	2.48	1.80
			1000-Up Ea.	1.50
1N1184RA	RCA	2.98	2.48	1.80
			1000-Up Ea.	1.50
1N1185	IR	3.48	2.90	1.95
1N1185	MOT	3.12	2.60	1.75
1N1186	IR	4.76	3.40	2.25
1N1186	MOT	3.78	3.15	2.10
1N1186A	RCA	4.76	3.55	2.58
			1000-Up Ea.	2.15
1N1186RA	RCA	4.26	3.55	2.58
			1000-Up Ea.	2.15
1N1187	IR	5.64	4.70	3.10
1N1187	MOT	5.58	4.65	3.10
1N1187A	RCA	5.93	4.95	3.60
			1000-Up Ea.	3.00
1N1188	IR	6.96	5.80	3.80
1N1188	MOT	6.30	5.25	3.50
1N1188A	RCA	7.42	6.19	4.50
			1000-Up Ea.	3.75
1N1188RA	RCA	7.42	6.19	4.50
			1000-Up Ea.	3.75
1N1189	IR	7.68	6.40	4.20
1N1189	MOT	7.20	6.00	4.00
1N1189A	RCA	8.92	7.43	5.40
			1000-Up Ea.	4.50
1N1190	IR	8.16	6.80	4.50
1N1190	MOT	8.10	6.75	4.50

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N1190	ST	5.39	4.89	4.19	3.90
1N1190A	RCA	10.38	8.65	8.65	6.30
			1000-Up Ea.		5.25
1N1190RA	RCA	10.38	8.65	8.65	6.30
			1000-Up Ea.		5.25
1N1191	MOT	1.62	1.35	1.35	.90
1N1192	MOT	1.80	1.50	1.50	1.05
1N1193	MOT	2.16	1.80	1.80	1.20
1N1194	MOT	3.12	2.60	2.60	1.75
1N1195	MOT	4.56	3.80	3.80	2.55
1N1195A	RCA	4.66	3.88	3.88	2.82
			1000-Up Ea.		2.35
1N1196	MOT	5.22	4.35	4.35	2.90
1N1196A	RCA	5.94	4.95	4.95	3.60
			1000-Up Ea.		3.00
1N1197A	RCA	7.13	5.94	5.94	4.32
			1000-Up Ea.		3.60
1N1198	MOT	8.10	6.75	6.75	4.50

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N1198A	MOT	8.46	7.05	4.70
1N1198A	RCA	8.42	7.01	5.10
			1000-Up Ea.	4.25
1N1199A	IR	1.44	1.20	.80
1N1199A	RCA	1.49	1.24	.90
			1000-Up Ea.	.75
1N1199RA	RCA	1.49	1.24	.90
			1000-Up Ea.	.75

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N1200A	IR	1.65	1.35	1.35	.94
1N1200A	RCA	1.69	1.41	1.41	1.02
			1000-Up Ea.		.85
1N1200RA	RCA	1.69	1.41	1.41	1.02
			1000-Up Ea.		.85
1N1201	IR	2.10	1.75	1.75	1.20
1N1201A	IR	2.10	1.75	1.75	1.20
1N1202	IR	2.94	2.45	2.45	1.65
1N1202	ST	1.50	1.25	1.07	1.00
1N1202A	IR	2.94	2.45	2.45	1.65
1N1202A	RCA	2.98	2.48	2.48	1.80
			1000-Up Ea.		1.50
1N1203	IR	4.14	3.45	3.45	2.30
1N1203A	IR	4.14	3.45	3.45	2.30
1N1203A	RCA	4.17	3.47	2.47	2.52
			1000-Up Ea.		2.10
1N1203RA	RCA	4.17	3.47	3.47	2.52
			1000-Up Ea.		2.10
1N1204	IR	5.28	4.40	4.40	2.95
1N1204	ST	2.01	1.67	1.43	1.33
1N1204A	IR	5.28	4.40	4.40	2.95
1N1204A	RCA	5.35	4.46	4.46	3.24
			1000-Up Ea.		2.70
1N1204RA	RCA	5.35	4.46	4.46	3.24
			1000-Up Ea.		2.70
1N1205	IR	6.30	5.25	5.25	3.50
1N1205A	IR	6.30	5.25	5.25	3.50
1N1205A	RCA	6.44	5.36	5.36	3.90
			1000-Up Ea.		3.25
1N1206	IR	7.32	6.10	6.10	4.10
1N1206	ST	2.81	2.34	2.00	1.86
1N1206A	IR	7.32	6.10	6.10	4.10
1N1206A	RCA	7.42	6.19	6.19	4.50
			1000-Up Ea.		3.75
1N1206RA	RCA	7.42	6.19	6.19	4.50
			1000-Up Ea.		3.75
1N1238	ST	6.30	5.25	4.69	4.13

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N1313	MOT	3.72	3.10	2.35
1N1314	MOT	3.72	3.10	2.35
1N1315	MOT	3.72	3.10	2.35
1N1316	MOT	3.72	3.10	2.35
1N1317	MOT	3.72	3.10	2.35
1N1320	MOT	3.72	3.10	2.35
1N1321	MOT	3.72	3.10	2.35
1N1323	MOT	3.72	3.10	2.35
1N1324	MOT	3.72	3.10	2.35
1N1326	MOT	3.72	3.10	2.35

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N1341	IR	1.14	.95	.95	.75
1N1341	ST	1.43	1.19	.96	.89
1N1341A	IR	1.14	.95	.95	.75
1N1341B	RCA	1.39	1.16	1.16	.84
			1000-Up Ea.		.70
1N1342	IR	1.44	1.20	1.20	.85
1N1342A	IR	1.44	1.20	1.20	.85
1N1342B	RCA	1.59	1.32	1.32	.96
			1000-Up Ea.		.80
1N1343	IR	1.86	1.55	1.55	1.00
1N1343	ST	1.44	1.20	1.03	.96
1N1343A	IR	1.86	1.55	1.55	1.00
1N1344	IR	2.46	2.05	2.05	1.40
1N1344A	IR	2.46	2.05	2.05	1.40
1N1344B	RCA	2.58	2.15	2.15	1.56
			1000-Up Ea.		1.30
1N1345	IR	3.42	2.85	2.85	2.00
1N1345A	IR	3.42	2.85	2.85	2.00
1N1345B	RCA	3.66	3.05	3.05	2.22
			1000-Up Ea.		1.85
1N1346	IR	4.50	3.75	3.75	2.60
1N1346	ST	1.80	1.50	1.29	1.20
1N1346A	IR	4.50	3.75	3.75	2.60
1N1346B	RCA	4.75	3.96	3.96	2.88
			1000-Up Ea.		2.40

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N1347	IR	5.52	4.60	4.60	3.10
1N1347A	IR	5.52	4.60	4.60	3.10
1N1347B	RCA	5.75	4.79	4.79	3.48
			1000-Up Ea.		2.90
1N1348	IR	6.48	5.40	5.40	3.65
1N1348A	IR	6.48	5.40	5.40	3.65
1N1348B	RCA	6.94	5.78	5.78	4.20
			1000-Up Ea.		3.50

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N1487	IR	.59	.49	.32
1N1488	IR	.62	.52	.34
1N1489	IR	.71	.59	.39
1N1490	IR	.80	.67	.44
1N1491	IR	.90	.75	.50
1N1492	IR	1.14	.95	.70
1N1507	IR	3.30	2.75	2.10
1N1508	IR	3.30	2.75	2.10
1N1509	IR	3.30	2.75	2.10
1N1510	IR	3.30	2.75	2.10
1N1511	IR	3.30	2.75	2.10
1N1512	IR	3.30	2.75	2.10
1N1513	IR	3.30	2.75	2.10
1N1513A	IR	4.14	3.45	2.65
1N1514	IR	3.30	2.75	2.10
1N1515	IR	3.30	2.75	2.10
1N1516	IR	3.30	2.75	2.10
1N1517	IR	3.30	2.75	2.10
1N1518	IR	3.24	2.70	2.20
1N1519	IR	3.24	2.70	2.20
1N1519A	IR	4.20	3.50	2.75
1N1520	IR	3.24	2.70	2.20
1N1521	IR	3.24	2.70	2.20
1N1522	IR	3.24	2.70	2.20
1N1523	IR	3.24	2.70	2.20
1N1524	IR	3.24	2.70	2.20
1N1525	IR	3.24	2.70	2.20
1N1526	IR	3.24	2.70	2.20
1N1527	IR	3.24	2.70	2.20
1N1528	IR	3.24	2.70	2.20
1N1530	MOT	19.86	16.55	12.45
1N1581	TI	1.26	1.05	.70
1N1588	IR	4.56	3.80	3.05
1N1589	IR	4.56	3.80	3.05
1N1590A	IR	5.46	4.55	3.65
1N1591	IR	4.56	3.80	3.05
1N1591A	IR	5.46	4.55	3.65
1N1592	IR	4.56	3.80	3.05
1N1593A	IR	5.46	4.55	3.65
1N1594	IR	4.56	3.80	3.05
1N1594A	IR	5.46	4.55	3.65
1N1595	IR	4.56	3.80	3.05
1N1595A	IR	5.46	4.55	3.65
1N1596	IR	4.56	3.80	3.05
1N1597	IR	4.56	3.80	3.05
1N1598	IR	4.56	3.80	3.05
1N1599	IR	7.15	5.95	4.75
1N1600	IR	7.15	5.95	4.75
1N1600A	IR	9.60	8.00	6.40
1N1601	IR	7.14	5.95	4.75
1N1601A	IR	9.60	8.00	6.40
1N1602	IR	7.15	5.95	4.75
1N1602A	IR	9.60	8.00	6.40
1N1604	IR	7.15	5.95	4.75
1N1604A	IR	9.60	8.00	6.40
1N1605	IR	7.15	5.95	4.75
1N1605A	IR	9.60	8.00	6.40
1N1606	IR	7.15	5.95	4.75
1N1606A	IR	9.60	8.00	6.40
1N1608	IR	7.15	5.95	4.75
1N1608A	IR	9.60	8.00	6.40
1N1609	IR	7.15	5.95	4.75

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
1N1612	IR	1.20	1.00	.71	....
1N1612	RCA	1.30	1.08	.78	.65
1N1612R	RCA	1.30	1.08	.78	.65
1N1613	IR	1.38	1.15	.81	....
1N1613	RCA	1.49	1.24	.90	.75
1N1613R	RCA	1.49	1.24	.90	.75
1N1614	IR	2.28	1.90	1.65	....
1N1614	RCA	2.28	1.90	1.38	1.15
1N1614R	RCA	2.28	1.90	1.38	1.15
1N1615	IR	4.50	3.75	3.05	....
1N1615	RCA	4.45	3.71	2.70	2.25
1N1615R	RCA	4.45	3.71	2.70	2.25
1N1616	IR	6.56	5.55	4.35	....
1N1616	RCA	6.43	5.36	3.90	3.25

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N1621	ST	2.69	2.24	1.92	1.80
1N1622	ST	3.36	2.80	2.40	2.24
1N1624	ST	5.09	4.24	3.62	3.40

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N1694	IR	67	56	37
1N1731	MOT	7.20	6.00	4.00
1N1732	MOT	8.10	6.75	4.50
1N1733	MOT	9.36	7.80	5.20
1N1734	MOT	13.92	11.60	7.75
1N1735	MOT	6.75	5.40	4.05
1N1736	IR	7.83	6.52	5.55
1N1736	MOT	10.90	8.75	6.60
1N1736A	MOT	13.40	10.70	8.05
1N1738A	MOT	20.20	16.20	12.20

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N1763A	RCA	.51	.42	.30
			1000-Up Ea.	.25
1N1764A	RCA	.63	.52	.38
			1000-Up Ea.	.31
1N1765	IR	3.06	2.55	2.05
1N1766	IR	3.06	2.55	2.05
1N1767	IR	3.06	2.55	2.05
1N1768	IR	3.06	2.55	2.05
1N1769	IR	3.06	2.55	2.05
1N1770	IR	3.06	2.55	2.05
1N1771	IR	3.06	2.55	2.05
1N1772	IR	3.06	2.55	2.05
1N1773	IR	3.06	2.55	2.05
1N1774	IR	3.06	2.55	2.05
1N1775	IR	3.06	2.55	2.05
1N1776	IR	3.06	2.55	2.05

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N1826	IR	6.84	5.70	5.70	4.55
1N1826	TI	6.12	5.10	4.50	....
1N1832	IR	6.84	5.70	5.70	4.55
1N1832	TI	6.12	5.10	4.50	....
1N1833	IR	6.84	5.70	5.70	4.55
1N1833	TI	6.12	5.10	4.50	....
1N1835	IR	6.84	5.70	5.70	4.55
1N1835	TI	6.12	5.10	4.50	....
1N2069	IR	.38	.32	.28	....
1N2069	SYL	.72	.60	.40	.32
1N2069	TI	.54	.45	.29	....
1N2069A	SYL	.78	.65	.43	.35
1N2070	IR	.49	.41	.35	....
1N2070	SYL	.81	.67	.45	.36
1N2070	TI	.66	.55	.33	....
1N2070A	SYL	.87	.72	.49	.39
1N2071	IR	.60	.50	.44	....
1N2071	SYL	.90	.75	.50	.40
1N2091	TI	.75	.62	.42	....
1N2071A	SYL	.96	.80	.54	.44

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N2128A	IR	4.03	3.35	2.56
1N2129A	IR	4.03	3.35	2.56
1N2130A	IR	4.94	4.12	3.07
1N2131A	IR	5.76	4.80	3.51
1N2132A	IR	6.49	5.40	3.88
1N2133A	IR	7.20	6.00	4.20
1N2134A	IR	7.20	6.00	4.20
1N2135A	IR	8.34	6.95	4.85
1N2136A	IR	8.34	6.95	4.85
1N2137A	IR	9.40	7.85	5.40
1N2138A	IR	10.05	8.70	5.85
1N2154	IR	4.24	3.53	3.53
1N2155	IR	5.60	4.65	4.65
1N2156	IR	8.00	6.68	6.00
1N2157	IR	10.80	9.00	9.00
1N2158	IR	12.78	10.65	10.65
1N2159	IR	17.80	14.85	14.85
1N2160	IR	23.50	19.58	19.58
1N2163	MOT	4.12	3.30	2.50
1N2163A	MOT	4.30	3.45	2.60
1N2164	MOT	5.60	4.50	3.40
1N2164A	MOT	6.85	5.50	4.15
1N2165	MOT	7.05	5.65	4.25
1N2165A	MOT	9.10	7.30	5.50
1N2166	MOT	8.50	6.80	5.10
1N2166A	MOT	10.20	8.10	6.10
1N2167	MOT	10.80	8.65	6.50
1N2167A	MOT	13.80	11.05	8.30
1N2168	MOT	14.90	11.90	8.95
1N2168A	MOT	20.00	15.95	12.00
1N2169	MOT	21.20	16.95	12.75
1N2169A	MOT	31.20	25.00	18.80
1N2170	MOT	29.95	23.95	18.00
1N2170A	MOT	46.00	36.95	27.80
1N2171	MOT	43.00	34.85	26.20
1N2171A	MOT	53.40	44.50	33.50
1N2175	TI	7.20	6.00	4.00
1N2326	RCA	.66	.55	.40
			1000-Up Ea.	.33

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N2389	ST	7.32	6.10	5.23	4.87
1N2482	ST	.38	.33	.29	.27
1N2482	SYL	.78	.65	.65	.43
1N2483	ST	.42	.35	.30	.28
1N2483	SYL	.82	.82	.72	.49
1N2484	ST	.45	.37	.32	.29
1N2484	SYL	.96	.96	.80	.54
1N2490	ST	14.40	12.00	9.61	8.65
1N2610	IR	.66	.55	.55	.40
1N2610	ST	.42	.35	.30	.28
1N2611	IR	.74	.62	.62	.45
1N2611	ST	.45	.37	.32	.29
1N2612	IR	.84	.70	.70	.50
1N2613	IR	.94	.79	.79	.56
1N2613	ST	.52	.43	.37	.35
1N2614	IR	1.07	.89	.89	.63
1N2615	IR	1.20	1.00	1.00	.70
1N2615	ST	.52	.47	.40	.37

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N2620	MOT	4.92	4.10	3.05
1N2620A	MOT	5.22	4.35	3.25
1N2620B	MOT	5.88	4.90	3.65

SEE PAGE 7 FOR INTEGRATED CIRCUITS

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them. On Zener Diodes, we ship the better tolerance device at the same price at our discretion.

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N2621	MOT	5.52	4.60	3.45
1N2621A	MOT	6.66	5.55	4.15
1N2622	MOT	9.12	7.60	5.70
1N2622A	MOT	9.78	8.15	6.10
1N2622B	MOT	11.22	9.35	7.00
1N2623	MOT	10.56	8.80	6.60
1N2623A	MOT	12.06	10.05	7.55
1N2623B	MOT	16.20	13.50	10.15
1N2624	MOT	26.40	22.00	16.55
1N2624A	MOT	34.56	28.80	21.65
1N2624B	MOT	46.20	38.50	28.95
1N2630	IR	7.55	6.29	5.55
1N2631	IR	6.60	5.50	4.95
1N2633	IR	6.60	5.50	4.95
1N2637	IR	11.58	9.65	8.65
1N2804	MOT	6.72	5.65	4.25
1N2804A	MOT	9.18	7.65	5.75
1N2804B	MOT	12.80	10.65	8.00
1N2805	MOT	6.72	5.65	4.25
1N2805A	MOT	9.18	7.65	5.75
1N2805B	MOT	12.80	10.65	8.00
1N2806	MOT	6.72	5.65	4.25
1N2806A	MOT	9.18	7.65	5.75
1N2806B	MOT	12.80	10.65	8.00
1N2807	MOT	6.72	5.65	4.25
1N2807A	MOT	9.18	7.65	5.75
1N2807B	MOT	12.80	10.65	8.00
1N2808	MOT	6.72	5.65	4.25
1N2808A	MOT	9.18	7.65	5.75
1N2808B	MOT	12.80	10.65	8.00
1N2809	MOT	6.72	5.65	4.25
1N2809A	MOT	9.18	7.65	5.75
1N2809B	MOT	12.80	10.65	8.00
1N2810	MOT	6.72	5.65	4.25
1N2810A	MOT	9.18	7.65	5.75
1N2810B	MOT	12.80	10.65	8.00
1N2811	MOT	6.72	5.65	4.25
1N2811A	MOT	9.18	7.65	5.75
1N2811B	MOT	12.80	10.65	8.00
1N2812	MOT	6.72	5.65	4.25
1N2812A	MOT	9.18	7.65	5.75
1N2812B	MOT	12.80	10.65	8.00
1N2813	MOT	6.72	5.65	4.25
1N2813A	MOT	9.18	7.65	5.75
1N2813B	MOT	12.80	10.65	8.00
1N2816	MOT	6.72	5.65	4.25
1N2816A	MOT	9.18	7.65	5.75
1N2816B	MOT	12.80	10.65	8.00
1N2817	MOT	6.72	5.65	4.25
1N2817A	MOT	9.18	7.65	5.75
1N2817B	MOT	12.80	10.65	8.00
1N2818	MOT	6.72	5.65	4.25
1N2818A	MOT	9.18	7.65	5.75
1N2818B	MOT	12.80	10.65	8.00
1N2819	MOT	6.72	5.65	4.25
1N2819A	MOT	9.18	7.65	5.75
1N2819B	MOT	12.80	10.65	8.00
1N2820	MOT	6.72	5.65	4.25
1N2820A	MOT	9.18	7.65	5.75
1N2820B	MOT	12.80	10.65	8.00
1N2821	MOT	6.72	5.65	4.25
1N2821A	MOT	9.18	7.65	5.75
1N2821B	MOT	12.80	10.65	8.00
1N2822	MOT	6.72	5.65	4.25
1N2822A	MOT	9.18	7.65	5.75
1N2822B	MOT	12.80	10.65	8.00
1N2824	MOT	6.72	5.65	4.25
1N2824A	MOT	9.18	7.65	5.75
1N2824B	MOT	12.80	10.65	8.00
1N2825	MOT	6.78	5.65	4.25
1N2825A	MOT	9.18	7.65	5.75
1N2825B	MOT	12.80	10.65	8.00
1N2826	MOT	6.72	5.65	4.25
1N2826A	MOT	9.18	7.65	5.75
1N2826B	MOT	12.80	10.65	8.00
1N2828	MOT	6.72	5.65	4.25
1N2828A	MOT	9.18	7.65	5.75
1N2828B	MOT	12.80	10.65	8.00
1N2829	MOT	6.72	5.65	4.25
1N2829A	MOT	9.18	7.65	5.75
1N2829B	MOT	12.80	10.65	8.00
1N2830	MOT	6.72	5.65	4.25
1N2830A	MOT	9.18	7.65	5.75
1N2830B	MOT	12.80	10.65	8.00
1N2831	MOT	6.72	5.65	4.25
1N2831A	MOT	9.18	7.65	5.75
1N2831B	MOT	12.80	10.65	8.00
1N2833	MOT	6.72	5.65	4.25
1N2833A	MOT	9.18	7.65	5.75
1N2833B	MOT	12.80	10.65	8.00
1N2834	MOT	6.72	5.65	4.25
1N2834A	MOT	9.18	7.65	5.75
1N2834B	MOT	12.80	10.65	8.00
1N2835	MOT	6.72	5.65	4.25
1N2835A	MOT	9.18	7.65	5.75
1N2835B	MOT	12.80	10.65	8.00
1N2838	MOT	6.72	5.65	4.25
1N2838A	MOT	9.18	7.65	5.75
1N2838B	MOT	12.80	10.65	8.00
1N2839	MOT	8.15	6.80	5.10
1N2839A	MOT	13.56	11.30	8.50
1N2839B	MOT	21.55	17.95	13.50
1N2840	MOT	8.15	6.80	5.10
1N2840A	MOT	13.56	11.30	8.50
1N2840B	MOT	21.55	17.95	13.50
1N2841	MOT	8.15	6.80	5.10
1N2841A	MOT	13.56	11.30	8.50
1N2841B	MOT	21.55	17.95	13.50
1N2842	MOT	8.15	6.80	5.10
1N2842A	MOT	13.56	11.30	8.50
1N2842B	MOT	21.55	17.95	13.50
1N2843	MOT	8.15	6.80	5.10
1N2843A	MOT	13.55	11.30	8.50
1N2843B	MOT	21.55	17.95	13.50
1N2846	MOT	8.15	6.80	5.10
1N2846A	MOT	13.56	11.30	8.50
1N2846B	MOT	21.55	17.95	13.50

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
1N2858A	RCA	.40	.33	.24	.20
1N2859A	RCA	.45	.37	.27	.22
1N2860A	RCA	.48	.40	.29	.24
1N2861A	RCA	.51	.42	.30	.25
1N2862A	RCA	.58	.48	.35	.29
1N2863A	RCA	.70	.58	.42	.35
1N2864A	RCA	.84	.70	.51	.42

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N2970	MOT	6.54	5.45	4.10
1N2970A	IR	3.96	3.30	2.65
1N2970A	MOT	7.02	5.85	4.40
1N2970B	IR	5.10	4.25	3.30
1N2970B	MOT	8.75	7.30	5.50
1N2971	MOT	6.54	5.45	4.10
1N2971A	IR	3.96	3.30	2.65
1N2971A	MOT	7.02	5.85	4.40
1N2971B	IR	5.10	4.25	3.30
1N2971B	MOT	8.75	7.30	5.50
1N2972	MOT	6.54	5.45	4.10
1N2972A	IR	3.96	3.30	2.65
1N2972A	MOT	7.02	5.85	4.40
1N2972B	IR	5.10	4.25	3.30
1N2972B	MOT	8.75	7.30	5.50
1N2973	MOT	6.54	5.45	4.10
1N2973A	IR	3.96	3.30	2.65
1N2973A	MOT	7.02	5.85	4.40
1N2973B	IR	5.10	4.25	3.30
1N2973B	MOT	8.75	7.30	5.50
1N2974	MOT	6.54	5.45	4.10
1N2974A	IR	3.96	3.30	2.65
1N2974A	MOT	7.02	5.85	4.40
1N2974B	IR	5.10	4.25	3.30
1N2974B	MOT	8.75	7.30	5.50
1N2975	MOT	6.54	5.45	4.10
1N2975A	IR	3.96	3.30	2.65
1N2975A	MOT	7.02	5.85	4.40
1N2975B	IR	5.10	4.25	3.30
1N2975B	MOT	8.75	7.30	5.50
1N2976	MOT	6.54	5.45	4.10
1N2976A	IR	3.96	3.30	2.65
1N2976A	MOT	7.02	5.85	4.40
1N2976B	IR	5.10	4.25	3.30
1N2976B	MOT	8.75	7.30	5.50
1N2977	MOT	6.54	5.45	4.10
1N2977A	IR	3.96	3.30	2.65
1N2977A	MOT	7.02	5.85	4.40
1N2977B	IR	5.10	4.25	3.30
1N2977B	MOT	8.75	7.30	5.50
1N2978	MOT	6.54	5.45	4.10
1N2978A	IR	3.96	3.30	2.65
1N2978A	MOT	7.02	5.85	4.40
1N2978B	IR	5.10	4.25	3.30
1N2978B	MOT	8.75	7.30	5.50
1N2979	MOT	6.54	5.45	4.10
1N2979A	IR	3.96	3.30	2.65
1N2979A	MOT	7.02	5.85	4.40
1N2979B	IR	5.10	4.25	3.30
1N2979B	MOT	8.75	7.30	5.50
1N2980	MOT	6.54	5.45	4.10
1N2980A	IR	3.96	3.30	2.65
1N2980A	MOT	7.02	5.85	4.40
1N2980B	IR	5.10	4.25	3.30
1N2980B	MOT	8.75	7.30	5.50
1N2982	MOT	6.54	5.45	4.10
1N2982A	IR	3.96	3.30	2.65

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N2982A	MOT	7.02	5.85	4.40
1N2982B	IR	5.10	4.25	3.30
1N2982B	MOT	8.75	7.30	5.50
1N2984	MOT	6.54	5.45	4.10
1N2984A	IR	3.96	3.30	2.65
1N2984A	MOT	7.02	5.85	4.40
1N2984B	IR	5.10	4.25	3.30
1N2984B	MOT	8.75	7.30	5.50
1N2985	MOT	6.54	5.45	4.10
1N2985A	IR	3.96	3.30	2.65
1N2985A	MOT	7.02	5.85	4.40
1N2985B	IR	5.10	4.25	3.30
1N2985B	MOT	8.75	7.30	5.50
1N2986	MOT	6.54	5.45	4.10
1N2986A	IR	3.96	3.30	2.65
1N2986A	MOT	7.02	5.85	4.40
1N2986B	IR	5.10	4.25	3.30
1N2986B	MOT	8.75	7.30	5.50
1N2987	MOT	6.54	5.45	4.10
1N2987A	IR	3.96	3.30	2.65
1N2987A	MOT	7.02	5.85	4.40
1N2987B	IR	5.10	4.25	3.30
1N2987B	MOT	8.75	7.30	5.50
1N2988	MOT	6.54	5.45	4.10
1N2988A	IR	3.96	3.30	2.65
1N2988A	MOT	7.02	5.85	4.40
1N2988B	IR	5.10	4.25	3.30
1N2988B	MOT	8.75	7.30	5.50
1N2989	MOT	6.54	5.45	4.10
1N2989A	IR	3.96	3.30	2.65
1N2989A	MOT	7.02	5.85	4.40
1N2989B	IR	5.10	4.25	3.30
1N2989B	MOT	8.75	7.30	5.50
1N2990	MOT	6.54	5.45	4.10
1N2990A	IR	3.96	3.30	2.65
1N2990A	MOT	7.02	5.85	4.40
1N2990B	IR	5.10	4.25	3.30
1N2990B	MOT	8.75	7.30	5.50
1N2991	MOT	6.54	5.45	4.10
1N2991A	IR	3.96	3.30	2.65
1N2991A	MOT	7.02	5.85	4.40
1N2991B	IR	5.10	4.25	3.30
1N2991B	MOT	8.75	7.30	5.50
1N2992	MOT	6.54	5.45	4.10
1N2992A	IR	3.96	3.30	2.65
1N2992A	MOT	7.02	5.85	4.40
1N2992B	IR	5.10	4.25	3.30
1N2992B	MOT	8.75	7.30	5.50
1N2993	MOT	6.54	5.45	4.10
1N2993A	IR	3.96	3.30	2.65
1N2993A	MOT	7.02	5.85	4.40
1N2993B	IR	5.10	4.25	3.30
1N2993B	MOT	8.75	7.30	5.50
1N2994	MOT	6.54	5.45	4.10
1N2994A	IR	3.96	3.30	2.65
1N2994A	MOT	7.02	5.85	4.40
1N2994B	IR	5.10	4.25	3.30
1N2994B	MOT	8.75	7.30	5.50
1N2995	MOT	6.54	5.45	4.10
1N2995A	IR	3.96	3.30	2.65
1N2995A	MOT	7.02	5.85	4.40
1N2995B	IR	5.10	4.25	3.30
1N2995B	MOT	8.75	7.30	5.50
1N2996	MOT	6.54	5.45	4.10
1N2996A	IR	3.96	3.30	2.65
1N2996A	MOT	7.02	5.85	4.40
1N2996B	IR	5.10	4.25	3.30
1N2996B	MOT	8.75	7.30	5.50
1N2997	MOT	6.54	5.45	4.10
1N2997A	IR	3.96	3.30	2.65
1N2997A	MOT	7.02	5.85	4.40
1N2997B	IR	5.10	4.25	3.30
1N2997B	MOT	8.75	7.30	5.50
1N2998	MOT	6.54	5.45	4.10
1N2998A	IR	3.96	3.30	2.65
1N2998A	MOT	7.02	5.85	4.40
1N2998B	IR	5.10	4.25	3.30
1N2998B	MOT	8.75	7.30	5.50
1N2999	MOT	6.54	5.45	4.10
1N2999A	IR	3.96	3.30	2.65
1N2999A	MOT	7.02	5.85	4.40
1N2999B	IR	5.10	4.25	3.30
1N2999B	MOT	8.75	7.30	5.50
1N3002	MOT	6.54	5.45	4.10
1N3002A	IR	3.96	3.30	2.65
1N3002A	MOT	7.02	5.85	4.40
1N3002B	IR	5.10	4.25	3.30
1N3002B	MOT	8.75	7.30	5.50
1N3003	MOT	6.54	5.45	4.10
1N3003A	IR	3.96	3.30	2.65
1N3003A	MOT	7.02	5.85	4.40
1N3003B	IR	5.10	4.25	3.30
1N3003B	MOT	8.75	7.30	5.50
1N3004	MOT	6.54	5.45	4.10
1N3004A	IR	3.96	3.30	2.65
1N3004A	MOT	7.02	5.85	4.40
1N3004B	IR	5.10	4.25	3.30
1N3004B	MOT	8.75	7.30	5.50
1N3005	MOT	6.54	5.45	4.10
1N3005A	IR	3.96	3.30	2.65
1N3005A	MOT	7.02	5.85	4.40
1N3005B	IR	5.10	4.25	3.30
1N3005B	MOT	8.75	7.30	5.50
1N3006	MOT	6.54	5.45	4.10
1N3006A	IR	3.96	3.30	2.65
1N3006A	MOT	7.02	5.85	4.40
1N3006B	IR	5.10	4.25	3.30

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N3006B	MOT	8.75	7.30	5.50
1N3007	MOT	6.54	5.45	4.10
1N3007A	IR	3.96	3.30	2.65
1N3007A	MOT	7.02	5.85	4.40
1N3007B	IR	5.10	4.25	3.30
1N3007B	MOT	8.75	7.30	5.50
1N3008	MOT	6.54	5.45	4.10
1N3008A	IR	3.96	3.30	2.65
1N3008A	MOT	7.02	5.85	4.40
1N3008B	IR	5.10	4.25	3.30
1N3008B	MOT	8.75	7.30	5.50
1N3009	MOT	6.54	5.45	4.10
1N3009A	IR	3.96	3.30	2.65
1N3009A	MOT	7.02	5.85	4.40
1N3009B	IR	5.10	4.25	3.30
1N3009B	MOT	8.75	7.30	5.50
1N3011	MOT	6.54	5.45	4.10
1N3011A	IR	3.96	3.30	2.65
1N3011A	MOT	7.02	5.85	4.40
1N3011B	IR	5.10	4.25	3.30
1N3011B	MOT	8.75	7.30	5.50
1N3013	MOT	7.20	6.00	4.50
1N3013A	IR	5.85	4.90	3.90
1N3013A	MOT	10.80	9.00	6.75
1N3013B	IR	7.80	6.50	5.40
1N3013B	MOT	16.50	13.75	10.35
1N3014	MOT	7.20	6.00	4.50
1N3014A	IR	5.85	4.90	3.90
1N3014A	MOT	7.20	9.00	6.75
1N3014B	IR	7.80	6.50	5.40
1N3014B	MOT	16.50	13.75	10.35
1N3015	MOT	7.20	6.00	4.50
1N3015A	IR	5.85	4.90	3.90
1N3015A	MOT	7.20	9.00	6.75
1N3015B	IR	7.80	6.50	5.40
1N3015B	MOT	16.50	13.75	10.35
1N3016	MOT	3.42	2.85	2.15
1N3016A	IR	3.31	2.76	2.15
1N3016A	MOT	3.84	3.20	2.40
1N3016B	IR	3.84	3.20	2.25
1N3016B	MOT	4.44	3.70	2.80
1N3017	MOT	3.42	2.85	2.15
1N3017A	IR	3.31	2.76	2.15
1N3017A	MOT	3.84	3.20	2.40
1N3017B	IR	3.84	3.20	2.25
1N3017B	MOT	4.44	3.70	2.80
1N3018	MOT	3.42	2.85	2.15
1N3018A	IR	3.31	2.76	2.15
1N3018A	MOT	3.84	3.20	2.40
1N3018B	IR	3.84	3.20	2.25
1N3018B	MOT	4.44	3.70	2.80
1N3019	MOT	3.42	2.85	2.15
1N3019A	IR	3.31	2.76	2.15
1N3019A	MOT	3.84	3.20	2.40
1N3019B	IR	3.84	3.20	2.25
1N3019B	MOT	4.44	3.70	2.80
1N3020	MOT	3.42	2.85	2.15
1N3020A	IR	3.31	2.76	2.15
1N3020A	MOT	3.84	3.20	2.40
1N3020B	IR	3.84	3.20	2.25
1N3020B	MOT	4.44	3.70	2.80
1N3021	MOT	3.42	2.85	2.15
1N3021A	IR	3.31	2.76	2.15
1N3021A	MOT	3.84	3.20	2.40
1N3021B	MOT	4.44	3.70	2.80
1N3022	MOT	3.42	2.85	2.15
1N3022A	IR	3.31	2.76	2.15
1N3022A	MOT	3.84	3.20	2.40
1N3022B	IR	3.84	3.20	2.25
1N3022B	MOT	4.44	3.70	2.80
1N3023	MOT	3.42	2.85	2.15
1N3023A	IR	3.31	2.76	2.15
1N3023A	MOT	3.84	3.20	2.40
1N3023B	IR	3.84	3.20	2.25
1N3023B	MOT	4.44	3.70	2.80
1N3024	MOT	3.42	2.85	2.15
1N3024A	IR	3.31	2.76	2.15
1N3024A	MOT	3.84	3.20	2.40
1N3024B	IR	3.84	3.20	2.25
1N3024B	MOT	4.44	3.70	2.80
1N3025	MOT	3.42	2.85	2.15
1N3025A	IR	3.31	2.76	2.15
1N3025B	MOT	4.44	3.70	2.80
1N3026	MOT	3.42	2.85	2.15
1N3026A	IR	3.31	2.76	2.15
1N3026A	MOT	3.84	3.20	2.40
1N3026B	IR	3.84	3.20	2.25
1N3026B	MOT	4.44	3.70	2.80
1N3027	MOT	3.42	2.85	2.15
1N3027A	IR	3.31	2.76	2.15
1N3027A	MOT	3.84	3.20	2.40
1N3027B	IR	3.84	3.20	2.25
1N3027B	MOT	4.44	3.70	2.80
1N3027B/ USN	MOT	4.80	4.00	3.00
1N3028	MOT	3.42	2.85	2.15
1N3028A	IR	3.31	2.76	2.15
1N3028A	MOT	3.84	3.20	2.40
1N3028B	IR	3.84	3.20	2.25
1N3028B	MOT	4.44	3.70	2.80
1N3029	MOT	3.42	2.85	2.15
1N3029A	IR	3.31	2.76	2.15
1N3029A	MOT	3.84	3.20	2.40
1N3029B	IR	3.84	3.20	2.25
1N3029B	MOT	4.44	3.70	2.80
1N3030	MOT	3.42	2.85	2.15
1N3030A	IR	3.31	2.76	2.15
1N3030A	MOT	3.84	3.20	2.40
1N3030B	IR	3.84	3.20	2.25
1N3030B	MOT	4.44	3.70	2.80
1N3031	MOT	3.42	2.85	2.15
1N3031A	IR	3.31	2.76	2.15
1N3031A	MOT	3.84	3.20	2.40
1N3031B	IR	3.84	3.20	2.25
1N3031B	MOT	4.44	3.70	2.80
1N3032	MOT	3.42	2.85	2.15
1N3032A	IR	3.31	2.76	2.15
1N3032A	MOT	3.84	3.20	2.40
1N3032B	IR	3.84	3.20	2.25
1N3032B	MOT	4.44	3.70	2.80
1N3033	MOT	3.42	2.85	2.15
1N3033A	IR	3.31	2.76	2.15
1N3033A	MOT	3.84	3.20	2.40
1N3033B	MOT	4.44	3.70	2.80
1N3034	MOT	3.42	2.85	2.15
1N3034A	IR	3.31	2.76	2.15
1N3034A	MOT	3.84	3.20	2.40
1N3034B	MOT	4.44	3.70	2.80
1N3035	MOT	3.42	2.85	2.15
1N3035A	IR	3.31	2.76	2.15
1N3035A	MOT	3.84	3.20	2.40
1N3035B	IR	3.84	3.20	2.25
1N3035B	MOT	4.44	3.70	2.80
1N3036	MOT	3.42	2.85	2.15
1N3036A	IR	3.31	2.76	2.15
1N3036A	MOT	3.84	3.20	2.40
1N3036B	IR	3.84	3.20	2.25
1N3036B	MOT	4.44	3.70	2.80
1N3037	MOT	3.42	2.85	2.15
1N3037A	IR	3.31	2.76	2.15
1N3037A	MOT	3.84	3.20	2.40
1N3037B	IR	3.84	3.20	2.25
1N3037B	MOT	4.44	3.70	2.80
1N3038	MOT	3.42	2.85	2.15
1N3038A	IR	3.31	2.76	2.15
1N3038A	MOT	3.84	3.20	2.40
1N3038B	MOT	4.44	3.70	2.80
1N3039	MOT	3.42	2.85	2.15
1N3039A	IR	3.31	2.76	2.15
1N3039A	MOT	3.84	3.20	2.40
1N3039B	MOT	4.44	3.70	2.80
1N3040	MOT	3.42	2.85	2.15
1N3040A	IR	3.31	2.76	2.15
1N3040A	MOT	3.84	3.20	2.40
1N3040B	IR	3.84	3.20	2.25
1N3040B	MOT	4.44	3.70	2.80
1N3041	MOT	3.42	2.85	2.15
1N3041A	IR	3.31	2.76	2.15
1N3041A	MOT	3.84	3.20	2.40
1N3041B	IR	3.84	3.20	2.25
1N3041B	MOT	4.44	3.70	2.80
1N3042	MOT	3.42	2.85	2.15
1N3042A	IR	3.31	2.76	2.15
1N3042A	MOT	3.84	3.20	2.40
1N3042B	MOT	4.44	3.70	2.80
1N3043	MOT	3.42	2.85	2.15
1N3043A	IR	3.31	2.76	2.15
1N3043A	MOT	3.84	3.20	2.40
1N3043B	MOT	4.44	3.70	2.80
1N3044	MOT	3.42	2.85	2.15
1N3044A	IR	3.31	2.76	2.15
1N3044A	MOT	3.84	3.20	2.40
1N3044B	IR	3.84	3.20	2.25
1N3044B	MOT	4.44	3.70	2.80
1N3045	MOT	3.54	2.95	2.20
1N3045A	IR	3.31	2.76	2.15
1N3045A	MOT	3.90	3.25	2.45
1N3045B	IR	3.84	3.20	2.25
1N3045B	MOT	5.58	4.65	3.50
1N3046	MOT	3.54	2.95	2.20
1N3046A	IR	3.31	2.76	2.15
1N3046A	MOT	3.90	3.25	2.45
1N3046B	MOT	5.58	4.65	3.50
1N3047	MOT	3.54	2.95	2.20
1N3047A	IR	3.31	2.76	2.15
1N3047A	MOT	3.90	3.25	2.45
1N3047B	IR	3.84	3.20	2.25
1N3047B	MOT	5.58	4.65	3.50
1N3048	MOT	3.54	2.95	2.20
1N3048A	IR	3.31	2.76	2.15
1N3048A	MOT	3.90	3.25	2.45
1N3048B	MOT	5.58	4.65	3.50
1N3049	MOT	3.54	2.95	2.20
1N3049A	IR	3.31	2.76	2.15
1N3050	MOT	3.54	2.95	2.20
1N3050A	IR	3.31	2.76	2.15
1N3050A	MOT	3.90	3.25	2.45
1N3050B	MOT	5.58	4.65	3.50
1N3051	MOT	3.54	2.95	2.20
1N3051A	IR	3.31	2.76	2.15
1N3051A	MOT	3.90	3.25	2.45
1N3051B	IR	3.84	3.20	2.25
1N3051B	MOT	5.58	4.65	3.50
1N3085	IR	9.60	8.00	....
1N3086	IR	16.80	14.00	....
1N3087	IR	21.30	17.75	....
1N3088	IR	24.00	20.00	....
1N3089	IR	27.00	22.50	....
1N3090	IR	29.10	24.25	....
1N3091	IR	36.12	30.10	....
1N3092	IR	50.40	42.00	....
1N3111	IR	8.40	7.00	....

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N3154	IR	2.64	2.20	2.20	1.75
1N3154	MOT	3.12	2.60	2.25	1.80
1N3154A	MOT	4.32	3.60	3.10	2.50
1N3155	IR	3.55	2.95	2.95	2.35
1N3155	MOT	4.26	3.55	3.05	2.45
1N3156	IR	6.24	5.20	5.20	4.15
1N3156	MOT	7.38	6.15	5.30	4.25
1N3157	IR	7.80	6.50	6.50	5.20
1N3157	MOT	9.12	7.60	6.55	5.25
1N3161	ST	17.04	14.20	12.19	11.36

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N3163	ST	18.96	15.80	13.50	12.60

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N3189	IR	2.52	2.10	1.80
1N3190	IR	3.60	3.00	2.45
1N3191	IR	5.70	4.75	4.00
1N3193	RCA	.42	.35	.26
			1000-Up Ea.	.21
1N3194	RCA	.46	.38	.28
			1000-Up Ea.	.23
1N3195	RCA	.64	.53	.39
			1000-Up Ea.	.32
1N3196	RCA	.89	.74	.54
			1000-Up Ea.	.45
1N3208	MOT	1.55	1.29	.86
1N3209	IR	1.50	1.25	.85
1N3209	MOT	1.71	1.42	.95
1N3209R	IR	1.50	1.25	.85
1N3210	IR	2.05	1.70	1.20
1N3210	MOT	2.25	1.87	1.25
1N3210R	MOT	2.25	1.87	1.25
1N3211	IR	2.46	2.05	1.55
1N3211	MOT	2.76	2.30	1.55
1N3211R	MOT	2.76	2.30	1.55
1N3212	IR	3.42	2.85	1.90
1N3212	MOT	3.06	2.55	1.70
1N3213	IR	7.98	6.65	4.40
1N3213	MOT	4.14	3.45	2.30
1N3214	IR	8.75	7.30	4.80
1N3214	MOT	4.68	3.90	2.60
1N3253	RCA	.46	.38	.28
			1000-Up Ea.	.23
1N3254	RCA	.51	.42	.30
			1000-Up Ea.	.25
1N3255	RCA	.67	.56	.41
			1000-Up Ea.	.34
1N3256	RCA	.94	.78	.57
			1000-Up Ea.	.47
1N3282	MOT	2.94	2.45	1.65
1N3283	MOT	3.66	3.05	2.05
1N3284	MOT	9.54	7.95	5.30
1N3285	MOT	12.06	10.05	6.70
1N3286	MOT	20.70	17.25	11.50

Type No.	Mfr.	EACH 1-9	10-24	25-Up
1N3289	IR	19.40	16.15	16.15
1N3290	IR	23.85	19.85	19.85
1N3291	IR	27.35	22.80	22.80
1N3292	IR	30.60	25.50	25.50
1N3293	IR	33.40	27.80	27.80
1N3294	IR	45.40	37.80	37.80
1N3295	IR	68.40	57.50	57.50
1N3296	IR	76.80	64.00	64.00

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N3305	IR	5.70	4.75	4.15
1N3305	MOT	6.72	5.65	4.25
1N3305A	MOT	9.18	7.65	5.75
1N3305B	MOT	12.80	10.65	8.00
1N3306	MOT	6.72	5.65	4.25
1N3306A	MOT	9.18	7.65	5.75
1N3306B	MOT	12.80	10.65	8.00
1N3307	MOT	6.72	5.65	4.25
1N3307B	MOT	12.80	10.65	8.00
1N3308	IR	5.70	4.75	4.15
1N3308	MOT	6.72	5.65	4.25
1N3308A	MOT	9.18	7.65	5.75
1N3308B	MOT	12.80	10.65	8.00
1N3309	IR	5.70	4.75	4.15
1N3309	MOT	6.72	5.65	4.25
1N3309A	MOT	9.18	7.65	5.75
1N3309B	MOT	12.80	10.65	8.00
1N3310	MOT	6.72	5.65	4.25
1N3310A	MOT	9.18	7.65	5.75
1N3310B	MOT	12.80	10.65	8.00
1N3311	IR	5.70	4.75	4.15
1N3311	MOT	6.72	5.65	4.25
1N3311A	MOT	9.18	7.65	5.75
1N3311B	MOT	12.80	10.65	8.00
1N3312	MOT	6.72	5.65	4.25
1N3312A	MOT	9.18	7.65	5.75
1N3312B	MOT	12.80	10.65	8.00
1N3313	IR	5.70	4.75	4.15
1N3313	MOT	6.72	5.65	4.25
1N3313A	MOT	9.18	7.65	5.75
1N3313B	MOT	12.80	10.65	8.00
1N3314	IR	5.70	4.75	4.15
1N3314	MOT	6.72	5.65	4.25
1N3314A	MOT	9.18	7.65	5.75
1N3314B	MOT	12.80	10.65	8.00
1N3315	MOT	6.72	5.65	4.25
1N3315A	MOT	9.18	7.65	5.75
1N3315B	MOT	12.80	10.65	8.00
1N3316	MOT	6.72	5.65	4.25
1N3316A	MOT	9.18	7.65	5.75
1N3316B	MOT	12.80	10.65	8.00
1N3317	MOT	6.72	5.65	4.25
1N3317A	MOT	9.18	7.65	5.75
1N3317B	MOT	12.80	10.65	8.00
1N3318	MOT	6.72	5.65	4.25
1N3318A	MOT	9.18	7.65	5.75
1N3318B	MOT	12.80	10.65	8.00
1N3319	MOT	6.72	5.65	4.25
1N3319A	MOT	9.18	7.65	5.75
1N3319B	MOT	12.80	10.65	8.00
1N3320	MOT	6.72	5.65	4.25
1N3320A	MOT	9.18	7.65	5.75

SEE PAGE 7 FOR INTEGRATED CIRCUITS

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them. On Zener Diodes, we ship the better tolerance device at the same price at our discretion.

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N3320B	MOT	12.80	10.65	8.00
1N3321	IR	5.70	4.75	4.15
1N3321	MOT	6.72	5.65	4.25
1N3321A	MOT	9.18	7.65	5.75
1N3321B	MOT	12.80	10.65	8.00
1N3322	MOT	6.72	5.65	4.25
1N3322A	MOT	9.18	7.65	5.75
1N3322B	MOT	12.80	10.65	8.00
1N3323	IR	5.70	4.75	4.15
1N3323	MOT	6.72	5.65	4.25
1N3323A	MOT	9.18	7.65	5.75
1N3323B	MOT	12.80	10.65	8.00
1N3324	IR	5.70	4.75	4.15
1N3324	MOT	6.72	5.65	4.25
1N3324A	MOT	9.18	7.65	5.75
1N3324B	MOT	12.80	10.65	8.00
1N3325	IR	5.70	4.75	4.15
1N3325	MOT	6.72	5.65	4.25
1N3325A	MOT	9.18	7.65	5.75
1N3325B	MOT	12.80	10.65	8.00
1N3326	MOT	6.72	5.65	4.25
1N3326A	MOT	9.18	7.65	5.75
1N3326B	MOT	12.80	10.65	8.00
1N3327	MOT	6.72	5.65	4.25
1N3327A	MOT	9.18	7.65	5.75
1N3327B	MOT	12.80	10.65	8.00
1N3328	MOT	6.72	5.65	4.25
1N3328A	MOT	9.18	7.65	5.75
1N3328B	MOT	12.80	10.65	8.00
1N3329	MOT	6.72	5.65	4.25
1N3329A	MOT	9.18	7.65	5.75
1N3329B	MOT	12.80	10.65	8.00
1N3330	MOT	6.72	5.65	4.25
1N3330A	MOT	9.18	7.65	5.75
1N3330B	MOT	12.80	10.65	8.00
1N3331	MOT	6.72	5.65	4.25
1N3331A	MOT	9.18	7.65	5.75
1N3331B	MOT	12.80	10.65	8.00
1N3333A	MOT	9.18	7.65	5.75
1N3333B	MOT	12.80	10.65	8.00
1N3334	MOT	6.72	5.65	4.25
1N3334A	MOT	9.18	7.65	5.75
1N3334B	MOT	12.80	10.65	8.00
1N3335	MOT	6.72	5.65	4.25
1N3335A	MOT	9.18	7.65	5.75
1N3335B	MOT	12.80	10.65	8.00
1N3338	MOT	6.72	5.65	4.25
1N3338A	MOT	9.18	7.65	5.75
1N3338B	MOT	12.80	10.65	8.00
1N3339	MOT	6.72	5.65	4.25
1N3339A	MOT	9.18	7.65	5.75
1N3339B	MOT	12.80	10.65	8.00
1N3340	IR	5.70	4.75	4.15
1N3340	MOT	6.72	5.65	4.25
1N3340A	MOT	9.18	7.65	5.75
1N3340B	MOT	12.80	10.65	8.00
1N3341	MOT	8.15	6.80	5.10
1N3341A	MOT	13.56	11.30	8.50
1N3341B	MOT	21.55	17.95	13.50
1N3342	MOT	8.15	6.80	5.10
1N3342A	MOT	13.56	11.30	8.50
1N3342B	MOT	21.55	17.95	13.50
1N3343	MOT	8.15	6.80	5.10
1N3343A	MOT	13.56	11.30	8.50
1N3344	MOT	8.15	6.80	5.10
1N3344A	MOT	13.56	11.30	8.50
1N3344B	MOT	21.55	17.95	13.50
1N3345	MOT	8.15	6.80	5.10
1N3345B	MOT	21.55	17.95	13.50
1N3346	MOT	8.15	6.80	5.10
1N3346A	MOT	13.56	11.30	8.50
1N3346B	MOT	21.55	17.95	13.50
1N3347	MOT	8.15	6.80	5.10
1N3348	MOT	8.15	6.80	5.10
1N3350	MOT	8.15	6.80	5.10
1N3350A	MOT	13.56	11.30	8.50
1N3350B	MOT	21.55	17.95	13.50
1N3491	MOT	.81	.67	.45
1N3492	MOT	.91	.76	.51
1N3493	MOT	1.33	1.11	.74
1N3494	MOT	1.53	1.27	.85
1N3495	MOT	1.78	1.48	.99

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N3496	IR	4.44	3.70	2.50
1N3497	IR	6.90	5.75	4.50
1N3498	IR	10.80	9.00	7.00
1N3499	IR	22.80	19.00	15.50
1N3563	RCA	1.13	.94	.69
			1000-Up Ea.	.57
1N3580A	MOT	6.24	5.20	3.90
1N3581	MOT	6.66	5.55	4.15
1N3605	SYL	.87	.71	.48
1N3639	IR	.66	.55	.36
1N3641	IR	1.20	1.00	.65
1N3659	MOT	1.08	.90	.60
1N3660	MOT	1.19	.99	.66
1N3661	MOT	1.60	1.33	.89
1N3662	MOT	1.78	1.48	.99
1N3663	MOT	2.04	1.70	1.14
1N3670	IR	9.36	7.80	5.25
1N3670A	IR	9.36	7.80	5.25
1N3671	IR	10.45	8.70	5.85
1N3671A	IR	10.45	8.70	5.85
1N3672A	IR	11.28	9.40	6.30
1N3673	IR	11.75	9.80	6.60
1N3673A	IR	11.75	9.80	6.60
1N3680	MOT	4.14	3.45	2.60
1N3680B	MOT	5.88	4.90	3.70
1N3683A	MOT	4.92	4.10	3.10
1N3683B	MOT	5.88	4.90	3.70
1N3684	MOT	4.14	3.45	2.60
1N3685	MOT	4.14	3.45	2.60
1N3686B	MOT	5.88	4.90	3.70
1N3689	MOT	4.14	3.45	2.60
1N3689B	MOT	5.88	4.90	3.70
1N3696	MOT	4.14	3.45	2.60

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N3731	SYL	1.02	.85	.85	.68

Type No.	Mfr.	EACH 1-9	10-24	25-Up
1N3738	IR	31.95	26.60	26.60
1N3740	IR	48.00	40.00	40.00
1N3741	IR	66.00	55.00	55.00
1N3742	IR	79.20	66.00	66.00

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N3754	RCA	.39	.32	.23
			1000-Up Ea.	.19
1N3755	RCA	.40	.33	.24
			1000-Up Ea.	.20
1N3756	RCA	.42	.35	.26
			1000-Up Ea.	.21
1N3765	IR	18.43	15.36	10.24
1N3766	IR	21.10	17.58	11.75
1N3768	IR	22.96	19.13	12.75
1N3779	IR	5.40	4.50	3.75
1N3780	IR	9.90	8.25	6.90
1N3781	IR	13.10	10.90	9.10
1N3782	IR	20.16	16.80	14.10
1N3783	IR	29.40	24.50	20.50
1N3785	MOT	4.50	3.75	2.80
1N3785A	MOT	6.36	5.30	4.00
1N3785B	MOT	8.34	6.95	5.25
1N3786	MOT	4.50	3.75	2.80
1N3786A	MOT	6.36	5.30	4.00
1N3786B	MOT	8.34	6.95	5.25
1N3787	MOT	4.50	3.75	2.80
1N3787A	MOT	6.36	5.30	4.00
1N3787B	MOT	8.34	6.95	5.25
1N3788	MOT	4.50	3.75	2.80
1N3788A	MOT	6.36	5.30	4.00
1N3788B	MOT	8.34	6.95	5.25
1N3789	MOT	4.50	3.75	2.80
1N3789A	MOT	6.36	5.30	4.00
1N3789B	MOT	8.34	6.95	5.25
1N3790	MOT	4.50	3.75	2.80
1N3790A	MOT	6.36	5.30	4.00
1N3790B	MOT	8.34	6.95	5.25
1N3791	MOT	4.50	3.75	2.80
1N3791A	MOT	6.36	5.30	4.00
1N3791B	MOT	8.34	6.95	5.25
1N3792	MOT	4.50	3.75	2.80
1N3792A	MOT	6.36	5.30	4.00
1N3792B	MOT	8.34	6.95	5.25
1N3793	MOT	4.50	3.75	2.80
1N3793A	MOT	6.36	5.30	4.00
1N3793B	MOT	8.34	6.95	5.25
1N3794	MOT	4.50	3.75	2.80
1N3794A	MOT	6.36	5.30	4.00
1N3794B	MOT	8.34	6.95	5.25
1N3795	MOT	4.50	3.75	2.80
1N3795A	MOT	6.36	5.30	4.00
1N3795B	MOT	8.34	6.95	5.25
1N3796	MOT	4.50	3.75	2.80
1N3796A	MOT	6.36	5.30	4.00
1N3796B	MOT	8.34	6.95	5.25
1N3797	MOT	4.50	3.75	2.80
1N3797A	MOT	6.36	5.30	4.00
1N3797B	MOT	8.34	6.95	5.25
1N3798	MOT	4.50	3.75	2.80
1N3798A	MOT	6.36	5.30	4.00
1N3798B	MOT	8.34	6.95	5.25
1N3799	MOT	4.50	3.75	2.80
1N3799A	MOT	6.36	5.30	4.00
1N3799B	MOT	8.34	6.95	5.25

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N3800	MOT	4.50	3.75	2.80
1N3800A	MOT	6.36	5.30	4.00
1N3800B	MOT	8.34	6.95	5.25
1N3801	MOT	4.50	3.75	2.80
1N3801A	MOT	6.36	5.30	4.00
1N3801B	MOT	8.34	6.95	5.25
1N3802	MOT	4.50	3.75	2.80
1N3802A	MOT	6.36	5.30	4.00
1N3802B	MOT	8.34	6.95	5.25
1N3803	MOT	4.50	3.75	2.80
1N3803A	MOT	6.36	5.30	4.00
1N3803B	MOT	8.34	6.95	5.25
1N3804	MOT	4.50	3.75	2.80
1N3804A	MOT	6.36	5.30	4.00
1N3804B	MOT	8.34	6.95	5.25
1N3805	MOT	4.50	3.75	2.80
1N3805A	MOT	6.36	5.30	4.00
1N3805B	MOT	8.34	6.95	5.25
1N3806	MOT	4.50	3.75	2.80
1N3806A	MOT	6.36	5.30	4.00
1N3806B	MOT	8.34	6.95	5.25
1N3807	MOT	4.50	3.75	2.80
1N3807A	MOT	6.36	5.30	4.00
1N3807B	MOT	8.34	6.95	5.25
1N3808	MOT	4.50	3.75	2.80
1N3808A	MOT	6.36	5.30	4.00
1N3808B	MOT	8.34	6.95	5.25
1N3809	MOT	4.50	3.75	2.80
1N3809A	MOT	6.36	5.30	4.00
1N3809B	MOT	8.34	6.95	5.25
1N3810	MOT	4.50	3.75	2.80
1N3810A	MOT	6.36	5.30	4.00
1N3810B	MOT	8.34	6.95	5.25
1N3811	MOT	4.50	3.75	2.80
1N3811A	MOT	6.36	5.30	4.00
1N3811B	MOT	8.34	6.95	5.25
1N3812	MOT	4.50	3.75	2.80
1N3812A	MOT	6.36	5.30	4.00
1N3812B	MOT	8.34	6.95	5.25
1N3813	MOT	4.50	3.75	2.80
1N3813A	MOT	6.36	5.30	4.00
1N3813B	MOT	8.34	6.95	5.25
1N3815	MOT	5.70	4.75	3.55
1N3815A	MOT	7.74	6.45	4.85
1N3815B	MOT	10.00	8.35	6.30
1N3817	MOT	5.70	4.75	3.55
1N3817A	MOT	8.80	7.05	5.30
1N3817B	MOT	10.52	8.80	6.60
1N3818	MOT	5.70	4.75	3.55
1N3818A	MOT	8.80	7.05	5.30
1N3818B	MOT	10.52	8.80	6.60
1N3820	MOT	5.70	4.75	3.55
1N3820A	MOT	8.80	7.05	5.30
1N3820B	MOT	10.52	8.80	6.60
1N3821	IR	2.40	2.00	1.60
1N3821	MOT	2.52	2.10	1.60
1N3821A	IR	3.00	2.50	2.00
1N3821A	MOT	3.18	2.65	2.00
1N3822	IR	2.40	2.00	1.60
1N3822	MOT	2.52	2.10	1.60
1N3822A	IR	3.00	2.50	2.00
1N3822A	MOT	3.18	2.65	2.00
1N3823	IR	2.40	2.00	1.60
1N3823	MOT	2.52	2.10	1.60
1N3823A	IR	3.00	2.50	2.00
1N3823A	MOT	3.18	2.65	2.00
1N3824	IR	2.40	2.00	1.60
1N3824	MOT	2.52	2.10	1.60
1N3824A	IR	3.00	2.50	2.00
1N3824A	MOT	3.18	2.65	2.00
1N3825	IR	2.40	2.00	1.60
1N3825	MOT	2.52	2.10	1.60
1N3825A	IR	3.00	2.50	2.00
1N3825A	MOT	3.18	2.65	2.00
1N3826	IR	2.40	2.00	1.60
1N3826	MOT	2.52	2.10	1.60
1N3826A	IR	3.00	2.50	2.00
1N3826A	MOT	3.18	2.65	2.00
1N3827	IR	2.40	2.00	1.60
1N3827	MOT	2.52	2.10	1.60
1N3827A	IR	3.00	2.50	2.00
1N3827A	MOT	3.18	2.65	2.00
1N3828	IR	2.40	2.00	1.60
1N3828	MOT	2.52	2.10	1.60
1N3828A	IR	3.00	2.50	2.00
1N3828A	MOT	3.18	2.65	2.00
1N3829	IR	2.40	2.00	1.60
1N3829	MOT	2.52	2.10	1.60
1N3829A	IR	3.00	2.50	2.00
1N3829A	MOT	3.18	2.65	2.00
1N3830	MOT	2.52	2.10	1.60
1N3830A	MOT	3.18	2.65	2.00
1N3879	MOT	4.32	3.60	2.40
1N3880	MOT	4.68	3.90	2.60
1N3881	MOT	6.84	5.70	3.80
1N3882	MOT	9.72	8.10	5.40
1N3883	MOT	12.24	10.20	6.80
1N3889	MOT	5.04	4.20	2.80
1N3890	MOT	5.40	4.50	3.00
1N3891	MOT	7.56	6.30	4.20
1N3892	MOT	10.80	9.00	6.00
1N3893	MOT	14.04	11.70	7.80
1N3900	MOT	7.92	6.60	4.40
1N3901	MOT	10.62	8.85	5.90
1N3902	MOT	13.50	11.25	7.50
1N3903	MOT	17.64	14.70	9.80

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N3909	MOT	8.10	6.75	4.50
1N3910	MOT	9.00	7.50	5.00
1N3911	MOT	12.60	10.50	7.00
1N3912	MOT	16.50	13.80	9.20
1N3913	MOT	21.60	18.00	12.00
1N3987	IR	8.70	7.25	5.00
1N3988	IR	9.90	8.25	5.60
1N3989	IR	10.80	9.00	6.00
1N3990	IR	11.40	9.50	6.25
1N3993	MOT	6.78	5.65	4.25
1N3993A	MOT	9.24	7.70	5.80
1N3994	MOT	6.78	5.65	4.25
1N3994A	MOT	9.24	7.70	5.80
1N3995	MOT	6.78	5.65	4.25
1N3995A	MOT	9.24	7.70	5.80
1N3996	MOT	6.78	5.65	4.25
1N3996A	MOT	9.24	7.70	5.80
1N3997	MOT	6.78	5.65	4.25
1N3997A	MOT	9.24	7.70	5.80
1N3998	MOT	6.78	5.65	4.25
1N3998A	MOT	9.24	7.70	5.80
1N3999	MOT	6.78	5.65	4.25
1N3999A	MOT	9.24	7.70	5.80
1N4000	MOT	6.78	5.65	4.25
1N4000A	MOT	9.24	7.70	5.80

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-4999	5000-Up
1N4001	MOT	.46	.38	.25	.20	.16
1N4001	SYL	.54	.45	.30	.24	...
1N4002	MOT	.49	.41	.27	.22	.18
1N4002	SYL	.59	.49	.33	.26	...
1N4003	MOT	.54	.45	.30	.24	.19
1N4003	SYL	.72	.60	.40	.32	...
1N4004	MOT	.64	.53	.35	.28	.22
1N4004	SYL	.81	.67	.45	.36	...
1N4005	MOT	.72	.60	.40	.32	.25
1N4005	SYL	.90	.75	.50	.40	....
1N4006	MOT	.90	.75	.50	.40	.32
1N4007	MOT	1.00	.83	.55	.44	.35

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N4099	MOT	4.62	3.85	2.90
1N4100	MOT	4.62	3.85	2.90
1N4100	TI	6.06	5.05	3.80
1N4101	MOT	4.62	3.85	2.90
1N4102	MOT	4.62	3.85	2.90
1N4102	TI	6.06	5.05	3.80
1N4103	MOT	4.62	3.85	2.90
1N4104	MOT	4.62	3.85	2.90
1N4105	MOT	4.62	3.85	2.90
1N4106	MOT	4.62	3.85	2.90
1N4107	MOT	4.62	3.85	2.90
1N4109	MOT	4.62	3.85	2.90
1N4111	MOT	4.62	3.85	2.90
1N4112	MOT	4.62	3.85	2.90
1N4113	MOT	4.62	3.85	2.90
1N4114	MOT	4.62	3.85	2.90
1N4115	MOT	4.62	3.85	2.90
1N4117	MOT	4.62	3.85	2.90
1N4118	MOT	4.62	3.85	2.90
1N4119	MOT	4.62	3.85	2.90
1N4120	MOT	4.62	3.85	2.90
1N4123	MOT	6.06	5.05	3.80
1N4124	MOT	6.06	5.05	3.80
1N4125	MOT	6.06	5.05	3.80
1N4129	MOT	6.06	5.05	3.80
1N4131	MOT	6.06	5.05	3.80
1N4135	MOT	6.06	5.05	3.80

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
1N4148	SYL	.42	.35	.24	.14
1N4149	SYL	.54	.45	.30	.19
1N4151	SYL	.96	.80	.56	.32
1N4152	SYL	.78	.65	.44	.18
1N4154	SYL	.48	.40	.26	.15

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N4360	TI	1.26	1.05	.85
1N4370	MOT	2.40	2.00	1.50
1N4370	IR	1.20	1.00	.80
1N4370A	MOT	3.30	2.75	2.05
1N4371	IR	1.20	1.00	.80
1N4371	MOT	2.40	2.00	1.50
1N4371A	MOT	3.30	2.75	2.05
1N4372	MOT	2.40	2.00	1.50
1N4372	IR	1.20	1.00	.80
1N4372A	MOT	3.30	2.75	2.05
1N4372A	TI	1.26	1.05	.85
1N4383	SYL	.58	.48	.38
			1000-Up Ea.	.27
1N4384	SYL	.70	.58	.41
			1000-Up Ea.	.30
1N4385	SYL	.94	.78	.54
			1000-Up Ea.	.35
1N4387	MOT	50.40	42.00	28.00
1N4388	MOT	50.40	42.00	28.00
1N4436	VA	4.98	4.15	3.05
1N4436/S/F	VA	5.46	4.55	3.35
1N4436/T/F	VA	5.28	4.40	3.25
1N4437	VA	6.54	5.45	4.00
1N4437/S/F	VA	8.02	5.85	4.30
1N4437/T/F	VA	6.84	5.70	4.20
1N4438	VA	7.94	7.45	5.45
1N4438/S/F	VA	9.42	7.85	5.75
1N4438/T/F	VA	9.24	7.70	5.65
1N4441	VA	2.41	2.01	1.53

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N4446	SYL	.48	.40	.26
			1000-Up Ea.	.15
1N4447	SYL	.60	.50	.34
			1000-Up Ea.	.19
1N4448	SYL	.96	.80	.54
			1000-Up Ea.	.17
1N4449	SYL	.60	.50	.34
			1000-Up Ea.	.19
1N4454	SYL	.42	.35	.24
			1000-Up Ea.	.14
1N4549	MOT	7.26	6.05	4.55
1N4549A	MOT	9.60	8.00	6.00
1N4549B	MOT	13.80	11.50	8.65
1N4550	MOT	7.26	6.05	4.55
1N4550A	MOT	9.60	8.00	6.00
1N4550B	MOT	13.80	11.50	8.65
1N4551	MOT	7.26	6.05	4.55
1N4551A	MOT	9.60	8.00	6.00
1N4551B	MOT	13.80	11.50	8.65
1N4552	MOT	7.26	6.05	4.55
1N4552A	MOT	9.60	8.00	6.00
1N4552B	MOT	13.80	11.50	8.65
1N4553	MOT	7.26	6.05	4.55
1N4553A	MOT	9.60	8.00	6.00
1N4553B	MOT	13.80	11.50	8.65
1N4554	MOT	7.26	6.05	4.55
1N4554A	MOT	9.60	8.00	6.00
1N4554B	MOT	13.80	11.50	8.65
1N4557	MOT	7.26	6.05	4.55
1N4557A	MOT	9.60	8.00	6.00
1N4557B	MOT	13.80	11.50	8.65
1N4560	MOT	7.26	6.05	4.55
1N4560A	MOT	9.60	8.00	6.00
1N4560B	MOT	13.80	11.50	8.65
1N4562	MOT	7.26	6.05	4.55
1N4562A	MOT	9.60	8.00	6.00
1N4562B	MOT	13.80	11.50	8.65
1N4571	MOT	8.76	7.30	5.50
1N4571A	MOT	9.72	8.10	6.10
1N4572	MOT	15.90	13.25	9.95
1N4572A	MOT	17.70	14.75	11.10
1N4573	MOT	29.10	24.25	18.25
1N4573A	MOT	32.40	27.00	20.30
1N4574	MOT	67.80	56.50	42.50
1N4574A	MOT	75.78	63.15	47.50
1N4575	MOT	3.60	3.00	2.25
1N4575A	MOT	3.96	3.30	2.50
1N4576	MOT	4.38	3.65	2.75
1N4576A	MOT	4.86	4.05	3.05
1N4577	MOT	7.92	6.60	4.95
1N4577A	MOT	8.76	7.30	5.50
1N4578	MOT	14.58	12.15	9.15
1N4578A	MOT	16.20	13.50	10.15
1N4579	MOT	33.90	28.25	21.25
1N4579A	MOT	37.68	31.40	23.60
1N4580	MOT	3.60	3.00	2.25
1N4580A	MOT	3.96	3.30	2.50
1N4581	MOT	4.38	3.65	2.75
1N4581A	MOT	4.86	4.05	3.05
1N4582	MOT	7.92	6.60	4.95
1N4582A	MOT	8.76	7.30	5.50
1N4583	MOT	14.58	12.15	9.15
1N4583A	MOT	16.20	13.50	10.15
1N4584	MOT	33.90	28.25	21.25
1N4584A	MOT	37.68	31.40	23.60
1N4585	SYL	1.44	1.20	.80
			1000-Up Ea.	.65
1N4586	SYL	3.24	2.70	1.80
			1000-Up Ea.	1.62

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
1N4719	MOT	.79	.66	.44	.42
1N4720	MOT	.88	.73	.49	.46
1N4721	MOT	.99	.82	.55	.52
1N4722	MOT	1.35	1.12	.75	.71
1N4723	MOT	1.80	1.50	1.00	.95
1N4724	MOT	2.70	2.25	1.50	1.40
1N4725	MOT	4.02	3.35	2.25	2.15

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N4728	IR	1.50	1.25	.93
1N4728	MOT	1.51	1.26	.95
1N4728A	IR	2.28	1.90	1.40
1N4728A	MOT	2.32	1.93	1.45
1N4729	IR	1.50	1.25	.93
1N4729	MOT	1.51	1.26	.95
1N4729A	IR	2.28	1.90	1.40
1N4729A	MOT	2.32	1.93	1.45
1N4730	IR	1.50	1.25	.93
1N4730	MOT	1.51	1.26	.95
1N4730A	IR	2.28	1.90	1.40
1N4730A	MOT	2.32	1.93	1.45
1N4731	IR	1.50	1.25	.93
1N4731	MOT	1.51	1.26	.95
1N4731A	IR	2.28	1.90	1.40
1N4731A	MOT	2.32	1.93	1.45
1N4732	IR	1.50	1.25	.93
1N4732	MOT	1.51	1.26	.95
1N4732A	IR	2.28	1.90	1.40
1N4732A	MOT	2.32	1.93	1.45
1N4733	IR	1.50	1.25	.93
1N4733	MOT	1.51	1.26	.95
1N4733A	IR	2.28	1.90	1.40
1N4733A	MOT	2.32	1.93	1.45
1N4734	IR	1.50	1.25	.93
1N4734	MOT	1.51	1.26	.95
1N4734A	IR	2.28	1.90	1.40
1N4734A	MOT	2.32	1.93	1.45
1N4735	IR	1.50	1.25	.93
1N4735	MOT	1.51	1.26	.95

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N4735A	IR	2.28	1.90	1.40
1N4735A	MOT	2.32	1.93	1.45
1N4736	IR	1.50	1.25	.93
1N4736	MOT	1.51	1.26	.95
1N4736A	IR	2.28	1.90	1.40
1N4736A	MOT	2.32	1.93	1.45
1N4737	IR	1.50	1.25	.93
1N4737	MOT	1.51	1.26	.95
1N4737A	IR	2.28	1.90	1.40
1N4737A	MOT	2.32	1.93	1.45
1N4738	IR	1.50	1.25	.93
1N4738	MOT	1.51	1.26	.95
1N4738A	IR	2.28	1.90	1.40
1N4738A	MOT	2.32	1.93	1.45
1N4739	IR	1.50	1.25	.93
1N4739	MOT	1.51	1.26	.95
1N4739A	IR	2.28	1.90	1.40
1N4739A	MOT	2.32	1.93	1.45
1N4740	IR	1.50	1.25	.93
1N4740	MOT	1.51	1.26	.95
1N4740A	IR	2.28	1.90	1.40
1N4740A	MOT	2.32	1.93	1.45
1N4741	IR	1.50	1.25	.93
1N4741	MOT	1.51	1.26	.95
1N4741A	IR	2.28	1.90	1.40
1N4741A	MOT	2.32	1.93	1.45
1N4742	IR	1.50	1.25	.93
1N4742	MOT	1.51	1.26	.95
1N4742A	IR	2.28	1.90	1.40
1N4742A	MOT	2.32	1.93	1.45
1N4743	IR	1.50	1.25	.93
1N4743	MOT	1.51	1.26	.95
1N4743A	IR	2.28	1.90	1.40
1N4743A	MOT	2.32	1.93	1.45
1N4744	IR	1.50	1.25	.93
1N4744	MOT	1.51	1.26	.95
1N4744A	IR	2.28	1.90	1.40
1N4744A	MOT	2.32	1.93	1.45
1N4745	IR	1.50	1.25	.93
1N4745	MOT	1.51	1.26	.95
1N4745A	IR	2.28	1.90	1.40
1N4745A	MOT	2.32	1.93	1.45
1N4746	IR	1.50	1.25	.93
1N4746	MOT	1.51	1.26	.95
1N4746A	IR	2.28	1.90	1.40
1N4746A	MOT	2.32	1.93	1.45
1N4747	IR	1.50	1.25	.93
1N4747	MOT	1.51	1.26	.95
1N4747A	IR	2.28	1.90	1.40
1N4747A	MOT	2.32	1.93	1.45
1N4748	IR	1.50	1.25	.93
1N4748	MOT	1.51	1.26	.95
1N4748A	IR	2.28	1.90	1.40
1N4748A	MOT	2.32	1.93	1.45
1N4749	IR	1.50	1.25	.93
1N4749	MOT	1.51	1.26	.95
1N4749A	IR	2.28	1.90	1.40
1N4749A	MOT	2.32	1.93	1.45
1N4750	IR	1.50	1.25	.93
1N4750	MOT	1.51	1.26	.95
1N4750A	IR	2.28	1.90	1.40
1N4750A	MOT	2.32	1.93	1.45
1N4751	IR	1.50	1.25	.93
1N4751	MOT	1.51	1.26	.95
1N4751A	IR	2.28	1.90	1.40
1N4751A	MOT	2.32	1.93	1.45
1N4752	IR	1.50	1.25	.93
1N4752	MOT	1.51	1.26	.95
1N4752A	IR	2.28	1.90	1.40
1N4752A	MOT	2.32	1.93	1.45
1N4753	IR	1.50	1.25	.93
1N4753	MOT	1.51	1.26	.95
1N4753A	IR	2.28	1.90	1.40
1N4753A	MOT	2.32	1.93	1.45
1N4754	IR	1.50	1.25	.93
1N4754	MOT	1.51	1.26	.95
1N4754A	IR	2.28	1.90	1.40
1N4754A	MOT	2.32	1.93	1.45
1N4755	IR	1.50	1.25	.93
1N4755	MOT	1.51	1.26	.95
1N4755A	IR	2.28	1.90	1.40
1N4755A	MOT	2.32	1.93	1.45
1N4756	IR	1.50	1.25	.93
1N4756	MOT	1.51	1.26	.95
1N4756A	IR	2.28	1.90	1.40
1N4756A	MOT	2.32	1.93	1.45
1N4757	IR	1.50	1.25	.93
1N4757	MOT	1.51	1.26	.95
1N4757A	IR	2.28	1.90	1.40
1N4757A	MOT	2.32	1.93	1.45
1N4758	IR	1.50	1.25	.93
1N4758	MOT	1.51	1.26	.95
1N4758A	MOT	2.32	1.93	1.45
1N4759	IR	1.50	1.25	.93
1N4759	MOT	1.51	1.26	.95
1N4759A	MOT	2.32	1.93	1.45
1N4760	IR	1.50	1.25	.93
1N4760	MOT	1.51	1.26	.95
1N4760A	MOT	2.32	1.93	1.45
1N4761	IR	1.50	1.25	.93
1N4761	MOT	1.51	1.26	.95
1N4761A	MOT	2.32	1.93	1.45
1N4762	IR	1.50	1.25	.93
1N4762	MOT	1.51	1.26	.95
1N4762A	MOT	2.32	1.93	1.45
1N4763	IR	1.50	1.25	.93
1N4763	MOT	1.51	1.26	.95
1N4763A	MOT	2.32	1.93	1.45
1N4764	IR	1.50	1.25	.93
1N4764	MOT	1.51	1.26	.95

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them. On Zener Diodes, we ship the better tolerance device at the same price at our discretion.

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N4764A	MOT	2.32	1.93	1.45
1N4770	MOT	7.02	5.85	4.40
1N4776A	MOT	14.04	14.04	8.80
1N4785	RCA	1.30	1.08	.78
			1000-Up Ea.	.65
1N4816	IR	.29	.24	.20
1N4817	IR	.34	.28	.24
1N4818	IR	.39	.32	.28
1N4819	IR	.45	.37	.32
1N4820	IR	.49	.41	.35
1N4821	IR	.54	.45	.38
1N4822	IR	.60	.50	.44
1N4896	MOT	21.84	18.20	13.70
1N4896A	MOT	24.12	20.10	15.10
1N4897	MOT	25.08	20.90	15.70
1N4897A	MOT	28.08	23.40	17.60
1N4898	MOT	51.36	42.80	32.20
1N4898A	MOT	57.12	47.60	35.80
1N4899	MOT	88.92	74.10	55.70
1N4899A	MOT	98.94	82.45	62.00
1N4900	MOT	12.60	10.50	7.90
1N4900A	MOT	14.04	11.70	8.80
1N4901	MOT	15.78	13.15	9.90
1N4901A	MOT	17.58	14.65	11.00
1N4902	MOT	28.56	23.80	17.90
1N4902A	MOT	31.92	26.60	20.00
1N4903	MOT	52.50	43.75	32.90
1N4903A	MOT	58.38	48.65	36.60
1N4904	MOT	6.48	5.40	4.05
1N4904A	MOT	7.20	6.00	4.50
1N4905	MOT	7.92	6.60	4.95
1N4905A	MOT	8.64	7.20	5.41
1N4906	MOT	14.22	11.85	8.92
1N4906A	MOT	15.78	13.15	9.90
1N4907	MOT	26.22	21.85	16.45
1N4907A	MOT	29.22	24.35	18.30
1N4908	MOT	6.48	5.40	4.05
1N4908A	MOT	7.20	6.00	4.50
1N4909	MOT	7.92	6.60	4.95
1N4909A	MOT	8.64	7.20	5.40
1N4910	MOT	14.22	11.85	8.90
1N4910A	MOT	15.78	13.15	9.90
1N4911	MOT	23.70	19.75	14.85
1N4911A	MOT	26.40	22.00	16.55
1N4912	MOT	7.20	6.00	4.50
1N4912A	MOT	12.18	10.15	7.65
1N4913	MOT	8.64	7.20	5.40
1N4913A	MOT	15.78	13.15	9.90
1N4914	MOT	15.78	13.15	9.90
1N4914A	MOT	24.24	20.20	15.20
1N4915	MOT	26.34	21.95	16.50
1N4915A	MOT	35.28	29.40	22.10
1N4916	MOT	24.90	20.75	15.60
1N4916A	MOT	27.90	23.25	17.50
1N4917	MOT	33.66	28.05	21.10
1N4917A	MOT	37.50	31.25	23.50
1N4918	MOT	68.64	57.20	43.00
1N4918A	MOT	76.14	63.45	47.70
1N4919	MOT	16.86	14.05	10.55
1N4919A	MOT	18.72	15.60	11.75
1N4920	MOT	21.06	17.55	13.20
1N4920A	MOT	23.28	19.40	14.60
1N4921	MOT	38.16	31.80	23.90
1N4921A	MOT	42.42	35.35	26.60
1N4922	MOT	8.64	7.20	5.40
1N4922A	MOT	9.60	8.00	6.00
1N4923	MOT	10.50	8.75	6.60
1N4923A	MOT	11.46	9.55	7.20
1N4924	MOT	18.96	15.80	11.90
1N4924A	MOT	21.06	17.55	13.20
1N4925	MOT	8.64	7.20	5.40
1N4925A	MOT	9.60	8.00	6.00
1N4926	MOT	10.50	8.75	6.60
1N4926A	MOT	11.46	9.55	7.20
1N4927	MOT	18.96	15.80	11.90
1N4927A	MOT	21.06	17.55	13.20
1N4928	MOT	31.62	26.35	19.80
1N4928A	MOT	35.28	29.40	22.10
1N4929	MOT	9.72	8.10	6.10
1N4929A	MOT	16.50	13.75	10.35
1N4930	MOT	11.64	9.70	7.30
1N4930A	MOT	21.36	17.80	13.40
1N4931	MOT	21.36	17.80	13.40
1N4931A	MOT	32.22	26.85	20.20
1N4932	MOT	35.28	29.40	22.10
1N4932A	MOT	46.92	39.10	29.40
1N4933	MOT	1.35	1.12	.75
1N4934	MOT	1.71	1.42	.95
1N4935	MOT	1.98	1.65	1.10
1N4936	MOT	2.94	2.45	1.65
1N4937	MOT	4.68	3.90	2.60
1N4997	MOT	.79	.66	.44
			1000-Up Ea.	.42
1N4998	MOT	.88	.73	.49
			1000-Up Ea.	.46
1N4999	MOT	.95	.82	.55
			1000-Up Ea.	.52
1N5000	MOT	1.35	1.12	.75
			1000-Up Ea.	.71
1N5001	MOT	1.80	1.50	1.00
			1000-Up Ea.	.95
1N5002	MOT	2.70	2.25	1.50
			1000-Up Ea.	1.40
1N5003	MOT	4.02	3.35	2.25
			1000-Up Ea.	2.15
1N5052	IR	.84	.70	.62
1N5053	IR	1.02	.85	.75
1N5054	IR	1.44	1.20	1.02

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
1N5211	RCA	.46	.38	.28	.23
1N5212	RCA	.51	.42	.30	.25
1N5213	RCA	.67	.56	.41	.34
1N5214	RCA	.97	.81	.59	.49
1N5215	RCA	.51	.42	.30	.25
1N5216	RCA	.54	.45	.33	.27
1N5217	RCA	.72	.60	.44	.36
1N5218	RCA	1.02	.85	.62	.51

Motorola Type No.	EACH 1-9	10-24	25-99	100-249	250-499	500-999
1N5221	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5221A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5221B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5222	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5222A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5222B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5223	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5223A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5223B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5224	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5224A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5224B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5225	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5225A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5225B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5226	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5226A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5226B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5227	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5227A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5227B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5228	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5228A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5228B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5229	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5229A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5229B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5230	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5230A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5230B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5231	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5231A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5231B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59

Motorola Type No.	EACH 1-9	10-24	25-99	100-249	250-499	500-999
1N5232	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5232A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5232B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5233	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5233A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5233B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5234	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5234A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5234B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5235	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5235A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5235B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5236	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5236A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5236B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5237	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5237A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5237B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5238	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5238A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5238B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5239	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5239A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5239B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5240	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5240A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5240B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5241	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5241A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5241B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5242	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5242A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5242B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5243	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5243A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5243B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5244	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5244A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5244B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5245	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5245A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5245B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5246	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5246A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5246B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5247	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5247A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5247B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5248	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5248A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5248B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5249	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5249A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5249B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59

Motorola Type No.	EACH 1-9	10-24	25-99	100-249	250-499	500-999
1N5250	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5250A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5250B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5251	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5251A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5251B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5252	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5252A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5252B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5253	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5253A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5253B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5254	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5254A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5254B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5255	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5255A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5255B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5256	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5256A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5256B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5257	.80	.67	.60	.45	.43	.40
				1000-Up Ea.		.38
1N5257A	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5257B	1.26	1.05	.93	.70	.66	.63
				1000-Up Ea.		.59
1N5258	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5258A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5258B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5259	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5259A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5259B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5260	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5260A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5260B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5261	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5261A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5261B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5262	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5262A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5262B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5263	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5263A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5263B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5264	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5264A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5264B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5265	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5265A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5265B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5266	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5266A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5266B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5267	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5267A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5267B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5268	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5268A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5268B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72

Motorola Type No.	EACH 1-9	10-24	25-99	100-249	250-499	500-999
1N5269	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5269A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5269B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5270	1.09	.90	.80	.60	.57	.54
				1000-Up Ea.		.51
1N5270A	1.34	1.12	1.00	.75	.71	.67
				1000-Up Ea.		.64
1N5270B	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5271	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5271A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5271B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5272	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5272A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5272B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5273	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5273A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5273B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5274	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5274A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5274B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5275	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5275A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5275B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5276	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5276A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5276B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5277	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5277A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5277B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5278	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5278A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5278B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5279	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5279A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5279B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5280	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5280A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5280B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95
1N5281	1.52	1.27	1.13	.85	.81	.76
				1000-Up Ea.		.72
1N5281A	1.80	1.50	1.33	1.00	.95	.90
				1000-Up Ea.		.85
1N5281B	1.98	1.65	1.46	1.10	1.04	.99
				1000-Up Ea.		.95

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1N5283	MOT	5.34	4.45	3.90	2.95
1N5284	MOT	5.34	4.45	3.90	2.95
1N5285	MOT	5.34	4.45	3.90	2.95
1N5286	MOT	5.34	4.45	3.90	2.95
1N5287	MOT	5.34	4.45	3.90	2.95
1N5288	MOT	5.34	4.45	3.90	2.95
1N5289	MOT	5.34	4.45	3.90	2.95
1N5290	MOT	5.34	4.45	3.90	2.95
1N5291	MOT	5.34	4.45	3.90	2.95
1N5292	MOT	5.34	4.45	3.90	2.95
1N5293	MOT	5.34	4.45	3.90	2.95
1N5294	MOT	5.34	4.45	3.90	2.95
1N5295	MOT	5.34	4.45	3.90	2.95
1N5296	MOT	5.34	4.45	3.90	2.95
1N5297	MOT	5.34	4.45	3.90	2.95
1N5298	MOT	5.34	4.45	3.90	2.95
1N5299	MOT	5.34	4.45	3.90	2.95
1N5300	MOT	5.34	4.45	3.90	2.95
1N5301	MOT	5.34	4.45	3.90	2.95
1N5302	MOT	5.34	4.45	3.90	2.95
1N5303	MOT	5.34	4.45	3.90	2.95
1N5304	MOT	5.34	4.45	3.90	2.95
1N5305	MOT	5.34	4.45	3.90	2.95
1N5306	MOT	5.34	4.45	3.90	2.95
1N5307	MOT	5.34	4.45	3.90	2.95
1N5308	MOT	5.34	4.45	3.90	2.95
1N5309	MOT	5.34	4.45	3.90	2.95
1N5310	MOT	5.34	4.45	3.90	2.95
1N5311	MOT	5.34	4.45	3.90	2.95
1N5312	MOT	5.34	4.45	3.90	2.95
1N5313	MOT	5.34	4.45	3.90	2.95
1N5314	MOT	5.34	4.45	3.90	2.95

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N5333A	IR	2.64	2.20	1.55
1N5333A	MOT	2.64	2.20	1.65
1N5333B	IR	2.82	2.35	1.75
1N5333B	MOT	2.94	2.45	1.85
1N5334A	IR	2.64	2.20	1.55
1N5334A	MOT	2.64	2.20	1.65
1N5334B	IR	2.82	2.35	1.75
1N5334B	MOT	2.94	2.45	1.85
1N5335A	IR	2.64	2.20	1.55
1N5335A	MOT	2.64	2.20	1.65
1N5335B	IR	2.82	2.35	1.75
1N5335B	MOT	2.94	2.45	1.85
1N5336A	IR	2.64	2.20	1.55
1N5336A	MOT	2.64	2.20	1.65
1N5336B	IR	2.82	2.35	1.75
1N5336B	MOT	2.94	2.45	1.85
1N5337A	IR	2.64	2.20	1.55
1N5337A	MOT	2.64	2.20	1.65
1N5337B	IR	2.82	2.35	1.75
1N5337B	MOT	2.94	2.45	1.85
1N5338A	IR	2.64	2.20	1.55
1N5338A	MOT	2.64	2.20	1.65
1N5338B	IR	2.82	2.35	1.75
1N5338B	MOT	2.94	2.45	1.85
1N5339A	IR	2.64	2.20	1.55
1N5339A	MOT	2.64	2.20	1.65
1N5339B	IR	2.82	2.35	1.75
1N5339B	MOT	2.94	2.45	1.85
1N5340A	IR	2.64	2.20	1.55
1N5340A	MOT	2.64	2.20	1.65
1N5340B	IR	2.82	2.35	1.75
1N5340B	MOT	2.94	2.45	1.85
1N5341A	IR	2.64	2.20	1.55
1N5341A	MOT	2.64	2.20	1.65
1N5341B	IR	2.82	2.35	1.75
1N5341B	MOT	2.94	2.45	1.85
1N5342A	IR	2.64	2.20	1.55
1N5342A	MOT	2.64	2.20	1.65
1N5342B	IR	2.82	2.35	1.75
1N5342B	MOT	2.94	2.45	1.85
1N5343A	IR	2.64	2.20	1.55
1N5343A	MOT	2.64	2.20	1.65
1N5343B	IR	2.82	2.35	1.75
1N5343B	MOT	2.94	2.45	1.85
1N5344A	IR	2.64	2.20	1.55
1N5344A	MOT	2.64	2.20	1.65
1N5344B	IR	2.82	2.35	1.75
1N5344B	MOT	2.94	2.45	1.85
1N5345A	IR	2.64	2.20	1.55
1N5345A	MOT	2.64	2.20	1.65
1N5345B	IR	2.82	2.35	1.75
1N5345B	MOT	2.94	2.45	1.85
1N5346A	IR	2.64	2.20	1.55
1N5346A	MOT	2.64	2.20	1.65
1N5346B	IR	2.82	2.35	1.75
1N5346B	MOT	2.94	2.45	1.85
1N5347A	IR	2.64	2.20	1.55
1N5347A	MOT	2.64	2.20	1.65
1N5347B	IR	2.82	2.35	1.75
1N5347B	MOT	2.94	2.45	1.85
1N5348A	IR	2.64	2.20	1.55
1N5348A	MOT	2.64	2.20	1.65
1N5348B	IR	2.82	2.35	1.75
1N5348B	MOT	2.94	2.45	1.85
1N5349A	IR	2.64	2.20	1.55
1N5349A	MOT	2.64	2.20	1.65
1N5349B	IR	2.82	2.35	1.75
1N5349B	MOT	2.94	2.45	1.85
1N5350A	IR	2.64	2.20	1.55
1N5350A	MOT	2.64	2.20	1.65
1N5350B	IR	2.82	2.35	1.75
1N5350B	MOT	2.94	2.45	1.85
1N5351A	IR	2.64	2.20	1.55
1N5351A	MOT	2.64	2.20	1.65
1N5351B	IR	2.82	2.35	1.75
1N5351B	MOT	2.94	2.45	1.85
1N5352A	IR	2.64	2.20	1.55
1N5352A	MOT	2.64	2.20	1.65
1N5352B	IR	2.82	2.35	1.75
1N5352B	MOT	2.94	2.45	1.85
1N5353A	IR	2.64	2.20	1.55
1N5353A	MOT	2.64	2.20	1.65
1N5353B	IR	2.82	2.35	1.75
1N5353B	MOT	2.94	2.45	1.85
1N5354A	IR	2.64	2.20	1.55
1N5354A	MOT	2.64	2.20	1.65
1N5354B	IR	2.82	2.35	1.75
1N5354B	MOT	2.94	2.45	1.85
1N5355A	IR	2.64	2.20	1.55
1N5355A	MOT	2.64	2.20	1.65
1N5355B	IR	2.82	2.35	1.75
1N5355B	MOT	2.94	2.45	1.85
1N5356A	IR	2.64	2.20	1.55
1N5356A	MOT	2.64	2.20	1.65
1N5356B	IR	2.82	2.35	1.75
1N5356B	MOT	2.94	2.45	1.85
1N5357A	IR	2.64	2.20	1.55
1N5357A	MOT	2.64	2.20	1.65
1N5357B	IR	2.82	2.35	1.75
1N5357B	MOT	2.94	2.45	1.85
1N5358A	IR	2.64	2.20	1.55
1N5358A	MOT	2.64	2.20	1.65
1N5358B	IR	2.82	2.35	1.75
1N5358B	MOT	2.94	2.45	1.85
1N5359A	IR	2.64	2.20	1.55
1N5359A	MOT	2.64	2.20	1.65
1N5359B	IR	2.82	2.35	1.75
1N5359B	MOT	2.94	2.45	1.85
1N5360A	IR	2.64	2.20	1.55
1N5360A	MOT	2.64	2.20	1.65

SEE PAGE 7 FOR INTEGRATED CIRCUITS

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them. On Zener Diodes, we ship the better tolerance device at the same price at our discretion.

Type No.	Mfr.	EACH 1-9	10-99	100-Up
1N5360B	IR	2.82	2.35	1.75
1N5360B	MOT	2.94	2.45	1.85
1N5361A	IR	2.64	2.20	1.55
1N5361A	MOT	2.64	2.20	1.65
1N5361B	IR	2.82	2.35	1.75
1N5361B	MOT	2.94	2.45	1.85
1N5362A	IR	2.64	2.20	1.55
1N5362A	MOT	2.64	2.20	1.65
1N5362B	IR	2.82	2.35	1.75
1N5362B	MOT	2.94	2.45	1.85
1N5363A	IR	2.64	2.20	1.55
1N5363A	MOT	2.64	2.20	1.65
1N5363B	IR	2.82	2.35	1.75
1N5363B	MOT	2.94	2.45	1.85
1N5364A	IR	2.64	2.20	1.55
1N5364A	MOT	2.64	2.20	1.65
1N5364B	IR	2.82	2.35	1.75
1N5364B	MOT	2.94	2.45	1.85
1N5365A	IR	2.64	2.20	1.55
1N5365A	MOT	2.64	2.20	1.65
1N5365B	IR	2.82	2.35	1.75
1N5365B	MOT	2.94	2.45	1.85
1N5366A	IR	2.64	2.20	1.55
1N5366A	MOT	2.64	2.20	1.65
1N5366B	IR	2.82	2.35	1.75
1N5366B	MOT	2.94	2.45	1.85
1N5367A	IR	2.64	2.20	1.55
1N5367A	MOT	2.64	2.20	1.65
1N5367B	IR	2.82	2.35	1.75
1N5367B	MOT	2.94	2.45	1.85
1N5368A	IR	2.64	2.20	1.55
1N5368A	MOT	2.64	2.20	1.65
1N5368B	IR	2.82	2.35	1.75
1N5368B	MOT	2.94	2.45	1.85
1N5369A	IR	2.64	2.20	1.55
1N5369A	MOT	2.64	2.20	1.65
1N5369B	IR	2.82	2.35	1.75
1N5369B	MOT	2.94	2.45	1.85
1N5370A	IR	2.64	2.20	1.55
1N5370A	MOT	2.64	2.20	1.65
1N5370B	IR	2.82	2.35	1.75
1N5370B	MOT	2.94	2.45	1.85
1N5371A	IR	2.64	2.20	1.55
1N5371A	MOT	2.64	2.20	1.65
1N5371B	IR	2.82	2.35	1.75
1N5371B	MOT	2.94	2.45	1.85
1N5372A	IR	2.64	2.20	1.55
1N5372A	MOT	2.64	2.20	1.65
1N5372B	IR	2.82	2.35	1.75
1N5372B	MOT	2.94	2.45	1.85
1N5373A	IR	2.64	2.20	1.55
1N5373A	MOT	2.64	2.20	1.65
1N5373B	IR	2.82	2.35	1.75
1N5373B	MOT	2.94	2.45	1.85
1N5374A	IR	2.64	2.20	1.55
1N5374A	MOT	2.64	2.20	1.65
1N5374B	IR	2.82	2.35	1.75
1N5374B	MOT	2.94	2.45	1.85
1N5375A	IR	2.64	2.20	1.55
1N5375A	MOT	2.64	2.20	1.65
1N5375B	IR	2.82	2.35	1.75
1N5375B	MOT	2.94	2.45	1.85
1N5376A	IR	2.64	2.20	1.55
1N5376A	MOT	2.64	2.20	1.65
1N5376B	IR	2.82	2.35	1.75
1N5376B	MOT	2.94	2.45	1.85
1N5377A	IR	2.64	2.20	1.55
1N5377A	MOT	2.64	2.20	1.65
1N5377B	IR	2.82	2.35	1.75
1N5377B	MOT	2.94	2.45	1.85
1N5378A	IR	2.64	2.20	1.55
1N5378A	MOT	2.64	2.20	1.65
1N5378B	IR	2.82	2.35	1.75
1N5378B	MOT	2.94	2.45	1.85
1N5379A	MOT	3.12	2.60	1.95
1N5379B	MOT	3.42	2.85	2.15
1N5380A	MOT	3.12	2.60	1.95
1N5380B	MOT	3.42	2.85	2.15
1N5381A	MOT	3.12	2.60	1.95
1N5381B	MOT	3.42	2.85	2.15
1N5382A	MOT	3.12	2.60	1.95
1N5382B	MOT	3.42	2.85	2.15
1N5383A	MOT	3.12	2.60	1.95
1N5383B	MOT	3.42	2.85	2.15
1N5384A	MOT	3.12	2.60	1.95
1N5384B	MOT	3.42	2.85	2.15
1N5385A	MOT	3.12	2.60	1.95
1N5385B	MOT	3.42	2.85	2.15
1N5386A	MOT	3.12	2.60	1.95
1N5386B	MOT	3.42	2.85	2.15
1N5387A	MOT	3.12	2.60	1.95
1N5387B	MOT	3.42	2.85	2.15
1N5388A	MOT	3.12	2.60	1.95
1N5388B	MOT	3.42	2.85	2.15
1N5411	RCA	.73	.61	.44
			1000-Up Ea.	.37
1N5441A	MOT	4.50	3.75	2.50
1N5441B	MOT	5.40	4.50	3.00
1N5441C	MOT	6.84	5.70	3.80
1N5442A	MOT	4.50	3.75	2.50
1N5442B	MOT	5.40	4.50	3.00
1N5442C	MOT	6.84	5.70	3.80
1N5443A	MOT	4.50	3.75	2.50
1N5443B	MOT	5.40	4.50	3.00
1N5443C	MOT	6.84	5.70	3.80
1N5444A	MOT	4.50	3.75	2.50
1N5444B	MOT	5.40	4.50	3.00
1N5444C	MOT	6.84	5.70	3.80
1N5445A	MOT	4.50	3.75	2.50
1N5445B	MOT	5.40	4.50	3.00
1N5445C	MOT	6.84	5.70	3.80
1N5446A	MOT	4.50	3.75	2.50
1N5446B	MOT	5.40	4.50	3.00
1N5446C	MOT	6.84	5.70	3.80
1N5447A	MOT	4.50	3.75	2.50
1N5447B	MOT	5.40	4.50	3.00
1N5447C	MOT	6.84	5.70	3.80
1N5448A	MOT	4.50	3.75	2.50
1N5448B	MOT	5.40	4.50	3.00
1N5448C	MOT	6.84	5.70	3.80
1N5449A	MOT	4.50	3.75	2.50
1N5449B	MOT	5.40	4.50	3.00
1N5449C	MOT	6.84	5.70	3.80
1N5450A	MOT	4.50	3.75	2.50
1N5450B	MOT	5.40	4.50	3.00
1N5450C	MOT	6.84	5.70	3.80
1N5451A	MOT	4.50	3.75	2.50
1N5451B	MOT	5.40	4.50	3.00
1N5451C	MOT	6.84	5.70	3.80
1N5452A	MOT	4.50	3.75	2.50
1N5452B	MOT	5.40	4.50	3.00
1N5452C	MOT	6.84	5.70	3.80
1N5453A	MOT	4.50	3.75	2.50
1N5453B	MOT	5.40	4.50	3.00
1N5453C	MOT	6.84	5.70	3.80
1N5454A	MOT	4.50	3.75	2.50
1N5454B	MOT	5.40	4.50	3.00
1N5454C	MOT	6.84	5.70	3.80
1N5455A	MOT	4.50	3.75	2.50
1N5455B	MOT	5.40	4.50	3.00
1N5455C	MOT	6.84	5.70	3.80
1N5456A	MOT	4.50	3.75	2.50
1N5456B	MOT	5.40	4.50	3.00
1N5456C	MOT	6.84	5.70	3.80
1N5461A	MOT	8.10	6.75	4.50
1N5461B	MOT	10.44	8.70	5.80
1N5461C	MOT	14.40	12.00	8.00
1N5462A	MOT	8.10	6.75	4.50
1N5462B	MOT	10.44	8.70	5.80
1N5462C	MOT	14.40	12.00	8.00
1N5463A	MOT	8.10	6.75	4.50
1N5463B	MOT	10.44	8.70	5.80
1N5463C	MOT	14.40	12.00	8.00
1N5464A	MOT	8.10	6.75	4.50
1N5464B	MOT	10.44	8.70	5.80
1N5464C	MOT	14.40	12.00	8.00
1N5465A	MOT	8.10	6.75	4.50
1N5465B	MOT	10.44	8.70	5.80
1N5465C	MOT	14.40	12.00	8.00
1N5466A	MOT	8.10	6.75	4.50
1N5466B	MOT	10.44	8.70	5.80
1N5466C	MOT	14.40	12.00	8.00
1N5467A	MOT	8.10	6.75	4.50
1N5467B	MOT	10.44	8.70	5.80
1N5467C	MOT	14.40	12.00	8.00
1N5468A	MOT	8.10	6.75	4.50
1N5468B	MOT	10.44	8.70	5.80
1N5468C	MOT	14.40	12.00	8.00
1N5469A	MOT	8.10	6.75	4.50
1N5469B	MOT	10.44	8.70	5.80
1N5469C	MOT	14.40	12.00	8.00
1N5470A	MOT	8.10	6.75	4.50
1N5470B	MOT	10.44	8.70	5.80
1N5470C	MOT	14.40	12.00	8.00
1N5471A	MOT	8.10	6.75	4.50
1N5471B	MOT	10.44	8.70	5.80
1N5471C	MOT	14.40	12.00	8.00
1N5472A	MOT	8.10	6.75	4.50
1N5472B	MOT	10.44	8.70	5.80
1N5472C	MOT	14.40	12.00	8.00
1N5473A	MOT	8.10	6.75	4.50
1N5473B	MOT	10.44	8.70	5.80
1N5473C	MOT	14.40	12.00	8.00
1N5474A	MOT	8.10	6.75	4.50
1N5474B	MOT	10.44	8.70	5.80
1N5474C	MOT	14.40	12.00	8.00
1N5475A	MOT	8.10	6.75	4.50
1N5475B	MOT	10.44	8.70	5.80
1N5475C	MOT	14.40	12.00	8.00
1N5476A	MOT	8.10	6.75	4.50
1N5476B	MOT	10.44	8.70	5.80
1N5476C	MOT	14.40	12.00	8.00
1N5476C	MOT	14.40	12.00	8.00
1N5518	MOT	3.68	2.95	2.25
1N5518A	MOT	5.25	4.20	3.15
1N5519	MOT	3.68	2.95	2.25
1N5519A	MOT	5.25	4.20	3.15
1N5520	MOT	3.68	2.95	2.25
1N5520A	MOT	5.25	4.20	3.15
1N5521	MOT	3.68	2.95	2.25
1N5521A	MOT	5.25	4.20	3.15
1N5522	MOT	3.68	2.95	2.25
1N5522A	MOT	5.25	4.20	3.15
1N5523	MOT	3.68	2.95	2.25
1N5523A	MOT	5.25	4.20	3.15
1N5524	MOT	3.68	2.95	2.25
1N5524A	MOT	5.25	4.20	3.15
1N5525	MOT	3.68	2.95	2.25
1N5525A	MOT	5.25	4.20	3.15
1N5526	MOT	3.68	2.95	2.25
1N5526A	MOT	5.25	4.20	3.15
1N5527	MOT	3.68	2.95	2.25
1N5527A	MOT	5.25	4.20	3.15
1N5528	MOT	3.68	2.95	2.25
1N5528A	MOT	5.25	4.20	3.15
1N5529	MOT	3.68	2.95	2.25
1N5529A	MOT	5.25	4.20	3.15
1N5530	MOT	3.68	2.95	2.25
1N5530A	MOT	5.25	4.20	3.15
1N5531	MOT	3.68	2.95	2.25
1N5531A	MOT	5.25	4.20	3.15
1N5532	MOT	3.68	2.95	2.25
1N5532A	MOT	5.25	4.20	3.15
1N5533	MOT	3.68	2.95	2.25
1N5533A	MOT	5.25	4.20	3.15
1N5534	MOT	3.68	2.95	2.25
1N5534A	MOT	5.25	4.20	3.15
1N5535	MOT	3.68	2.95	2.25
1N5535A	MOT	5.25	4.20	3.15
1N5536	MOT	3.68	2.95	2.25
1N5536A	MOT	5.25	4.20	3.15
1N5537	MOT	3.68	2.95	2.25
1N5537A	MOT	5.25	4.20	3.15
1N5538	MOT	3.68	2.95	2.25
1N5538A	MOT	5.25	4.20	3.15
1N5539	MOT	3.68	2.95	2.25
1N5539A	MOT	5.25	4.20	3.15
1N5540	MOT	3.68	2.95	2.25
1N5540A	MOT	5.25	4.20	3.15
1N5541	MOT	3.68	2.95	2.25
1N5541A	MOT	5.25	4.20	3.15
1N5542	MOT	3.68	2.95	2.25
1N5542A	MOT	5.25	4.20	3.15
1N5543	MOT	3.68	2.95	2.25
1N5543A	MOT	5.25	4.20	3.15
1N5544	MOT	3.68	2.95	2.25
1N5544A	MOT	5.25	4.20	3.15
1N5545	MOT	3.68	2.95	2.25
1N5545A	MOT	5.25	4.20	3.15
1N5546	MOT	3.68	2.95	2.25
1N5546A	MOT	5.25	4.20	3.15

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
2N109	RCA	.92	.77	.56	.465
2N118A	TI	9.80	8.15	5.45	....
2N119	TI	13.25	11.05	7.35	....
2N173	MOT	4.08	3.40	2.50	....
2N174	MOT	4.32	3.60	2.67	....
2N174A	MOT	4.56	3.80	2.79	....
2N176	MOT	1.44	1.20	.87	....
2N176	RCA	1.57	1.31	.95	.79
2N178	MOT	1.32	1.10	.80	....
2N217	RCA	.72	.60	.44	.365
2N242	MOT	1.98	1.65	1.10	....
2N244	TI	19.63	16.36	12.24	....
2N250A	TI	2.08	1.73	1.15	....
2N251A	TI	2.26	1.88	1.25	....
2N274	RCA	1.49	1.24	.90	.75

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N277	MOT	2.70	2.25	1.66
2N278	MOT	3.36	2.80	2.07
2N297A	MOT	1.92	1.60	1.17
2N297A/JAN	MOT	2.88	2.40	1.78
2N307	MOT	1.35	1.12	.75
2N307A	MOT	2.25	1.87	1.25
2N320	MOT	.90	.75	.50
2N321	MOT	1.00	.83	.55
2N322	MOT	.64	.53	.35
2N323	MOT	.90	.75	.50
2N324	MOT	.90	.75	.50
2N331	MOT	2.26	1.88	1.25
2N331/JAN	MOT	2.70	2.25	1.50
2N332	TI	5.58	4.65	3.10
2N333	TI	5.58	4.65	3.10
2N333A	TI	5.88	4.90	3.30
2N334	TI	5.58	4.65	3.10
2N335	TI	5.88	4.90	3.30
2N335A	TI	6.25	5.20	3.50
2N336	TI	7.15	5.95	3.95
2N336A	TI	7.50	6.25	4.20
2N337	TI	5.82	4.85	3.20

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N338	TI	6.60	5.50	3.65
2N339	TI	9.75	8.12	6.08
2N341	TI	16.80	14.00	10.49
2N342	TI			Each 7.11
2N342/JAN	TI	13.75	11.64	8.69
2N342A	TI	11.43	9.52	7.16
2N343	TI	17.70	14.72	11.03
2N350A	MOT	1.98	1.65	1.10
2N351A	MOT	2.04	1.70	1.15
2N370	RCA	1.39	1.16	.84
			1000-Up Ea.	.70
2N372	RCA	1.37	1.14	.83
			1000-Up Ea.	.69
2N375	MOT	2.64	2.20	1.65
2N376A	MOT	2.22	1.85	1.25
2N378	MOT	2.16	1.80	1.20
2N379	MOT	2.28	1.90	1.39
2N381	MOT	1.54	1.28	.85
2N382	MOT	2.08	1.73	1.15
2N383	MOT	2.62	2.18	1.45
2N384	RCA	1.98	1.65	1.20
			1000-Up Ea.	1.00
2N388	RCA	.60	.50	.36
			1000-Up Ea.	.30
2N388A	RCA	1.13	.94	.68
			1000-Up Ea.	.57
2N388A	TI	1.06	.88	.64
2N389A	TI	25.20	21.00	14.00
2N395	TI	.60	.50	.33

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
2N398	MOT	1.44	1.20	.80	...
2N398	RCA	1.19	.99	.72	.60
2N398A	MOT	1.54	1.28	.85	...
2N398A	RCA	1.17	.97	.71	.59
2N398B	RCA	1.49	1.24	.90	.70
2N404	RCA	.54	.45	.32	.27
2N404/JAN	RCA	.58	.48	.35	.29
2N404	TI	.51	.42	.28	...
2N404A	RCA	.70	.58	.42	.35
2N404A	TI	.70	.58	.39	....
2N405	RCA	.77	.64	.44	.37
2N406	RCA	.54	.45	.32	.27
2N407	RCA	.81	.67	.49	.405
2N408	RCA	.60	.50	.37	.305
2N409	RCA	.66	.55	.40	.33
2N410	RCA	.65	.54	.40	.33
2N412	RCA	.71	.59	.43	.36
2N414	RCA	.55	.46	.34	.28

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N428	TI	1.48	1.23	.82
2N441	MOT	1.51	1.26	.84
2N442	MOT	1.99	1.66	1.11
2N443	MOT	2.28	1.90	1.39
2N456A	MOT	2.16	1.80	1.20
2N456B	TI	2.16	1.80	1.20
2N457A	MOT	2.64	2.20	1.45
2N457A	TI	2.62	2.18	1.45
2N457B	TI	2.62	2.18	1.45
2N458A	MOT	3.13	2.65	1.75
2N458A	TI	3.16	2.63	1.75
2N458B	TI	3.16	2.63	1.75
2N459	MOT	5.22	4.35	2.90
2N460	MOT	2.70	2.25	1.50
2N461	MOT	2.70	2.25	1.50
2N461/JAN	MOT	3.42	2.85	1.90
2N464	MOT	2.26	1.88	1.25
2N465	MOT	2.26	1.88	1.25
2N466	MOT	2.52	2.10	1.40
2N467	MOT	3.06	2.55	1.70
2N467/JAN	MOT	3.24	2.70	1.80
2N489	TI	8.50	7.10	4.75
2N489A	TI	9.18	7.65	5.10
2N489B	TI	10.98	9.15	6.10
2N490	TI	9.36	7.80	5.20
2N490A	TI	10.00	8.35	5.55
2N491	TI	10.10	8.40	5.60
2N491A	TI	10.70	8.90	5.95
2N491B	TI	12.50	10.40	6.95
2N492	TI	11.65	9.80	6.55
2N492A	TI	12.50	10.40	6.95
2N942B	TI	14.30	11.90	7.95
2N493	TI	12.90	10.75	7.20
2N493A	TI	13.44	11.20	7.50
2N493B	TI	15.30	12.75	8.50
2N494	TI	13.10	10.90	7.30
2N494A	TI	13.68	11.40	7.60
2N494C	TI	17.90	14.95	9.90
2N497	TI	2.27	1.89	1.26
2N497A	TI	2.46	2.05	1.37
2N498	TI	2.55	2.12	1.41
2N499	MOT	4.32	3.60	2.40
2N499A	MOT	5.15	4.30	2.85
2N501	SPR	7.62	6.35	4.65
2N502	SPR	3.48	2.90	2.15
2N502	MOT	3.90	3.25	2.15
2N502A	MOT	4.50	3.75	2.50
2N502B	MOT	5.03	4.20	2.80
2N508	MOT	.90	.75	.50
2N508A	MOT	1.08	.90	.60
2N511B	TI	6.21	5.18	3.45
2N524	MOT	1.44	1.20	.80
2N525	MOT	1.44	1.20	.80
2N526	MOT	1.44	1.20	.80
2N527	MOT	1.72	1.43	.95
2N542	TI	7.45	6.20	4.10
2N543	TI	9.42	7.95	5.30
2N554	MOT	.72	.60	.40
2N555	MOT	.90	.75	.50

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N581	RCA	.60	.50	.36
			1000-Up Ea.	.30
2N582	RCA	.79	.66	.48
			1000-Up Ea.	.40
2N585	RCA	1.39	1.16	.84
			1000-Up Ea.	.70
2N588	SPR	1.74	1.45	1.05
2N591	RCA	.75	.62	.45
			1000-Up Ea.	.375
2N594	TI	3.30	2.75	1.83
2N595	TI	5.10	4.25	2.83
2N596	TI	6.78	5.65	3.77
2N618	MOT	2.94	2.45	1.82
2N647	RCA	1.39	1.16	.84
			1000-Up Ea.	.70
2N649	RCA	1.10	.92	.67
			1000-Up Ea.	.56
2N650	MOT	2.44	2.03	1.35
2N650A	MOT	2.52	2.10	1.40
2N651	MOT	2.44	2.03	1.35
2N651A	MOT	2.52	2.10	1.40
2N652	MOT	2.82	2.30	1.55
2N652A	MOT	3.36	2.80	1.85
2N653	MOT	3.00	2.50	1.65
2N654	MOT	3.12	2.60	1.75
2N655	MOT	3.36	2.80	1.85
2N656	MOT	2.44	2.03	1.35
2N656	TI	2.44	2.03	1.35
2N656A	TI	2.88	2.40	1.60
2N657	MOT	2.64	2.20	1.47
2N657	TI	2.64	2.20	1.47
2N657A	TI	10.80	9.00	6.00
2N659	TI	1.56	1.30	.87
2N660	TI	1.78	1.48	.99
2N662	TI	1.68	1.40	.93
2N665	MOT	5.28	4.40	2.95
2N669	MOT	1.71	1.42	.95
2N681	IR	3.60	3.00	2.00
2N681	MOT	3.96	3.30	2.20
2N682	IR	4.32	3.60	2.40
2N682	MOT	4.92	4.10	2.75
2N683	IR	5.66	4.72	3.15
2N683	MOT	6.72	5.60	3.75
2N684	IR	6.57	5.47	3.65
2N684	MOT	7.56	6.30	4.20
2N684	RCA	5.03	4.19	3.05
			1000-Up Ea.	2.54
2N685	IR	7.11	5.92	3.95
2N685	MOT	7.92	6.60	4.40
2N685	RCA	5.77	4.81	3.50
			1000-Up Ea.	2.92
2N686	IR	7.56	6.30	4.20
2N686	MOT	8.34	6.95	4.65
2N686	RCA	6.44	5.36	3.90
			1000-Up Ea.	3.25
2N687	IR	8.10	6.75	4.50
2N687	MOT	18.98	14.60	9.75
2N687	RCA	6.93	5.77	4.20
			1000-Up Ea.	3.50
2N688	IR	9.90	8.25	5.50
2N688	MOT	20.52	17.10	11.40
2N688	RCA	8.09	6.74	4.90
			1000-Up Ea.	4.08
2N689	IR	12.15	10.12	6.75
2N689	MOT	24.72	20.60	13.75
2N689	RCA	9.70	8.05	5.85
			1000-Up Ea.	4.87
2N690	IR	14.40	12.00	8.00
2N690	RCA	10.40	8.67	6.30
			1000-Up Ea.	5.25
2N691	IR	23.13	19.27	12.85
2N692	IR	30.00	25.00	18.50
2N696	MOT	.62	.52	.46
			500-Up Ea.	.40
2N696	TI	.62	.52	.46
2N697	MOT	.62	.52	.46
			500-Up Ea.	.40
2N697	RCA	.76	.63	.46
			500-Up Ea.	.38
2N697	TI	.62	.52	.46
2N698	TI	1.89	1.57	1.05
2N699	MOT	1.58	1.32	.88
2N699	RCA	1.39	1.16	.84
			1000-Up Ea.	.70
2N700	MOT	8.82	7.35	4.90
2N700A	MOT	14.20	11.85	8.70
2N702	MOT	8.10	6.75	4.50
2N703	MOT	8.10	6.75	4.50
2N705	MOT	1.24	1.03	.69
2N706	MOT	.83	.69	.46
			500-Up Ea.	.41
2N706/JAN	MOT	.70	.58	.50
2N706	RCA	.71	.59	.43
			1000-Up Ea.	.36
2N706A	MOT	1.42	1.18	.79
2N706A	RCA	1.29	1.07	.78
			1000-Up Ea.	.65
2N706A	TI	.76	.63	.42
			1000-Up Ea.	.33
2N706B	MOT	1.78	1.48	.99
2N707	MOT	7.56	6.30	4.20
2N708	MOT	.96	.80	.53
			500-Up Ea.	.45
2N709	RCA	1.59	1.32	.96
			1000-Up Ea.	.80
2N709	TI	1.55	1.29	.86
2N710	MOT	1.60	1.33	.89
2N711	MOT	1.06	.88	.59
2N711	TI	1.07	.89	.59
2N711A	MOT	1.06	.88	.59
2N711B	MOT	1.13	.94	.63
2N711B	TI	1.13	.94	.63
2N717	TI	1.19	.99	.66

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N718	MOT	.55	.46	.40
			1000-4999 Ea.	.35
			5000-Up Ea.	.34
2N718	TI	.48	.40	.38
2N718A	MOT	.95	.79	.68
			1000-4999 Ea.	.60
			5000-Up Ea.	.57
2N718A	RCA	1.30	1.08	.78
			1000-Up Ea.	.65
2N718A	TI	.90	.75	.50
2N719	TI	2.82	2.35	1.56
2N720	TI	1.32	1.10	.70
2N720A	MOT	1.58	1.32	.88
2N720A	RCA	1.58	1.32	.88
			1000-Up Ea.	.80
2N721	MOT	1.75	1.46	1.27
2N722	MOT	1.75	1.46	1.27
2N730	TI	.84	.70	.47
2N731	TI	1.32	1.10	.75
2N735	MOT	3.00	2.50	1.65
2N736	MOT	3.00	2.50	1.65
2N739	MOT	3.24	2.70	1.80
2N740	MOT	3.24	2.70	1.80
2N741	MOT	2.62	2.18	1.45
2N741A	MOT	3.95	3.30	2.20
2N743	MOT	7.45	6.20	4.15
2N743	TI	1.13	.94	.63
2N744	MOT	3.48	2.90	1.95
2N744	TI	1.19	.99	.66
2N753	MOT	2.36	1.97	1.31
2N769	SPR	8.10	6.75	4.95
2N779A	MOT	4.50	3.75	2.50
2N779A	SPR	4.20	3.50	2.55
2N797	TI	5.12	4.27	2.85
2N828	MOT	3.96	3.30	2.20
2N829	MOT	5.34	4.45	2.95
2N834	MOT	2.40	2.00	1.35
2N834	RCA	2.38	1.98	1.44
			1000-Up Ea.	1.20
2N835	MOT	1.80	1.50	1.00
2N840	MOT	4.32	3.60	2.45
2N841	MOT	5.28	4.40	2.95
2N859	SPR	11.22	9.35	6.95
2N861	SPR	7.20	6.00	4.40
2N863	SPR	5.40	4.50	3.30
2N869	MOT	7.00	5.85	3.90
2N869A	MOT	5.40	4.50	3.00
2N870	TI	2.98	2.48	1.65
2N871	TI	3.28	2.73	1.82
2N910	MOT	2.85	2.37	1.58
2N911	MOT	6.66	5.55	3.70
2N914	MOT	1.14	.95	.63
2N914	TI	1.14	.95	.63
2N915	MOT	5.94	4.95	3.30
2N916	MOT	4.38	3.65	2.45
2N917	RCA	1.53	1.27	.92
			1000-Up Ea.	.77
2N917	TI	2.98	2.48	1.65
2N918	MOT	3.48	2.90	1.92
2N918/JAN	MOT	4.02	3.35	2.23
2N918	RCA	3.57	2.97	2.16
			1000-Up Ea.	1.80
2N918	TI	3.96	3.30	2.20
2N929	MOT	2.70	2.25	1.50
2N929	TI	1.79	1.49	.98
2N929A	MOT	5.40	4.50	4.00
2N930	MOT	1.80	1.50	.99
2N930A	MOT	2.16	1.80	1.21
2N956	MOT	1.02	.85	.74
			500-Up Ea.	.65
2N960	MOT	1.15	.96	.64
2N961	MOT	1.09	.91	.61
2N962	MOT	1.02	.85	.57
2N963	MOT	.99	.82	.55
2N964	MOT	1.19	.99	.66
2N964A	MOT	6.30	5.25	3.50
2N965	MOT	1.13	.94	.63
2N966	MOT	1.06	.88	.59
2N967	MOT	1.04	.87	.58
2N967	TI	1.04	.87	.58
2N968	MOT	1.08	.90	.60
2N970	MOT	.97	.81	.54
2N973	TI	1.07	.89	.59
2N974	TI	1.00	.83	.55
2N984	SPR	1.20	1.00	.75
2N985	MOT	3.50	2.88	1.92
2N985	TI	3.40	2.83	1.89
2N995	MOT	7.00	5.85	3.90
2N997	TI	12.60	10.50	7.00
2N998	MOT	16.20	13.50	9.00
2N999	MOT	17.82	14.85	9.90
2N1008	MOT	1.32	1.10	.75
2N1008A	MOT	1.44	1.20	.80
2N1008B	MOT	1.56	1.30	.85
2N1011	MOT	2.34	1.95	1.45
2N1021A	TI	3.70	3.08	2.05
2N1022	MOT	4.32	3.60	2.40
2N1022	TI	4.32	3.60	2.40
2N1022A	TI	4.32	3.60	2.40
2N1023	RCA	3.27	2.72	1.98
			1000-Up Ea.	1.65
2N1038	MOT	3.42	2.85	1.90
2N1038	TI	2.16	1.80	1.20
2N1039	MOT	4.50	3.75	2.50
2N1039	TI	2.88	2.40	1.60
2N1039/JAN	TI	2.98	2.48	1.65
2N1040	MOT	6.84	5.70	3.80
2N1041	MOT	9.00	7.50	5.00
2N1041	TI	5.40	4.50	3.00
2N1042	TI	3.42	2.85	1.90
2N1043	TI	5.04	4.20	2.80

SEE PAGE 7 FOR INTEGRATED CIRCUITS

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them. On Zener Diodes, we ship the better tolerance device at our discretion.

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N1045	TI	8.64	7.20	4.80
2N1046	TI	12.30	10.25	7.50
2N1047A	TI	17.16	14.30	9.55
2N1047B	TI	31.14	25.95	17.30
2N1049A	TI	20.10	16.75	11.15
2N1049B	TI	40.50	33.75	22.50
2N1050A	TI	26.52	22.10	14.20
2N1050B	TI	56.28	46.90	31.20
2N1073	MOT	2.88	2.40	1.78
2N1073B	MOT	5.40	4.50	3.30
2N1099	MOT	4.60	3.90	2.87
2N1100	MOT	5.40	4.50	3.34
2N1118	SPR	12.72	10.60	7.85
2N1131	MOT	6.72	5.60	3.75
2N1131/JAN	TI	7.20	6.00	4.00
2N1132	MOT	1.75	1.46	1.27
			500-Up Ea.	1.10
2N1132	TI	1.75	1.46	1.27
2N1132A	MOT	14.40	12.00	8.00
2N1141	MOT	5.80	4.83	3.22
2N1142	MOT	5.05	4.20	2.80
2N1142	TI	4.86	4.05	2.70
2N1142/JAN	TI	5.22	4.35	2.90
2N1143	MOT	4.20	3.50	2.33
2N1151	TI	10.38	8.65	5.75
2N1152	TI	13.62	11.35	7.55
2N1162	MOT	5.34	4.45	3.30
2N1162AML	MOT	6.10	5.08	3.75
2N1164	MOT	7.62	6.35	4.70
2N1164AML	MOT	8.34	6.95	5.15
2N1165	MOT	7.62	6.35	4.70
2N1166	MOT	9.05	7.55	5.60
2N1166AML	MOT	9.72	8.10	6.00
2N1167	MOT	9.05	7.55	5.60
2N1167AML	MOT	9.72	8.10	6.00
2N1175	MOT	1.34	1.12	.75
2N1177	RCA	1.31	1.09	.79
			1000-Up Ea.	.66
2N1178	RCA	1.29	1.07	.78
			1000-Up Ea.	.65
2N1179	RCA	1.29	1.07	.78
			1000-Up Ea.	.65
2N1180	RCA	1.05	.87	.64
			1000-Up Ea.	.53
2N1183	RCA	2.19	1.82	1.32
			1000-Up Ea.	1.10
2N1183A	RCA	2.77	2.31	1.68
			1000-Up Ea.	1.40
2N1183B	RCA	3.47	2.89	2.10
			1000-Up Ea.	1.75
2N1184	RCA	2.98	2.48	1.80
			1000-Up Ea.	1.50
2N1184A	RCA	3.38	2.81	2.04
			1000-Up Ea.	1.70
2N1184B	RCA	4.96	4.13	3.00
			1000-Up Ea.	2.50
2N1185	MOT	4.32	3.60	2.40
2N1186	MOT	4.56	3.80	2.55
2N1187	MOT	4.56	3.80	2.55
2N1188	MOT	5.64	4.70	3.15
2N1189	MOT	2.70	2.25	1.50
2N1191	MOT	1.68	1.40	.95
2N1192	MOT	1.68	1.40	.95
2N1193	MOT	2.24	1.87	1.25
2N1194	MOT	2.44	2.03	1.35
2N1195	MOT	4.74	3.95	2.63
2N1204	MOT	1.98	1.65	1.10
2N1204A	MOT	1.98	1.65	1.10
2N1224	RCA	1.54	1.24	.90
			1000-Up Ea.	.75
2N1225	RCA	1.69	1.41	1.02
			1000-Up Ea.	.85
2N1226	RCA	1.79	1.49	1.08
			1000-Up Ea.	.90
2N1277	TI	5.10	4.25	2.84
2N1278	TI	5.70	4.75	3.15
2N1302	RCA	.54	.45	.32
			1000-Up Ea.	.27
2N1302	TI	.51	.42	.30
2N1303	RCA	.54	.45	.32
			1000-Up Ea.	.27
2N1303	TI	.51	.42	.30
2N1303/JAN	TI	.57	.47	.31

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N1304	RCA	.64	.53	.38
			1000-Up Ea.	.32
2N1304	TI	.60	.50	.36
2N1305	RCA	.64	.53	.38
			1000-Up Ea.	.32
2N1305	TI	.58	.48	.35
2N1306	RCA	.79	.66	.48
			1000-Up Ea.	.40
2N1306	TI	.75	.62	.45
2N1307	RCA	.77	.58	.42
			1000-Up Ea.	.35
2N1307	TI	.70	.58	.42
2N1308	RCA	1.29	1.07	.76
			1000-Up Ea.	.63
2N1308	TI	1.09	.91	.66
2N1309	RCA	1.12	.97	.71
			1000-Up Ea.	.59
2N1309/JAN	TI	1.15	.96	.70
2N1358	MOT	4.88	4.15	3.06
2N1359	MOT	1.68	1.40	1.05
2N1360	MOT	2.04	1.70	1.25
2N1362	MOT	3.42	2.85	2.12
2N1363	MOT	3.72	3.10	2.30
2N1364	MOT	5.70	4.75	3.54
2N1365	MOT	6.00	5.00	3.70
2N1370	TI	.87	.72	.48
2N1371	TI	1.39	1.14	.76
2N1372	TI	.97	.81	.54
2N1373	TI	1.44	1.20	.80
2N1374	TI	1.23	1.02	.68
2N1375	TI	1.66	1.38	.92
2N1376	TI	1.55	1.29	.86
2N1377	TI	1.80	1.50	1.00
2N1378	TI	1.55	1.29	.86
2N1379	TI	1.73	1.44	.96
2N1381	TI	.87	.72	.48
2N1383	TI	1.11	.92	.61
2N1396	RCA	2.32	1.93	1.40
			1000-Up Ea.	1.17
2N1397	RCA	2.58	2.15	1.56
			1000-Up Ea.	1.30
2N1404	TI	.70	.58	.39
2N1412	MOT	5.40	4.50	3.34
2N1412A/JAN	MOT	10.80	9.00	6.00
2N1413	MOT	1.00	.83	.55
2N1414	MOT	1.08	.90	.60
2N1415	MOT	1.26	1.05	.70
2N1420	MOT	.78	.65	.56
			500-Up Ea.	.50

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
2N1479	RCA	1.98	1.65	1.20	1.00
2N1480	RCA	2.18	1.82	1.32	1.10
2N1481	RCA	2.38	1.98	1.44	1.30
2N1482	RCA	3.37	2.81	2.04	1.70
2N1483	RCA	3.47	2.89	2.10	1.75
2N1483TX/JAN	RCA	9.42	7.85	5.70	4.75
2N1484	RCA	4.36	3.63	2.64	2.20
2N1484TX/JAN	RCA	10.32	8.60	6.25	5.20
2N1485	RCA	5.35	4.46	3.24	2.70
2N1485/JAN	RCA	6.34	5.28	3.84	3.20
2N1485TX/JAN	RCA	11.28	9.40	6.85	5.70
2N1486	RCA	8.13	6.77	4.92	4.10
2N1486TX/JAN	RCA	12.36	10.30	8.55	7.10
2N1487	RCA	5.46	4.54	3.30	2.75
2N1488	RCA	5.95	4.95	3.60	3.00
2N1489	RCA	8.92	7.43	5.40	4.50
2N1490	RCA	10.00	8.25	6.00	5.00
2N1491	RCA	2.19	1.82	1.32	1.10
2N1493	RCA	8.51	7.01	5.10	4.25

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N1494	MOT	2.60	2.17	1.45
2N1495	MOT	3.96	3.30	2.20
2N1496	MOT	4.56	3.80	2.55
2N1499A	MOT	1.92	1.60	1.05
2N1499A	SPR	1.80	1.50	1.15
2N1499B	SPR	2.22	1.85	1.40
2N1500	MOT	9.18	7.65	5.10
2N1500	SPR	8.34	6.95	5.10
2N1507	TI	1.44	1.20	.80
2N1524	RCA	.61	.51	.37
			1000-Up Ea.	.31
2N1529	MOT	1.74	1.45	1.08
2N1530	MOT	1.92	1.60	1.15
2N1531	MOT	2.76	2.30	1.70
2N1532	MOT	3.60	3.00	2.24
2N1532A	MOT	4.30	3.58	2.65
2N1533	MOT	5.22	4.35	3.25
2N1534	MOT	1.68	1.40	1.05
2N1535	MOT	1.80	1.50	1.14
2N1535AML	MOT	2.52	2.10	1.55
2N1536	MOT	2.04	1.70	1.25
2N1536AML	MOT	2.64	2.20	1.65
2N1537	MOT	4.68	3.90	2.90
2N1537AML	MOT	5.34	4.45	3.30
2N1538	MOT	6.60	5.50	4.05
2N1539	MOT	1.80	1.50	1.12

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N1540	MOT	1.90	1.58	1.18
2N1540	TI	1.90	1.58	1.18
2N1540AML	MOT	2.52	2.10	1.62
2N1541	MOT	2.22	1.85	1.38
2N1541AML	MOT	2.82	2.35	1.75
2N1542	MOT	2.82	2.35	1.75
2N1542AML	MOT	3.65	3.04	2.25
2N1543	MOT	4.32	3.60	2.65
2N1544	MOT	1.98	1.65	1.24
2N1544AML	MOT	2.65	2.22	1.64
2N1545	MOT	2.22	1.85	1.35
2N1545AML	MOT	2.82	2.35	1.75
2N1546	MOT	2.76	2.30	1.70
2N1546AML	MOT	3.54	2.95	2.20
2N1547	MOT	3.30	2.75	2.05
2N1547AML	MOT	4.14	3.45	2.55
2N1548	MOT	4.80	4.00	2.95
2N1550	MOT	3.66	3.05	2.05
2N1551	MOT	5.82	4.85	3.25
2N1552	MOT	6.66	5.55	3.70
2N1553	MOT	2.22	1.85	1.35
2N1554	MOT	2.76	2.30	1.70
2N1554AML	MOT	3.42	2.85	2.10
2N1555	MOT	3.30	2.75	2.05
2N1555AML	MOT	4.14	3.45	2.55
2N1556	MOT	4.80	4.00	2.95
2N1556AML	MOT	5.58	4.65	3.45
2N1557	MOT	2.52	2.15	1.58
2N1557AML	MOT	3.24	2.70	2.00
2N1558	MOT	3.36	2.80	2.06
2N1558AML	MOT	4.08	3.40	2.50
2N1559	MOT	3.90	3.25	2.40
2N1559AML	MOT	4.68	3.90	2.90
2N1560	MOT	5.34	4.45	3.30
2N1560AML	MOT	6.00	5.00	3.70
2N1561	MOT	26.10	21.75	14.50
2N1562	MOT	17.10	14.25	9.50
2N1595	MOT	2.58	2.15	1.45
2N1595	TI	3.60	3.00	2.00
2N1596	MOT	3.12	2.60	1.75
2N1596	TI	5.40	4.50	3.05
2N1597	MOT	5.94	4.95	3.30
2N1597	TI	11.22	9.35	6.20
2N1598	MOT	10.32	8.60	5.75
2N1599	MOT	14.82	12.35	8.25
2N1600	IR	6.12	5.10	3.40
2N1601	IR	6.84	5.70	3.95
2N1601	TI	6.84	5.70	3.45
2N1602	IR	11.34	9.45	6.30
2N1602	TI	11.34	9.45	6.30
2N1603	IR	16.20	13.50	9.00
2N1603	TI	16.20	13.50	9.00
2N1604	IR	20.16	16.80	10.80
2N1604	TI	20.16	16.80	10.80
2N1605	RCA	.79	.66	.48
			1000-Up Ea.	.40
2N1605	TI	.75	.62	.45
2N1605A	RCA	1.37	1.14	.83
			1000-Up Ea.	.69
2N1613	MOT	.90	.79	.68
			500-Up Ea.	.60
2N1613	RCA	.90	.75	.54
			1000-Up Ea.	.45
2N1631	RCA	.95	.79	.58
			1000-Up Ea.	.48
2N1632	RCA	.76	.63	.46
			1000-Up Ea.	.38
2N1637	RCA	.73	.61	.44
			1000-Up Ea.	.37
2N1638	RCA	.65	.54	.40
			1000-Up Ea.	.33
2N1639	RCA	.70	.58	.42
			1000-Up Ea.	.35
2N1651	MOT	5.82	4.85	3.25
2N1652	MOT	12.12	10.10	6.75
2N1653	MOT	17.50	14.60	9.75
2N1671	TI	3.54	2.95	1.98
2N1671A	TI	3.84	3.20	2.14
2N1671B	TI	4.26	3.55	2.36
2N1692	MOT	27.00	22.50	17.00
2N1693	MOT	21.60	18.00	12.00
2N1700	RCA	2.28	1.90	1.38
			1000-Up Ea.	1.15
2N1701	RCA	2.77	2.31	1.68
			1000-Up Ea.	1.40
2N1702	RCA	5.46	4.54	3.30
			1000-Up Ea.	2.75
2N1707	MOT	1.00	.83	.55
2N1708	MOT	3.84	3.20	2.20
2N1711	MOT	1.02	.85	.74
			500-Up Ea.	.65
2N1711	RCA	1.13	.94	.69
			1000-Up Ea.	.57
2N1714	TI	7.20	6.00	4.00
2N1715	TI	9.90	8.25	5.50
2N1718	TI	8.10	6.75	4.50
2N1719	TI	10.80	9.00	6.00
2N1720	TI	9.90	8.25	5.50
2N1722A	TI	72.00	60.00	40.00
2N1723	TI	52.20	43.50	29.00
2N1724	MOT	33.30	27.75	18.50
2N1726	SPR	1.38	1.15	.85
2N1742	MOT	3.24	2.70	1.80
2N1742	SPR	3.52	2.93	2.15
2N1743	SPR	3.45	2.87	2.11
2N1744	SPR	2.70	2.25	1.65
2N1745	SPR	2.16	1.80	1.32
2N1746	SPR	1.20	1.00	.75

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N1748	SPR	1.26	1.05	.80
2N1748A	SPR	1.38	1.15	.85
2N1751	MOT	17.10	14.25	9.50
2N1754	MOT	1.71	1.42	.95
2N1754	SPR	1.62	1.35	.95
2N1770	IR	3.63	3.02	2.43
2N1770A	IR	7.38	6.15	4.10
2N1771	IR	4.17	3.47	2.79
2N1771	TI	5.58	4.65	3.10
2N1771A	IR	8.37	6.97	4.65
2N1772	IR	6.87	5.72	3.80
2N1772	TI	6.90	5.75	3.85
2N1772A	IR	10.74	8.95	5.95
2N1773	IR	8.31	6.92	4.60
2N1773A	IR	13.26	11.05	7.35
2N1774	IR	9.75	8.12	5.40
2N1774	TI	9.78	8.15	5.45
2N1774A	IR	16.14	13.45	8.95
2N1775	IR	11.19	9.32	6.20
2N1775	TI	11.22	9.35	6.25
2N1775A	IR	18.60	15.50	10.45
2N1776	IR	12.72	10.60	7.05
2N1776A	IR	22.02	18.35	12.20
2N1777	IR	14.88	12.40	8.25
2N1777A	IR	28.32	23.60	15.50
2N1778	IR	21.78	18.15	12.05
2N1792	IR	28.80	24.00	18.50
2N1793	IR	33.60	28.00	21.50
2N1794	IR	39.60	33.00	25.40
2N1795	IR	45.60	38.00	29.20
2N1798	IR	79.20	66.00	51.00
2N1842	MOT	3.60	3.00	2.00
2N1842A	MOT	3.75	3.15	2.10
2N1842A	RCA	2.64	2.20	1.60
			1000-Up Ea.	1.33
2N1843	MOT	4.50	3.75	2.50
2N1843A	MOT	4.85	4.05	2.70
2N1844	MOT	6.00	5.00	3.35
2N1845	MOT	6.84	5.70	3.80
2N1845A	MOT	7.27	6.05	4.05
2N1845B	TI	7.13	5.94	3.96
2N1846	IR	6.94	5.78	3.55
2N1846	MOT	7.20	6.00	4.00
2N1846A	MOT	7.60	6.35	4.25
2N1846A	RCA	5.35	4.46	3.75
			1000-Up Ea.	2.71
2N1847	MOT	7.56	6.30	4.20
2N1847A	MOT	8.10	6.75	4.50
2N1847A	RCA	6.12	5.10	3.70
			1000-Up Ea.	3.09
2N1848	IR	7.29	6.07	4.05
2N1848	MOT	15.90	13.25	8.85
2N1848A	MOT	17.10	14.25	9.50
2N1848A	RCA	6.62	5.51	4.00
			1000-Up Ea.	3.34
2N1849	IR	8.91	7.42	4.95
2N1849	MOT	18.00	15.00	10.00
2N1849A	MOT	19.30	16.10	10.75
2N1849A	RCA	7.84	6.54	4.75
			1000-Up Ea.	3.96
2N1850	MOT	20.90	18.15	12.10
2N1850A	MOT	23.78	19.80	13.20
2N1850A	RCA	9.07	7.56	5.50
			1000-Up Ea.	4.58
2N1890	TI	2.64	2.20	1.48
2N1893	MOT	1.88	1.57	1.05
2N1893	RCA	1.30	1.08	.78
			1000-Up Ea.	.65
2N1905	RCA	4.96	4.13	3.00
			1000-Up Ea.	2.50
2N1906	RCA	7.92	6.60	4.80
			1000-Up Ea.	4.00
2N1907	TI	11.26	9.38	6.75
2N1908	TI	15.30	12.75	9.00

Type No.	Mfr.	EACH 1-9	10-24	25-Up
2N1913	IR	37.80	31.50	24.20
2N1916	IR	63.60	53.00	38.50

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N1924	MOT	2.16	1.80	1.20
2N1925	MOT	2.44	2.03	1.35
2N1926	MOT	2.88	2.40	1.60
2N1959	MOT	5.35	4.45	2.95
2N1970	MOT	2.82	2.35	1.73
2N1973	TI	2.64	2.20	1.48
2N1974	TI	1.62	1.35	.90
2N1975	TI	2.64	2.20	1.48
2N1982	MOT	9.36	7.80	5.20
2N1983	MOT	3.00	2.50	1.67
2N1984	MOT	2.80	2.33	1.56
2N1990	MOT	2.70	2.25	1.50
2N1991	MOT	4.74	3.95	2.96
2N1994	TI	2.80	2.33	1.55
2N1995	TI	4.50	3.75	2.50
2N1996	TI	6.17	5.14	3.43
2N1997	TI	2.13	1.77	1.18
2N1999	TI	2.49	2.07	1.38
2N2000	TI	3.00	2.50	1.67
2N2001	TI	2.80	2.17	1.45
2N2015	RCA	10.89	9.08	6.60
			1000-Up Ea.	5.50
2N2016	RCA	11.88	9.90	7.20
			1000-Up Ea.	6.00

Type No.	Mfr.	EACH 1-9	10-24	25-Up
2N2025	IR	34.20	28.50	21.70
2N2027	IR	44.40	37.00	27.40
2N2028	IR	52.20	43.50	30.70

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N2042	MOT	3.42	2.85	1.90
2N2043	MOT	3.84	3.20	2.15
2N2048	MOT	1.92	1.60	1.05
2N2048	SPR	2.34	1.95	1.42
2N2060	MOT	8.10	6.75	4.50
2N2060A	MOT	10.44	8.70	5.80
2N2076	MOT	4.80	4.00	2.67
2N2076AML	MOT	5.70	4.75	3.17
2N2077	MOT	3.84	3.20	2.12
2N2078	MOT	2.50	2.08	1.90
2N2079	MOT	9.60	8.00	5.34
2N2080	MOT	6.76	5.65	3.78
2N2080AML	MOT	7.68	6.40	4.28
2N2081	MOT	4.20	3.50	2.32
2N2102	RCA	1.36	1.13	.82
			1000-Up Ea.	.68
2N2138	MOT	2.52	2.10	1.40
2N2139	MOT	2.70	2.25	1.50
2N2140	MOT	4.68	3.90	2.60
2N2141	MOT	9.42	7.85	5.25
2N2142	MOT	2.76	2.30	1.55
2N2143	MOT	2.94	2.45	1.65
2N2144	MOT	4.50	3.75	2.50
2N2145	MOT	5.40	4.50	3.00
2N2147	RCA	1.89	1.57	1.14
			1000-Up Ea.	.95
2N2148	RCA	1.30	1.08	.78
			1000-Up Ea.	.65
2N2151	TI	25.20	21.00	14.00
2N2152	MOT	4.32	3.60	2.40
2N2152AML	MOT	5.22	4.35	2.90
2N2153	MOT	6.56	5.55	3.70
2N2153AML	MOT	7.56	6.30	4.20
2N2154	MOT	12.12	10.10	6.75
2N2155	MOT	18.40	15.35	10.25
2N2156	MOT	4.92	4.10	2.75
2N2157	MOT	7.62	6.35	4.25
2N2157AML	MOT	8.50	7.10	4.75
2N2158	MOT	13.00	10.85	7.25
2N2158AML	MOT	13.90	11.60	7.75
2N2159	MOT	19.50	16.25	10.85
2N2160	TI	1.79	1.49	.99
2N2171	MOT	2.34	1.95	1.30
2N2188	TI	1.54	1.28	.82
2N2189	TI	1.97	1.64	1.09
2N2190	TI	1.77	1.47	.98
2N2191	TI	2.22	1.85	1.23
2N2192	MOT	5.05	4.20	2.80
2N2192A	MOT	5.30	4.40	2.95
2N2193	MOT	3.48	2.90	1.95
2N2193A	MOT	3.78	3.15	2.10
2N2194	MOT	2.62	2.18	1.45
2N2194A	MOT	2.88	2.40	1.60
2N2195	MOT	1.66	1.38	.92
2N2195A	MOT	1.84	1.53	1.02
2N2212	MOT	10.32	8.60	5.75
2N2217	MOT	4.02	3.35	2.25
2N2217	TI	1.20	1.00	.81
2N2218	MOT	1.26	1.05	.69
2N2218/JAN	MOT	1.68	1.40	.93
2N2218A	MOT	1.80	1.50	.99
2N2218A	SPR	1.80	1.50	1.00
2N2219	MOT	1.38	1.15	.77
2N2219/JAN	MOT	1.92	1.60	1.07
2N2219	SPR	1.20	1.00	.65
2N2219A	MOT	2.10	1.75	1.16
2N2220	TI	1.33	1.11	.74
2N2221	MOT	1.26	1.05	.69
2N2221A	MOT	1.98	1.65	1.08
2N2222	MOT	1.14	.95	.63
2N2222	TI	1.14	.95	.63
2N2222A	MOT	1.44	1.20	.79
2N2222A/JAN	MOT	1.98	1.65	1.08
2N2223	MOT	5.94	4.95	3.30
2N2223A	MOT	7.02	5.85	3.90
2N2224	MOT	4.50	3.75	2.50
2N2242	MOT	6.96	5.80	3.90
2N2243	TI	2.23	1.86	1.24
2N2256	MOT	1.35	1.12	.75
2N2257	MOT	1.52	1.27	.85
2N2258	MOT	1.44	1.12	.75
2N2259	MOT	1.52	1.27	.85
2N2270	RCA	1.09	.91	.66
			1000-Up Ea.	.55
2N2280	SPR	5.04	4.20	3.10
2N2285	MOT	5.82	4.85	3.25
2N2286	MOT	12.12	10.10	6.75
2N2287	MOT	17.50	14.60	9.75
2N2288	MOT	3.18	2.65	1.78
2N2289	MOT	4.80	4.00	2.65
2N2290	MOT	5.94	4.95	3.30
2N2291	MOT	3.30	2.75	1.85
2N2292	MOT	7.20	6.00	4.00
2N2293	MOT	14.22	11.85	7.90
2N2303	MOT	10.00	8.25	5.50
2N2322	MOT	2.76	2.30	1.55
2N2323	MOT	3.42	2.85	1.90
2N2324	MOT	4.50	3.75	2.50
2N2325	MOT	5.94	4.95	3.30
2N2326	MOT	6.48	5.40	3.60
2N2330	MOT	17.55	14.62	9.75
2N2338	RCA	7.92	6.60	4.80
			1000-Up Ea.	4.00
2N2357	MOT	8.52	7.10	4.75
2N2358	MOT	17.10	14.25	9.50
2N2359	MOT	21.12	17.60	11.75
2N2360	SPR	4.74	3.95	2.75
2N2361	SPR	3.96	3.30	2.20
2N2362	SPR	2.57	2.10	1.55
2N2368	MOT	1.29	1.07	.93
			500-Up Ea.	.82
2N2368	TI	1.14	.95	.69

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N2369	MOT	1.50	1.25	.84
			500-Up Ea.	.76
2N2369A	MOT	1.80	1.50	.99
2N2369A	RCA	1.98	1.65	1.20
			1000-Up Ea.	1.00
2N2382	MOT	6.17	5.15	3.45
2N2386	TI	3.24	2.70	1.80
2N2396	TI	13.86	11.55	7.70
2N2398	SPR	4.68	3.90	2.95
2N2400	SPR	1.50	1.25	.95
2N2402	SPR	2.70	2.25	1.65
2N2405	MOT	2.18	1.82	1.25
2N2405	RCA	1.89	1.57	1.14
			1000-Up Ea.	.95
2N2410	MOT	5.40	4.50	3.00
2N2411	TI	1.93	1.61	1.07
2N2412	TI	2.10	1.73	1.15
2N2415	MOT	7.20	6.00	4.00
2N2453	MOT	11.22	9.35	6.25
2N2453A	MOT	13.50	11.25	7.50
2N2475	RCA	1.95	1.62	1.18
			1000-Up Ea.	.98
2N2476	MOT	1.98	1.65	1.14
2N2476	RCA	1.39	1.16	.84
			1000-Up Ea.	.70
2N2477	MOT	2.47	2.06	1.35
2N2477	RCA	1.59	1.32	.96
			1000-Up Ea.	.80
2N2480	MOT	5.82	4.85	3.25
2N2480A	MOT	6.84	5.70	3.80
2N2481	MOT	3.16	2.63	1.75
2N2484	TI	1.63	1.36	.91
2N2490	MOT	2.26	1.88	1.39
2N2492	MOT	4.06	3.38	2.50
2N2493	MOT	7.20	6.00	4.45
2N2498	TI	4.44	3.70	2.45
2N2499	TI	4.32	3.60	2.40
2N2500	TI	6.30	5.25	3.50
2N2501	MOT	5.64	4.70	3.15
2N2527	MOT	11.15	9.30	6.20
2N2528	MOT	17.80	14.85	9.90
2N2537	MOT	5.94	4.95	3.30
2N2538	MOT	7.00	5.85	3.90
2N2552	TI	2.26	1.88	1.25
2N2553	TI	2.98	2.48	1.65
2N2557	TI	2.98	2.48	1.65
2N2564	TI	3.60	3.00	2.00
2N2574	MOT	4.68	3.90	2.60
2N2575	MOT	6.00	5.00	3.35
2N2576	MOT	6.84	5.70	3.80
2N2577	MOT	13.44	11.20	7.50
2N2579	MOT	18.48	15.40	10.30
2N2586	TI	2.23	1.86	1.25
2N2604	MOT	4.20	3.50	2.30
2N2604	TI	3.12	2.60	1.74
2N2605	MOT	4.80	4.00	2.70
2N2605	TI	2.82	2.35	1.56
2N2613	RCA	.71	.59	.43
			1000-Up Ea.	.355
2N2614	RCA	.65	.54	.39
			1000-Up Ea.	.325
2N2619	IR	25.56	21.30	14.20
2N2631	RCA	4.56	3.80	2.76
			1000-Up Ea.	2.30
2N2635	MOT	1.13	.94	.63
2N2639	MOT	10.80	9.00	6.00
2N2640	MOT	8.10	6.75	4.50
2N2640	TI	8.10	6.75	4.50
2N2641	MOT	5.10	4.25	2.85
2N2642	MOT	12.12	10.10	6.75
2N2643	MOT	8.64	7.20	4.80
2N2644	MOT	6.30	5.25	3.50
2N2646	MOT	1.20	1.00	.67
2N2647	MOT	2.28	1.90	1.26
2N2652	MOT	21.60	18.00	12.00
2N2652A	MOT	25.20	21.00	14.00
2N2659	TI	1.98	1.65	1.10
2N2660	TI	2.35	1.95	1.30
2N2661	TI	3.42	2.85	1.90
2N2662	TI	1.98	1.65	1.10
2N2663	TI	2.88	2.40	1.60
2N2665	TI	2.88	2.40	1.60
2N2667	TI	4.50	3.75	2.50
2N2668	TI	2.80	2.33	1.55
2N2695	MOT	5.22	4.35	2.90
2N2708/JAN	MOT	6.18	5.15	3.42
2N2708	RCA	2.77	2.31	1.68
			1000-Up Ea.	1.40
2N2710	MOT	9.00	7.50	5.00
2N2711	SPR	.28	.23	.15
			1000-9999 Ea.	.12
			10000-24999 Ea.	.10
2N2712	SPR	.29	.24	.16
			1000-9999 Ea.	.13
			10000-24999 Ea.	.11
2N2713	SPR	.46	.38	.26
			1000-9999 Ea.	.21
			10000-24999 Ea.	.17
2N2714	SPR	.43	.36	.24
			1000-9999 Ea.	.19
			10000-24999 Ea.	.16
2N2720	MOT	26.10	21.75	14.50
2N2721	MOT	20.70	17.25	11.50
2N2722	MOT	17.64	14.70	9.80
2N2723	MOT	18.00	15.00	10.00
2N2724	MOT	19.80	16.50	11.00
2N2725	MOT	25.20	21.00	14.00
2N2785	MOT	13.50	11.25	7.50
2N2800	MOT	8.10	6.75	4.50
2N2801	MOT	8.52	7.10	4.75
2N2802	MOT	24.00	20.00	13.40

SEE PAGE 7 FOR INTEGRATED CIRCUITS

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them. On Zener Diodes, we ship the better tolerance device at the same price at our discretion.

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N2803	MOT	14.40	12.00	8.05
2N2804	MOT	8.40	7.00	4.70
2N2805	MOT	24.60	20.50	13.60
2N2806	MOT	20.70	17.25	11.50
2N2807	MOT	7.20	6.00	4.00
2N2832	MOT	4.02	3.35	2.25
2N2833	MOT	5.82	4.85	3.25
2N2834	MOT	8.52	7.10	4.75
2N2838	MOT	8.52	7.10	4.75
2N2845	MOT	5.94	4.95	3.30
2N2845	SPR	5.94	4.95	3.30
2N2846	MOT	5.94	4.95	3.30
2N2847	MOT	6.12	5.10	3.40
2N2848	MOT	6.12	5.10	3.40
2N2857	MOT	4.86	4.05	2.70
			1000-4999 Ea.	2.45
2N2857	RCA	5.35	4.46	3.24
			1000-Up Ea.	2.70
2N2862	TI	1.46	1.22	.81
2N2869/ 2N301	RCA	1.82	1.52	1.11
			1000-Up Ea.	.92
2N2870/ 2N301A	RCA	3.78	3.15	2.29
			1000-Up Ea.	1.91
2N2876	RCA	20.90	17.40	14.40
			1000-Up Ea.	12.00
2N2894	MOT	2.34	1.95	1.30
2N2894	TI	1.49	1.24	.83
2N2895	MOT	1.69	1.41	.97
2N2895	RCA	1.69	1.41	1.02
			1000-Up Ea.	.85
2N2896	MOT	2.47	2.06	1.43
2N2896	RCA	2.47	2.06	1.43
			1000-Up Ea.	1.25
2N2897	MOT	1.39	1.16	.80
2N2897	RCA	1.39	1.16	.80
			1000-Up Ea.	.70
2N2903	MOT	7.02	5.85	3.90
2N2903A	MOT	8.64	7.20	4.80
2N2904	MOT	2.34	1.95	1.29
			500-Up Ea.	1.16
2N2904A	MOT	3.06	2.55	1.69
2N2905	MOT	2.64	2.20	1.45
			500-Up Ea.	1.31
2N2905JAN	MOT	3.06	2.55	1.70
2N2905A	MOT	3.18	2.65	1.77
2N2906	MOT	2.22	1.85	1.24
			500-Up Ea.	1.12
2N2906	TI	1.49	1.24	.82
2N2906A	MOT	2.88	2.40	1.60
2N2907	MOT	2.40	2.00	1.32
			500-Up Ea.	1.19
2N2907A	MOT	2.64	2.20	1.48
2N2907A	TI	1.65	1.36	.91
2N2912	MOT	9.72	8.10	5.40
2N2913	MOT	3.24	2.70	1.80
2N2914	MOT	3.60	3.00	2.00
2N2915	MOT	8.46	7.05	4.70
2N2916	MOT	10.98	9.15	6.10
2N2917	MOT	4.32	3.60	2.40
2N2918	MOT	5.58	4.65	3.10
2N2919	MOT	9.42	7.85	5.25
2N2920	MOT	13.32	11.10	7.40
2N2923	SPR	.30	.25	.17
			1000-4999 Ea.	.14
			10000-24999 Ea.	.11
2N2924	SPR	.33	.27	.18
			1000-4999 Ea.	.15
			10000-24999 Ea.	.12
2N2925	SPR	.40	.33	.22
			1000-4999 Ea.	.18
			10000-24999 Ea.	.15
2N2926	SPR	.29	.24	.16
			1000-4999 Ea.	.13
			10000-24999 Ea.	.10
2N2929	MOT	8.10	6.75	4.50
2N2944	MOT	3.32	2.76	1.84
2N2944	SPR	6.60	5.50	3.68
2N2945	MOT	3.03	2.52	1.68
2N2946	MOT	3.46	2.88	1.92
2N2946	SPR	6.60	5.50	3.68
2N2947	MOT	27.00	22.50	15.00
2N2949	MOT	12.60	10.50	7.00
			1000-4999 Ea.	6.30
2N2950	MOT	13.50	11.25	7.50
2N2951	MOT	5.40	4.50	3.00
2N2952	MOT	5.94	4.95	3.30
2N2953	RCA	.65	.54	.40
			1000-Up Ea.	.33
2N2955	MOT	2.98	2.48	1.65
2N2956	MOT	3.16	2.63	1.75
2N2957	MOT	4.05	3.37	2.25
2N2958	MOT	2.70	2.25	1.50
2N2959	MOT	3.24	2.70	1.80
2N2994	TI	16.68	13.90	9.25
2N2996	TI	1.72	1.43	.95
2N2997	TI	3.70	3.08	2.05
2N3005	TI	3.96	3.30	2.20
2N3009	MOT	2.38	1.98	1.32
2N3010	MOT	2.28	1.90	1.27
2N3011	MOT	1.20	1.00	.67
2N3012	TI	1.41	1.17	.78
2N3013	MOT	2.57	2.10	1.39
2N3013	TI	1.63	1.36	.91
2N3014	MOT	2.10	1.75	1.16
2N3014	TI	1.55	1.29	.86
2N3015	MOT	2.32	1.93	1.29
2N3015	TI	1.81	1.51	.99
2N3019	MOT	7.20	6.00	4.00
2N3020	MOT	6.84	5.70	3.80
2N3026	MOT	59.40	49.50	33.00
2N3036	TI	6.60	5.50	3.70
2N3043	MOT	46.80	39.00	26.00
2N3044	MOT	39.60	33.00	22.00
2N3045	MOT	17.10	14.25	9.50
2N3046	MOT	43.20	36.00	24.00
2N3047	MOT	36.00	30.00	20.00
2N3048	MOT	15.30	12.75	8.50
2N3049	MOT	41.40	34.50	23.00
2N3050	MOT	28.80	24.00	16.00
2N3053	MOT	1.00	.83	.57
2N3053	RCA	.90	.75	.54
			1000-Up Ea.	.45
2N3054	RCA	1.39	1.16	.84
			1000-Up Ea.	.70
2N3055	MOT	2.19	1.82	1.32
2N3055	RCA	2.19	1.82	1.32
			1000-Up Ea.	1.10
2N3114	MOT	7.20	6.00	4.00
2N3115	MOT	2.34	1.95	1.30
2N3116	MOT	2.88	2.40	1.60
2N3118	RCA	5.95	4.95	3.60
			1000-Up Ea.	3.00
2N3119	RCA	6.44	5.36	3.90
			1000-Up Ea.	3.25
2N3127	MOT	6.12	5.10	3.40
2N3133	MOT	5.94	4.95	3.30
2N3134	MOT	7.00	5.85	3.90
2N3135	MOT	5.94	4.95	3.30
2N3136	MOT	7.00	5.85	3.90
2N3137	MOT	4.14	3.45	2.30
2N3146	TI	5.22	4.35	2.90
2N3210	MOT	1.00	.83	.55
2N3211	MOT	1.52	1.27	.85
2N3217	SPR	3.06	2.55	1.70
2N3218	SPR	2.70	2.25	1.50
2N3219	SPR	3.06	2.55	1.70
2N3227	MOT	2.88	2.40	1.60
2N3228	RCA	1.95	1.62	1.18
			1000-Up Ea.	.98
2N3229	RCA	26.65	22.21	18.38
			1000-Up Ea.	15.32
2N3232	MOT	4.50	3.75	2.50
2N3235	MOT	4.50	3.75	2.50
2N3241A	RCA	.88	.73	.53
			1000-Up Ea.	.44
2N3242A	RCA	1.01	.83	.60.50
2N3244	MOT	18.90	15.75	10.50
2N3245	MOT	18.90	15.75	10.50
2N3248	MOT	4.68	3.90	2.60
2N3249	MOT	5.58	4.65	3.10
2N3250	MOT	3.84	3.20	2.15
2N3250A	MOT	4.26	3.55	2.38
2N3251	MOT	4.26	3.55	2.38
2N3251A	MOT	4.68	3.90	2.59
2N3252	MOT	11.17	9.75	6.50
2N3253	MOT	11.17	9.75	6.50
2N3261	RCA	1.59	1.32	.96
			1000-Up Ea.	.80
2N3262	RCA	8.92	7.43	5.40
			1000-Up Ea.	4.50
2N3263	RCA	69.60	58.00	48.00
			1000-Up Ea.	40.00
2N3264	RCA	55.20	40.60	33.60
			1000-Up Ea.	28.00
2N3265	RCA	73.00	60.90	50.40
			1000-Up Ea.	42.00
2N3266	RCA	52.20	43.50	36.00
			1000-Up Ea.	30.00
2N3279	MOT	5.40	4.50	3.00
2N3280	MOT	4.90	4.10	2.75
2N3282	MOT	2.58	2.15	1.45
2N3283	MOT	1.80	1.50	1.00
2N3284	MOT	1.70	1.42	.95
2N3286	MOT	1.16	.97	.65
2N3287	MOT	6.72	5.60	3.75
			500-Up Ea.	3.35
2N3288	MOT	6.12	5.10	3.40
			500-Up Ea.	3.00
2N3290	MOT	4.80	4.00	2.65
			500-Up Ea.	2.40
2N3293	MOT	1.98	1.65	1.10
			500-Up Ea.	1.00
2N3294	MOT	1.80	1.50	1.00
			500-Up Ea.	.90
2N3295	MOT	7.20	6.00	4.00
2N3296	MOT	18.00	15.00	10.00
2N3298	MOT	2.88	2.40	1.60
2N3299	MOT	.90	.75	.50
2N3300	MOT	1.26	1.05	.70
2N3301	MOT	.90	.75	.50
2N3302	MOT	1.26	1.05	.70
2N3303	MOT	16.20	13.50	9.00
2N3304	MOT	5.40	4.50	3.00
2N3307	MOT	12.60	10.50	7.00
2N3308	MOT	10.80	9.00	6.00
2N3323	MOT	1.07	.90	.60
2N3324	MOT	.98	.82	.55
2N3325	MOT	.90	.75	.50
2N3329	TI	4.56	3.80	2.55
2N3331	TI	4.38	3.65	2.45
2N3348	TI	13.50	11.25	7.50
2N3350	TI	17.10	14.25	9.50
2N3351	TI	14.04	11.70	7.80
2N3375	MOT	11.88	9.90	7.60
2N3375	RCA	12.95	10.80	8.95
			1000-Up Ea.	7.45
2N3375TX/ JAN	RCA	25.92	21.60	17.85
			1000-Up Ea.	14.90

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-9999	10,000-Up
2N3391	SPR	.47	.39	.26	.21	.17
2N3391A	SPR	.54	.45	.30	.24	.20
2N3392	SPR	.30	.25	.17	.14	.11
2N3393	SPR	.30	.25	.17	.14	.11
2N3394	SPR	.30	.25	.17	.14	.11
2N3395	SPR	.40	.33	.22	.18	.15
2N3396	SPR	.30	.25	.17	.14	.11
2N3397	SPR	.29	.24	.16	.13	.10
2N3398	SPR	.29	.24	.16	.13	.10
2N3402	SPR	.40	.33	.22	.18	.14
2N3403	SPR	.42	.35	.23	.19	.15
2N3404	SPR	.60	.50	.33	.26	.21
2N3405	SPR	.72	.60	.40	.32	.26
2N3409	MOT	16.20	13.50	9.00	....	....
2N3410	MOT	18.00	15.00	10.00	....	....
2N3414	SPR	.34	.28	.19	.16	.12
2N3415	SPR	.36	.30	.20	.17	.13
2N3416	SPR	.54	.45	.30	.24	.19
2N3417	SPR	.66	.55	.37	.30	.24

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N3418	TI	12.54	10.45	6.95
2N3423	MOT	15.84	13.20	8.80
2N3424	MOT	18.90	15.75	10.50
2N3425	MOT	6.30	5.25	3.50
2N3427	MOT	2.34	1.95	1.30
2N3428	MOT	2.70	2.25	1.50
2N3439	MOT	2.32	1.93	1.43
2N3439	RCA	4.45	3.71	2.70
			1000-Up Ea.	2.25
2N3440	MOT	1.74	1.45	1.07
2N3440	RCA	2.18	1.82	1.32
			1000-Up Ea.	1.10
2N3441	RCA	2.98	2.48	1.80
			1000-Up Ea.	1.50
2N3441/JAN	RCA	3.66	3.05	2.22
			1000-Up Ea.	1.85
2N3442	RCA	5.46	4.54	3.30
			1000-Up Ea.	2.75
2N3442/JAN	RCA	6.83	5.69	4.14
			1000-Up Ea.	3.45
2N3444	MOT	14.40	12.00	8.00
2N3445	MOT	10.80	9.00	6.00
2N3446	MOT	16.20	13.50	9.00
2N3447	MOT	17.25	14.40	9.60
2N3448	MOT	21.60	18.00	12.00
2N3467	MOT	11.70	9.75	6.50
2N3478	RCA	2.28	1.90	1.38
			1000-Up Ea.	1.15
2N3486	MOT	12.23	10.20	6.80
2N3486A	MOT	16.20	13.50	9.00
2N3494	MOT	11.70	9.75	6.50
2N3495	MOT	15.30	12.75	8.50
2N3496	MOT	11.70	9.75	6.50
2N3498	MOT	7.90	6.60	4.40
2N3499	MOT	8.90	7.40	4.95
2N3500	MOT	13.50	11.25	7.50
2N3501	MOT	15.10	12.60	8.40
2N3504	TI	2.40	2.00	1.32
2N3505	TI	3.72	3.10	2.06
2N3506	MOT	13.85	11.55	7.70
2N3507	MOT	15.80	13.20	8.80
2N3509	MOT	6.48	5.40	3.60
2N3510	MOT	1.74	1.45	.97
2N3511	MOT	2.34	1.95	1.29
2N3512	RCA	1.30	1.08	.78
			1000-Up Ea.	.65
2N3515	MOT	32.40	27.00	18.00
2N3518	MOT	39.60	33.00	22.00
2N3525	RCA	2.77	2.31	1.68
			1000-Up Ea.	1.40

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N3528	RCA	1.90	1.58	1.14
			1000-Up Ea.	.95
2N3529	RCA	2.36	1.96	1.43
			1000-Up Ea.	1.19
2N3546	MOT	6.30	5.25	3.50
2N3553	MOT	3.90	3.25	2.50
			1000-Up Ea.	2.05
2N3553	RCA	5.25	4.37	3.18
			1000-Up Ea.	2.65
2N3553TX/ JAN	RCA	10.49	8.74	6.36
			1000-Up Ea.	5.30
2N3555	TI	8.94	7.45	4.95
2N3556	TI	10.74	8.95	5.95
2N3558	TI	17.04	14.20	9.45
2N3559	TI	6.90	5.75	3.83
2N3572	TI	7.10	5.90	3.95
2N3574	TI	20.70	17.25	11.50
2N3575	TI	22.32	18.60	12.50
2N3576	TI	2.94	2.45	1.63
2N3583	RCA	2.98	2.48	1.80
			1000-Up Ea.	1.50
2N3584	RCA	4.96	4.13	3.00
			1000-Up Ea.	2.50
2N3585	RCA	7.92	6.60	4.80
			1000-Up Ea.	4.00
2N3600	RCA	4.56	3.80	2.76
			1000-Up Ea.	2.30
2N3611	MOT	1.38	1.15	.78
2N3612	MOT	1.56	1.30	.88
2N3613	MOT	1.50	1.25	.85
2N3614	MOT	1.68	1.40	.94
2N3615	MOT	1.98	1.65	1.10
2N3616	MOT	2.52	2.10	1.39
2N3617	MOT	2.26	1.88	1.25
2N3618	MOT	2.85	1.37	1.58
2N3632	RCA	15.30	12.75	10.55
			1000-Up Ea.	8.80
2N3634	MOT	15.80	13.20	8.80
2N3635	MOT	17.30	14.40	9.60
2N3636	MOT	23.28	19.40	12.95
2N3637	MOT	25.60	21.30	14.20
2N3647	MOT	2.70	2.25	1.50
2N3648	MOT	3.24	2.70	1.80
2N3668	RCA	2.87	2.39	1.74
			1000-Up Ea.	1.45
2N3669	RCA	3.38	2.81	2.04
			1000-Up Ea.	1.70
2N3670	RCA	4.56	3.80	2.76
			1000-Up Ea.	2.30
2N3671	MOT	5.40	4.50	3.00
2N3672	MOT	5.40	4.50	3.00
2N3673	MOT	6.24	5.20	3.40
2N3677	MOT	3.33	2.76	1.84
2N3702	TI	.45	.37	.32
2N3703	TI	.41	.34	.29
2N3704	TI	.41	.34	.29
2N3705	TI	.35	.29	.25
2N3706	TI	.32	.27	.24
2N3707	TI	.41	.34	.29
2N3708	TI	.33	.27	.24
2N3709	TI	.35	.29	.25
2N3710	TI	.36	.30	.27
2N3711	TI	.39	.32	.28
2N3712	MOT	2.70	2.25	1.50
2N3712	TI	3.60	3.00	2.00
2N3713	MOT	3.47	2.89	2.14
2N3714	MOT	3.70	3.08	2.28
2N3715	MOT	4.06	3.38	2.50
2N3716	MOT	3.74	3.95	2.95
2N3719	MOT	11.70	9.75	6.50
2N3720	MOT	13.12	10.85	7.25
2N2721	SPR	.29	.24	.16
			1000-9999 Ea.	.13
			10000-Up Ea.	.10
2N3722	MOT	7.20	6.00	4.00
2N3723	MOT	15.60	13.00	8.65
2N3730	RCA	1.49	1.24	.90
			1000-Up Ea.	.75
2N3731	RCA	1.95	1.62	1.18
			1000-Up Ea.	.98
2N3732	RCA	1.29	1.07	.78
			1000-Up Ea.	.65
2N3733	MOT	18.00	15.00	11.50
2N3733	RCA	18.95	15.80	13.10
			1000-Up Ea.	10.90
2N3734	MOT	7.20	6.00	4.00
2N3735	MOT	7.20	6.00	4.00
2N3736	MOT	7.90	6.60	4.40
2N3737	MOT	7.92	6.60	4.40
2N3738	MOT	1.85	1.54	1.14
2N3739	MOT	2.15	1.82	1.35
2N3740	MOT	2.32	1.93	1.43
2N3741	MOT	3.12	2.60	1.60
2N3742	MOT	15.10	12.60	8.40
2N3743	MOT	35.20	29.25	19.50
2N3762	MOT	9.00	7.50	5.00
2N3763	MOT	9.00	7.50	5.00
2N3765	MOT	9.90	8.25	5.50
2N3766	MOT	2.52	2.10	1.40
2N3767	MOT	2.76	2.30	1.55
2N3771	RCA	4.96	4.13	3.00
			1000-Up Ea.	2.50
2N3772	RCA	4.96	4.13	3.00
			1000-Up Ea.	2.50
2N3773	RCA	8.92	7.43	5.40
			1000-Up Ea.	4.50
2N3785	MOT	8.10	6.75	4.50
2N3789	MOT	5.19	4.32	3.20
2N3790	MOT	6.24	5.20	3.85
2N3791	MOT	5.57	4.64	3.43
2N3792	MOT	6.94	5.78	4.28

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N3796	MOT	4.15	3.45	2.30
			1000-Up Ea.	2.07
2N3797	MOT	4.15	3.45	2.30
			1000-Up Ea.	2.07
2N3798	MOT	7.38	6.15	4.10
2N3799	MOT	8.10	6.75	4.50
2N3800	MOT	17.10	14.25	9.50
2N3801	MOT	18.90	15.75	10.50
2N3802	MOT	25.20	21.00	14.00
2N3803	MOT	27.00	22.50	15.00
2N3804	MOT	31.50	26.25	17.50
2N3804A	MOT	41.04	34.20	22.80
2N3805	MOT	33.30	27.75	18.50
2N3805A	MOT	43.38	36.15	24.10
2N3806	MOT	14.04	11.70	7.80
2N3807	MOT	17.10	14.25	9.50
2N3808	MOT	17.46	14.55	9.70
2N3809	MOT	27.00	22.50	15.00
2N3810	MOT	24.30	20.25	13.50
2N3810A	MOT	41.04	34.20	22.80
2N3811	MOT	33.30	27.75	18.50
2N3811A	MOT	43.38	36.15	24.10
2N3812	MOT	22.50	18.75	12.50
2N3813	MOT	24.30	20.25	13.50
2N3814	MOT	34.20	28.50	19.00
2N3815	MOT	36.00	30.00	20.00
2N3816	MOT	45.90	38.25	25.50
2N3816A	MOT	59.04	49.20	32.80
2N3817	MOT	47.70	39.75	26.50
2N3817A	MOT	62.10	51.75	34.50
2N3819	TI	.67	.56	.49
2N3820	TI	.88	.72	.63
2N3822	MOT	2.64	2.20	1.45
			1000-Up Ea.	1.30
2N3823	MOT	2.26	1.88	1.25
			1000-Up Ea.	1.12
2N3823	TI	2.34	1.95	1.40
2N3824	MOT	2.07	1.72	1.15
			1000-Up Ea.	1.03
2N3829	TI	6.54	5.45	3.62
2N3838	TI	33.30	27.75	18.50
2N3839	MOT	11.40	9.50	7.30
2N3839	RCA	16.56	13.80	11.40
			1000-Up Ea.	9.50

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-9999	10,000-Up
2N3843	SPR	.49	.41	.27	.23	.18
2N3843A	SPR	.52	.43	.29	.24	.19
2N3844	SPR	.52	.43	.29	.24	.19
2N3844A	SPR	.54	.45	.30	.25	.20
2N3845	SPR	.54	.45	.30	.25	.20
2N3845A	SPR	.56	.47	.32	.26	.21
2N3854	SPR	.35	.29	.20	.17	.13
2N3854A	SPR	.38	.32	.21	.18	.14
2N3855	SPR	.38	.32	.21	.18	.14
2N3855A	SPR	.41	.34	.23	.19	.15
2N3856	SPR	.41	.34	.23	.19	.15
2N3856A	SPR	.43	.36	.24	.20	.16
2N3858	SPR	.30	.25	.17	.14	.11
2N3858A	SPR	.40	.33	.22	.18	.14
2N3859	SPR	.35	.29	.18	.15	.12
2N3859A	SPR	.43	.36	.24	.19	.15
2N3860	SPR	.38	.32	.21	.17	.13

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N3866	MOT	1.92	1.60	1.23
			1000-Up Ea.	1.00
2N3866	RCA	1.98	1.65	1.25
			1000-Up Ea.	1.00
2N3870	RCA	4.66	3.88	2.82
			1000-Up Ea.	2.35
2N3871	RCA	5.45	4.54	3.30
			1000-Up Ea.	2.75
2N3872	RCA	7.33	6.11	4.44
			1000-Up Ea.	3.70
2N3873	RCA	9.87	8.22	5.98
			1000-Up Ea.	4.98
2N3877	SPR	.54	.45	.30
			1000-9999 Ea.	.24
			10000-Up Ea.	.19
2N3877A	SPR	.59	.49	.33
			1000-9999 Ea.	.26
			10000-Up Ea.	.21
2N3878	RCA	3.76	3.13	2.28
			1000-Up Ea.	1.90
2N3879	RCA	5.74	4.78	3.48
			1000-Up Ea.	2.90
2N3896	RCA	5.25	4.37	3.18
			1000-Up Ea.	2.65
2N3897	RCA	6.04	5.03	3.66
			1000-Up Ea.	3.05
2N3898	RCA	7.92	6.60	4.80
			1000-Up Ea.	4.00
2N3899	RCA	10.50	8.75	6.36
			1000-Up Ea.	5.30
2N3900	SPR	.43	.36	.24
			1000-9999 Ea.	.19
			10000-Up Ea.	.16
2N3900A	SPR	.47	.39	.26
			1000-9999 Ea.	.21
			10000-Up Ea.	.17
2N3903	MOT	.90	.75	.50
			1000-4999 Ea.	.37
			5000-Up Ea.	.35
2N3904	MOT	.98	.82	.55
			1000-4999 Ea.	.41
			5000-Up Ea.	.38
2N3905	MOT	.90	.75	.50
			1000-4999 Ea.	.37
			5000-Up Ea.	.35

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N3906	MOT	.99	.82	.55
			1000-4999 Ea.	.41
			5000-Up Ea.	.38
2N3909	TI	2.46	2.05	1.40
2N3924	MOT	4.80	4.00	2.80
			1000-Up Ea.	2.40
2N3925	MOT	7.20	6.00	4.10
			1000-Up Ea.	3.50
2N3932	RCA	1.68	1.40	1.02
			1000-Up Ea.	.85
2N3933	RCA	1.95	1.62	1.18
			1000-Up Ea.	.98
2N3946	MOT	3.28	2.40	1.60
2N3947	MOT	3.30	2.75	1.85
2N3948	MOT	6.18	5.15	3.42
			1000-Up Ea.	2.80
2N3950	MOT	41.00	34.20	22.80
2N3959	MOT	12.60	10.50	7.00
			1000-Up Ea.	6.30
2N3960	MOT	15.72	13.10	8.75
			1000-Up Ea.	7.90
2N3961	MOT	10.42	8.70	5.80
			1000-Up Ea.	5.20
2N3970	TI	3.90	3.25	2.40
2N3971	TI	3.60	3.00	2.15
2N3972	TI	3.18	2.65	1.90
2N3975	SPR	.46	.38	.26
			1000-9999 Ea.	.21
			10000-Up Ea.	.17
2N3976	SPR	.49	.41	.27
			1000-9999 Ea.	.23
			10000-Up Ea.	.18
2N3977	MOT	4.00	3.30	2.20
2N3978	MOT	3.60	3.00	2.00
2N3980	MOT	4.08	3.40	2.25
2N3993	TI	6.72	5.60	4.05
2N3993A	TI	6.84	5.70	4.20
2N3994	TI	5.76	4.80	3.42
2N3994A	TI	5.94	4.95	3.54
2N4001	TI	9.18	7.65	5.10
2N4012	MOT	17.05	14.20	11.75
2N4012	RCA	17.04	14.20	11.75
			1000-Up Ea.	9.80
2N4036	RCA	1.59	1.32	.96
			1000-Up Ea.	.80
2N4037	RCA	1.39	1.16	.84
			1000-Up Ea.	.70
2N4048	MOT	6.72	5.60	3.75
2N4049	MOT	9.00	7.50	5.00
2N4050	MOT	11.15	9.30	6.20
2N4051	MOT	7.74	6.45	4.30
2N4058	TI	.42	.35	.31
2N4059	TI	.35	.29	.25
2N4060	TI	.36	.30	.27
2N4061	TI	.38	.32	.28
2N4062	TI	.41	.34	.29
2N4063	RCA	4.56	3.80	2.76
			1000-Up Ea.	2.30
2N4064	RCA	2.28	1.90	1.38
			1000-Up Ea.	1.15
2N4068	RCA	1.61	1.34	.97
			1000-Up Ea.	.81
2N4069	RCA	1.68	1.40	1.02
			1000-Up Ea.	.85
2N4072	MOT	2.70	2.25	1.50
			1000-Up Ea.	1.35
2N4073	MOT	3.24	2.70	1.80
			1000-Up Ea.	1.62
2N4074	RCA	.88	.73	.53
			1000-Up Ea.	.44
2N4091	MOT	3.78	3.15	2.10
			1000-Up Ea.	1.90
2N4092	MOT	2.22	1.85	1.23
			1000-Up Ea.	1.10
2N4093	MOT	2.59	2.15	1.45
			1000-Up Ea.	1.30
2N4101	RCA	3.65	3.05	2.22
			1000-Up Ea.	1.85
2N4102	RCA	3.17	2.64	1.92
			1000-Up Ea.	1.60
2N4103	RCA	6.15	5.12	3.72
			1000-Up Ea.	3.10
2N4123	MOT	.63	.52	.35
			1000-4999 Ea.	.26
			5000-Up Ea.	.24
2N4124	MOT	.72	.60	.40
			1000-4999 Ea.	.30
			5000-Up Ea.	.28
2N4125	MOT	.63	.52	.35
			1000-4999 Ea.	.26
			5000-Up Ea.	.24
2N4126	MOT	.72	.60	.40
			1000-4999 Ea.	.30
			5000-Up Ea.	.28
2N4151	MOT	1.74	1.45	1.05
2N4152	MOT	1.92	1.60	1.10
2N4153	MOT	2.10	1.75	1.25
2N4154	MOT	2.34	1.95	1.35
2N4155	MOT	2.88	2.40	1.60
2N4156	MOT	3.36	2.80	1.85
2N4160	MOT	1.92	1.60	1.10
2N4162	MOT	2.34	1.95	1.35
2N4164	MOT	3.36	2.80	1.85
2N4167	MOT	1.92	1.60	1.20
2N4168	MOT	2.10	1.75	1.25
2N4169	MOT	2.28	1.90	1.40
2N4170	MOT	2.52	2.10	1.50
2N4171	MOT	3.06	2.55	1.75
2N4172	MOT	3.54	2.95	2.00
2N4173	MOT	6.18	5.15	3.50
2N4174	MOT	8.27	6.90	4.65

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them. On Zener Diodes, we ship the better tolerance device at the same price at our discretion.

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N4175	MOT	1.92	1.60	1.20
2N4177	MOT	2.28	1.90	1.40
2N4178	MOT	2.52	2.10	1.50
2N4179	MOT	3.06	2.55	1.75
2N4180	MOT	3.54	2.95	2.00
2N4182	MOT	8.27	6.90	4.65
2N4183	MOT	1.91	1.59	1.19
2N4184	MOT	2.09	1.74	1.24
2N4185	MOT	2.27	1.89	1.39
2N4186	MOT	2.51	2.09	1.49
2N4187	MOT	3.05	2.54	1.74
2N4188	MOT	3.53	2.94	1.99
2N4189	MOT	6.17	5.14	3.49
2N4190	MOT	8.27	6.89	4.64
2N4191	MOT	1.91	1.59	1.19
2N4192	MOT	2.09	1.74	1.24
2N4193	MOT	2.27	1.89	1.39
2N4194	MOT	2.51	2.09	1.49
2N4195	MOT	3.05	2.54	1.74
2N4196	MOT	3.53	2.94	1.99
2N4198	MOT	8.27	6.89	4.64

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
2N4199	MOT	25.50	21.25	19.10	15.00
2N4200	MOT	34.50	28.75	25.80	20.00
2N4202	MOT	53.10	44.25	38.40	29.50
2N4203	MOT	62.10	51.75	45.05	34.50
2N4204	MOT	76.50	63.75	55.70	42.50

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N4212	MOT	2.58	2.15	1.45
2N4213	MOT	3.13	2.60	1.75
2N4214	MOT	3.96	3.30	2.20
2N4215	MOT	5.40	4.50	3.00
2N4216	MOT	5.94	4.95	3.30
2N4220	MOT	1.80	1.50	1.00
			1000-Up Ea.	.90
2N4220A	MOT	2.07	1.72	1.15
			1000-Up Ea.	1.04
2N4221	MOT	1.68	1.40	.95
			1000-Up Ea.	.85
2N4221A	MOT	1.98	1.65	1.10
			1000-Up Ea.	.99
2N4222	MOT	1.70	1.42	.95
			1000-Up Ea.	.85
2N4222A	MOT	1.98	1.65	1.10
			1000-Up Ea.	.99
2N4223	MOT	1.80	1.50	1.00
			1000-Up Ea.	.90
2N4224	MOT	1.98	1.65	1.10
			1000-Up Ea.	.99
2N4231	MOT	2.52	2.10	1.40
2N4232	MOT	2.88	2.40	1.60
2N4233	MOT	3.84	3.20	2.15
2N4234	MOT	2.28	1.90	1.26
2N4235	MOT	3.00	2.50	1.66
2N4236	MOT	3.36	2.80	1.86
2N4237	MOT	1.80	1.50	1.00
2N4238	MOT	2.10	1.75	1.17
2N4239	MOT	2.46	2.05	1.37
2N4240	RCA	3.47	2.89	2.10
			1000-Up Ea.	1.75
2N4252	TI	2.34	1.95	1.30
			1000-Up Ea.	1.23
2N4259	RCA	2.28	1.90	1.38
			1000-Up Ea.	1.15
2N4260	MOT	14.75	12.35	8.25
2N4261	MOT	17.50	14.60	9.75
2N4264	MOT	.58	.48	.32
			1000-Up Ea.	.24
2N4265	MOT	.65	.54	.36
			1000-Up Ea.	.27
2N4276	MOT	4.20	3.50	2.35
2N4314	RCA	1.49	1.24	.90
			1000-Up Ea.	.75
2N4346	RCA	2.77	2.31	1.68
			1000-Up Ea.	1.40
2N4347	RCA	3.57	2.97	2.16
			1000-Up Ea.	1.80

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N4348	RCA	4.96	4.13	3.00
			1000-Up Ea.	2.50
2N4351	MOT	3.42	2.85	1.90
			1000-Up Ea.	1.70
2N4352	MOT	3.24	2.70	1.80
			1000-Up Ea.	1.62
2N4383	SPR	1.26	1.05	.70
2N4384	SPR	1.26	1.05	.70
2N4390	RCA	.90	.75	.54
			1000-Up Ea.	.45
2N4391	MOT	5.04	4.20	2.80
			1000-Up Ea.	2.50
2N4392	MOT	3.42	2.85	1.90
			1000-Up Ea.	1.72
2N4393	MOT	3.66	3.05	2.05
			1000-Up Ea.	1.84
2N4398	MOT	13.50	11.25	7.50
2N4399	MOT	16.20	13.50	9.05

Motorola Type No.	1-9	10-99	100-999	1000-4999	5000-Up
2N4400	.72	.60	.40	.30	.28
2N4401	.90	.75	.50	.38	.35
2N4402	.72	.60	.40	.30	.28
2N4403	.90	.75	.50	.38	.35
2N4404	9.90	8.25	5.50	....	....
2N4405	11.70	9.75	6.50	....	....
2N4406	13.50	11.25	7.50	....	....
2N4407	15.30	12.75	8.50	....	....
2N4409	.81	.67	.45	.34	.31
2N4410	1.44	1.20	.96	.64	.48

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N4411	MOT	21.60	18.00	12.00
2N4416	MOT	2.94	2.45	1.65
			1000-Up Ea.	1.49
2N4424	SPR	.47	.39	.26
			1000-9999 Ea.	.21
			10000-Up Ea.	.17
2N4425	SPR	.52	.43	.29
			1000-9999 Ea.	.23
			10000-Up Ea.	.19
2N4427	MOT	2.28	1.90	1.46
			1000-Up Ea.	1.20
2N4427	RCA	2.58	2.15	1.56
			1000-Up Ea.	1.30
2N4440	RCA	14.28	11.90	9.85
			1000-Up Ea.	8.20
2N4440/ JAN	RCA	21.60	18.00	15.00
			1000-Up Ea.	13.00
2N4440TX/ JAN	RCA	28.80	24.00	20.00
			1000-Up Ea.	16.50
2N4441	MOT	1.44	1.20	.80
2N4442	MOT	1.80	1.50	1.00
2N4443	MOT	2.40	2.00	1.35
2N4444	MOT	5.40	4.50	3.00
2N4851	MOT	1.17	.97	.65
2N4852	MOT	1.17	.97	.65
2N4853	MOT	2.70	2.25	1.50
2N4870	MOT	.90	.75	.50
2N4871	MOT	.82	.68	.45
2N4890	MOT	1.34	1.12	.75
2N4898	MOT	1.96	1.63	.121
2N4899	MOT	2.43	2.02	1.50
2N4900	MOT	2.71	2.26	1.67
2N4901	MOT	2.32	1.93	1.43
2N4902	MOT	3.36	2.80	2.07
2N4903	MOT	4.06	3.38	2.50
2N4904	MOT	2.77	2.31	1.71
2N4905	MOT	3.70	3.08	2.28
2N4906	MOT	4.62	3.85	2.85
2N4910	MOT	1.86	1.55	1.05
2N4911	MOT	2.16	1.80	1.20
2N4912	MOT	2.52	2.10	1.40
2N4913	MOT	2.08	1.73	1.28
2N4914	MOT	2.55	2.12	1.57
2N4915	MOT	3.47	2.89	2.14
2N4918	MOT	1.98	1.65	1.11
2N4919	MOT	2.28	1.90	1.27
2N4920	MOT	2.70	2.25	1.50
2N4921	MOT	1.60	1.33	.89
2N4922	MOT	1.77	1.48	.99
2N4923	MOT	2.16	1.80	1.20
2N4924	MOT	2.44	2.03	1.35
2N4925	MOT	3.00	2.50	1.65
2N4926	MOT	3.54	2.95	1.95
2N4927	MOT	3.77	3.15	2.10
2N4928	MOT	4.86	4.05	2.70
2N4929	MOT	5.95	4.95	3.30
2N4930	MOT	7.05	5.90	3.95
2N4931	MOT	8.10	6.75	4.50
2N4932	RCA	34.80	29.00	24.00
			1000-Up Ea.	20.00
2N4933	RCA	34.80	29.00	24.00
			1000-Up Ea.	20.00
2N4937	MOT	8.58	7.15	4.75
2N4938	MOT	6.84	5.70	3.80
2N4939	MOT	4.08	3.40	2.25
2N4940	MOT	18.90	15.75	10.50
2N4941	MOT	14.76	12.30	8.20
2N4942	MOT	10.62	8.85	5.90
2N4948	MOT	1.62	1.35	.90
2N4949	MOT	2.88	2.40	1.60

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N4957	MOT	18.52	15.45	11.00
2N4958	MOT	12.42	10.35	6.90
2N4959	MOT	8.10	6.75	4.50
2N4974	MOT	10.80	9.00	6.00
2N4975	MOT	9.00	7.50	5.00
2N5016	RCA	43.50	36.25	30.00
			1000-Up Ea.	25.00
2N5024	MOT	8.82	7.35	4.90
			1000-Up Ea.	4.40
2N5034	RCA	1.61	1.34	.98
			1000-Up Ea.	.81
2N5035	RCA	1.58	1.32	.96
			1000-Up Ea.	.80
2N5036	RCA	1.70	1.42	1.04
			1000-Up Ea.	.86
2N5037	RCA	1.69	1.41	1.02
			1000-Up Ea.	.85

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
2N5038	RCA	17.40	14.50	12.00	10.00
2N5039	RCA	13.92	11.60	9.60	8.00

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N5060	MOT	.83	.69	.46
2N5061	MOT	.94	.78	.52
2N5062	MOT	1.08	.90	.60
2N5063	MOT	1.35	1.12	.75
2N5067	MOT	2.16	1.80	1.20
2N5068	MOT	2.70	2.25	1.50
2N5069	MOT	3.42	2.85	1.90
2N5070	RCA	34.80	29.00	24.00
			1000-Up Ea.	20.00
2N5071	RCA	34.80	29.00	24.00
			1000-Up Ea.	20.00
2N5086	MOT	.90	.75	.50
2N5087	MOT	.97	.81	.54
2N5088	MOT	.90	.75	.50
2N5089	MOT	1.18	.98	.65
2N5090	RCA	13.68	11.40	8.30
2N5102	RCA	26.10	21.75	18.00
			1000-Up Ea.	15.00
2N5108	RCA	15.60	12.90	10.70
			1000-Up Ea.	8.90
2N5109	RCA	4.17	3.47	2.52
			1000-Up Ea.	2.10
2N5146	MOT	57.12	47.60	31.75
2N5155	MOT	9.42	7.85	5.25
2N5160	MOT	8.10	6.75	4.50
			1000-Up Ea.	4.05
2N5161	MOT	22.50	18.75	12.50
2N5162	MOT	32.40	27.00	18.00
2N5164	MOT	3.96	3.30	2.20
2N5165	MOT	5.58	4.65	3.10
2N5166	MOT	7.74	6.45	4.30
2N5167	MOT	11.70	9.75	6.50
2N5168	MOT	4.44	3.70	2.45
2N5169	MOT	6.00	5.00	3.35
2N5170	MOT	8.16	6.80	4.55
2N5171	MOT	12.12	10.10	6.75
2N6172	SPR	.23	.19	.12
			1000-9999 Ea.	.10
			10000-Up Ea.	.09

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
2N5179	MOT	1.16	.97	.75	.62
2N5180	RCA	.65	.54	.40	.33
2N5184	RCA	.58	.48	.35	.29
2N5185	RCA	.67	.56	.41	.34
2N5186	RCA	.48	.40	.29	.24
2N5187	RCA	.67	.56	.41	.34
2N5188	RCA	.79	.66	.48	.40
2N5189	RCA	.88	.73	.53	.44
2N5190	MOT	1.89	1.57	1.05	....
2N5191	MOT	2.30	1.92	1.28	....
2N5192	MOT	3.00	2.50	1.67	....
2N5193	MOT	2.40	2.00	1.33	....
2N5194	MOT	2.70	2.25	1.50	....
2N5195	MOT	3.48	2.90	1.95	....
2N5202	RCA	5.44	4.53	3.30	2.75

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-4999	5000-Up
2N5208	MOT	.65	.54	.36	.27	.25
2N5209	MOT	.79	.66	.44	.33	.31
2N5210	MOT	.87	.72	.48	.36	.34
2N5219	MOT	.34	.28	.19	.17	.14
2N5220	MOT	.33	.27	.18	.16	.13
2N5221	MOT	.36	.30	.20	.18	.15
2N5222	MOT	.29	.24	.16	.14	.12
2N5223	MOT	.25	.21	.14	.12	.11
2N5224	MOT	.29	.24	.16	.14	.12
2N5225	MOT	.32	.27	.18	.16	.13
2N5226	MOT	.36	.30	.20	.18	.15
2N5227	MOT	.29	.24	.16	.14	.12
2N5228	MOT	.34	.28	.19	.17	.14

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N5229	MOT	2.99	2.49	1.66
2N5230	MOT	3.60	3.00	2.00
2N5231	MOT	4.50	3.75	2.50

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
2N5239	RCA	6.92	5.77	4.20	3.50
2N5240	RCA	8.91	7.42	5.40	4.60
2N5262	RCA	1.95	1.62	1.18	.98
2N5265	MOT	5.58	4.65	3.10	2.80
2N5266	MOT	4.50	3.75	2.50	2.25
2N5267	MOT	4.14	3.45	2.30	2.05
2N5268	MOT	3.84	3.30	2.20	1.98
2N5269	MOT	4.14	3.45	2.30	2.05
2N5270	MOT	4.50	3.75	2.50	2.25
2N5293	RCA	1.09	.91	.66	.55
2N5294	RCA	1.09	.91	.66	.55
2N5295	RCA	1.09	.91	.66	.55
2N5296	RCA	1.09	.91	.66	.55
2N5297	RCA	1.25	1.04	.76	.63
2N5298	RCA	1.25	1.04	.76	.63
2N5301	MOT	8.28	6.90	4.60	....
2N5302	MOT	9.18	7.65	5.10	....
2N5303	MOT	14.40	12.00	8.00	....
2N5320	RCA	1.98	1.65	1.20	1.00
2N5321	RCA	1.39	1.16	.84	.70
2N5322	RCA	2.28	1.90	1.38	1.15

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2N5323	RCA	1.69	1.41	1.02
			1000-Up Ea.	.85
2N5324	MOT	5.40	4.50	3.00
2N5325	MOT	7.20	6.00	4.00
2N5334	MOT	4.06	3.38	2.50
2N5335	MOT	4.74	3.95	2.92
2N5336	MOT	6.81	5.67	4.20
2N5337	MOT	8.65	7.21	5.35
2N5338	MOT	9.60	8.00	5.92
2N5339	MOT	11.46	9.55	7.07
2N5344	MOT	21.60	18.00	12.00
2N5345	MOT	27.00	22.50	15.00
2N5346	MOT	43.20	36.00	24.00
2N5347	MOT	49.44	41.20	26.75
2N5348	MOT	54.96	45.80	30.50
2N5349	MOT	63.00	52.50	34.95
2N5357	MOT	18.00	15.00	10.00

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
2N5358	MOT	4.74	3.95	2.65	2.38
2N5359	MOT	4.14	3.45	2.30	2.05
2N5360	MOT	3.60	3.00	2.00	1.80
2N5361	MOT	3.13	2.65	1.76	1.58
2N5362	MOT	3.60	3.00	2.00	1.80
2N5363	MOT	4.14	3.45	2.30	2.05
2N5364	MOT	4.74	3.95	2.65	2.38
2N5400	MOT	.90	.75	.50	.45
2N5401	MOT	1.09	.91	.61	.55
2N5415	RCA	3.97	3.30	2.40	2.00
2N5416	RCA	5.94	4.95	3.60	3.00
2N5427	MOT	7.15	5.96	4.42	....
2N5428	MOT	9.04	7.53	5.57	....
2N5429	MOT	9.96	8.30	6.15	....
2N5430	MOT	9.30	9.75	7.23	....
2N5431	MOT	3.00	2.50	2.35	....
2N5435	MOT	13.02	10.85	7.25	....
2N5436	MOT	18.40	15.35	10.25	....
2N5437	MOT	21.60	18.00	12.00	....
2N5438	MOT	17.50	14.60	9.75	....
2N5439	MOT	22.02	18.35	12.25	....
2N5440	MOT	27.00	22.50	15.00	....
2N5441	RCA	9.81	8.17	5.94	4.95
2N5442	RCA	13.77	11.47	8.34	6.95
2N5443	RCA	16.36	13.63	11.28	9.40
2N5444	RCA	10.39	8.66	6.30	5.25
2N5445	RCA	12.61	10.51	8.70	7.25
2N5446	RCA	17.05	14.21	11.76	9.80
2N5457	MOT	.96	.80	.54	.43
2N5458	MOT	.88	.73	.49	.39
2N5459	MOT	.96	.80	.54	.43
2N5460	MOT	1.08	.90	.60	.48
2N5461	MOT	.81	.67	.45	.36
2N5462	MOT	1.08	.90	.60	.48
2N5463	MOT	1.62	1.35	.90	.72
2N5464	MOT	1.30	1.08	.72	.58
2N5465	MOT	1.62	1.35	.90	.72
2N5470	RCA	74.70	62.25	54.00	45.00
2N5471	MOT	3.06	2.55	1.70	1.50
2N5472	MOT	2.80	2.33	1.55	1.40
2N5473	MOT	2.58	2.15	1.45	1.30
2N5474	MOT	2.40	2.00	1.35	1.20
2N5475	MOT	2.16	1.80	1.20	1.05
2N5476	MOT	2.40	2.00	1.35	1.20
2N5477	MOT	39.55	33.00	22.00	....
2N5478	MOT	44.52	37.10	24.75	....
2N5479	MOT	51.00	42.50	28.30	....
2N5480	MOT	59.28	49.40	32.95	....
2N5484	MOT	1.18	.98	.65	.52
2N5485	MOT	1.26	1.05	.70	.56
2N5486	MOT	1.26	1.05	.70	.56
2N5490	RCA	1.29	1.07	.78	.65
2N5491	RCA	1.29	1.07	.78	.65
2N5492	RCA	1.42	1.19	.86	.72
2N5493	RCA	1.43	1.19	.86	.72
2N5494	RCA	1.43	1.19	.86	.72
2N5495	RCA	1.43	1.19	.86	.72
2N5496	RCA	1.55	1.29	.94	.78
2N5497	RCA	1.55	1.29	.94	.78
2N5550	MOT	.83	.69	.46	.41
2N5551	MOT	1.01	.84	.56	.50
2N5555	MOT	1.44	1.20	.80	.65
2N5556	MOT	14.40	12.00	9.50	8.00
2N5557	MOT	12.00	10.00	8.00	7.00
2N5558	MOT	11.40	9.50	7.50	6.50
2N5567	RCA	4.06	3.38	2.46	2.05
2N5568	RCA	5.29	4.41	3.20	2.67

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
2N5569	RCA	4.66	3.88	2.82	2.35
2N5570	RCA	5.88	4.90	3.56	2.97
2N5571	RCA	4.17	3.47	2.52	2.10
2N5572	RCA	5.58	4.65	3.38	2.82
2N5573	RCA	4.75	3.96	2.88	2.40
2N5574	RCA	6.18	5.15	3.74	3.12
2N5575	RCA	43.50	36.25	30.00	25.00
2N5576	RCA	43.50	36.25	30.00	25.00
2N5577	RCA	48.72	40.60	33.60	28.00
2N5578	RCA	52.20	43.50	36.00	30.00
2N5579	RCA	52.20	43.50	36.00	30.00
2N5580	RCA	57.42	47.85	39.60	33.00
2N5671	RCA	27.84	23.20	19.20	16.00
2N5672	RCA	43.50	36.25	30.00	25.00
3N74	TI	14.88	12.40	8.25	6.00
3N79	TI	4.42	3.68	2.45	2.25
3N108	TI	14.64	12.20	8.15	7.20
3N111	TI	10.62	8.85	5.90	5.25
3N116	SPR	4.50	3.75	2.50	....
3N124	MOT	3.60	3.00	2.00	1.70
3N126	MOT	3.60	3.00	2.00	1.70
3N128	RCA	1.74	1.45	1.06	.88
3N138	RCA	3.96	3.30	2.40	2.00
3N139	RCA	3.47	2.89	2.10	1.75
3N140	MOT	1.98	1.65	1.10	.99
3N140	RCA	1.95	1.62	1.18	.98
3N141	RCA	1.86	1.55	1.13	.94
3N142	RCA	1.30	1.08	.78	.65
3N143	RCA	1.67	1.39	1.01	.84
3N152	RCA	2.14	1.78	1.30	1.08
3N153	RCA	1.90	1.58	1.15	.96
3N154	RCA	1.95	1.62	1.18	.98
3N155	MOT	3.96	3.30	2.20	1.98
3N155A	MOT	7.56	6.30	4.20	3.75
3N156	MOT	3.96	3.30	2.20	1.98
3N156A	MOT	7.56	6.30	4.20	3.75
3N157	MOT	3.96	3.30	2.20	1.98
3N157A	MOT	7.56	6.30	4.20	3.75
3N158	MOT	3.96	3.30	2.20	1.98
3N158A	MOT	7.56	6.30	4.20	3.75
3N159	RCA	2.62	2.18	1.58	1.32

Type No.	Mfr.	EACH 1-9	10-99	100-Up
½M2.4AZ	MOT	2.52	2.10	1.70
½M2.4AZ5	MOT	4.80	4.00	3.20
½M2.4AZ10	MOT	3.12	2.60	2.10
½M3.0AZ	MOT	2.52	2.10	1.70
½M3.0AZ5	MOT	4.80	4.00	3.20
½M3.3AZ	MOT	2.52	2.10	1.70
½M3.3AZ5	MOT	4.80	4.00	3.20
½M3.6AZ	MOT	2.52	2.10	1.70
½M3.6AZ5	MOT	4.80	4.00	3.20
½M3.9AZ10	MOT	3.12	2.60	2.10
½M4.3AZ	MOT	2.52	2.10	1.70
½M4.7AZ	MOT	2.52	2.10	1.70
½M5.1AZ	MOT	2.52	2.10	1.70
½M5.1AZ10	MOT	3.12	2.60	2.10
½M5.6AZ	MOT	2.52	2.10	1.70
½M6.2AZ	MOT	2.52	2.10	1.70
½M6.2AZ5	MOT	4.80	4.00	3.20
½M6.8AZ	MOT	2.52	2.10	1.70
½M6.8Z	MOT	2.52	2.10	1.70
½M7.5Z	MOT	2.52	2.10	1.70
½M8.2Z	MOT	2.52	2.10	1.70
½M10Z	MOT	2.52	2.10	1.70
½M10Z5	MOT	4.80	4.00	3.20
½M11Z	MOT	2.52	2.10	1.70
½M11Z10	MOT	3.12	2.60	2.10
½M12Z	MOT	2.52	2.10	1.70
½M14Z10	MOT	3.12	2.60	2.10
½M15Z	MOT	2.52	2.10	1.70
½M15Z5	MOT	4.80	4.00	3.20
½M24Z5	MOT	4.80	4.00	3.20

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
1MA4	IR	.96	.80	.72	.63

Type No.	Mfr.	EACH 1-9	10-99	100-Up
2F4	ST	.60	.50	.40
3Z6.2T5	IR	5.46	4.55	3.65
5A2	IR	.38	.32	.28
5A4	IR	.49	.41	.35
5A5	IR	.54	.45	.38
5A6	IR	.60	.50	.44
5A8	IR	1.02	.85	.75
5A10	IR	1.44	1.20	1.02
5MA4	IR	1.13	.94	.76
5MA6	IR	2.04	1.70	1.35
6DP6A	IR	3.48	2.90	2.60
6DP10A	IR	6.30	5.25	4.70

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
8D4	IR	.53	.44	.44	.40
8D6	IR	.81	.67	.53	.48
9DD6A	IR	2.76	2.30	2.30	2.05
9DD10A	IR	3.12	2.60	2.60	2.30
10B1	IR	.60	.50	.50	.37
10B2	IR	.66	.55	.55	.40
10B3	IR	.78	.65	.65	.51
10B4	IR	.96	.80	.80	.64
10B5	IR	1.14	.95	.95	.75
10B6	IR	1.32	1.10	1.10	.88
10B8	IR	1.92	1.60	1.60	1.28
10B10	IR	2.46	2.05	2.05	1.64
10C1	IR	.39	.32	.32	.29
10C2	IR	.42	.35	.35	.32

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
10C3	IR	.46	.38	.38	.36
10C4	IR	.51	.42	.42	.38
10C6	IR	.63	.52	.52	.46
10C8	IR	.90	.75	.75	.65
10C10	IR	2.04	1.70	1.70	1.20
10D2	IR	.38	.32	.32	.28
10D3	IR	.44	.37	.37	.32
10D4	IR	.49	.41	.41	.35
10D5	IR	.54	.45	.45	.38
10D6	IR	.60	.50	.50	.44
10D8	IR	1.02	.85	.85	.75
10D10	IR	1.44	1.20	1.20	1.02

Type No.	Mfr.	EACH 1-9	10-99	100-Up
10DB1P	IR	1.20	1.00	.75
10DB2P	IR	1.32	1.10	.83
10DB4P	IR	1.44	1.20	.90
10DB6P	IR	1.79	1.49	1.11
16HFP	IR	.82	.52	.48
16RC10A	IR	9.60	8.00	5.30
16RC20A	IR	13.26	11.05	7.35
16RC40A	IR	20.46	17.05	11.35
16RC60A	IR	27.84	23.20	15.45
16RC80A	IR	43.14	35.95	23.95
16RC100A	IR	63.60	53.00	30.00
18DB2A	IR	2.86	2.38	2.14
18DB6A	IR	3.48	2.90	2.75
18DB10A	IR	6.15	5.12	4.95
18DC2A	IR	2.52	2.10	1.85
18DC6A	IR	2.76	2.30	2.05
18DC10A	IR	3.12	2.60	2.30
18DJ2A	IR	2.52	2.10	1.85
18DJ6A	IR	2.76	2.30	2.05
18DJ10A	IR	3.12	2.60	2.30
20AO5	IR	.54	.45	.32
20A1	IR	.60	.50	.35
20A2	IR	.66	.55	.39
20A3	IR	.72	.60	.43
20A4	IR	.84	.70	.50
20A5	IR	.96	.80	.56
20A6	IR	1.08	.90	.63
20A8	IR	1.56	1.30	.91
20A10	IR	1.92	1.60	1.10
21PT5	IR	1.32	1.10	.82
21PT10	IR	1.44	1.20	.90
21PT20	IR	1.56	1.30	.98
21PT40	IR	2.04	1.70	1.27
21PT60	IR	2.70	2.25	1.70
24HFP	IR	.92	.59	.54

IR Type No.	EACH 1-9	10-99	100-Up
30S1	.66	.55	.32
30S2	.72	.60	.40
30S3	.84	.70	.48
30S4	1.03	.86	.58
30S5	1.14	.95	.65
30S6	1.40	1.17	.78
30S8	3.67	3.06	2.16
30S10	5.46	4.55	3.05
40HF5	1.38	1.15	.80
40HF20	2.40	2.00	1.40
40HF30	3.06	2.55	1.85
40HF40	3.66	3.05	2.20
40HF50	4.62	3.85	2.80
40HF60	5.46	4.55	3.30
40HF70	6.90	5.75	4.10
40HF80	8.45	7.05	5.05
40HF90	9.84	8.20	6.10
40HF100	11.88	9.90	7.20
40RCS5	15.48	12.90	9.15
40RCS10	16.80	14.00	9.90
40RCS20	19.68	16.40	11.75
40RCS30	22.92	19.10	13.35
40RCS40	26.40	22.00	15.20
40RCS50	31.08	25.90	17.50
40RCS60	35.82	29.85	19.90
48HFP	1.14	.73	.66

Type No.	Mfr.	EACH 1-9	10-99	100-Up
50FB1L	IR	3.30	2.75	2.05
50FB2L	IR	3.84	3.20	2.40
50FB3L	IR	4.32	3.60	2.70
50FB4L	IR	5.04	4.20	3.15
50FB5L	IR	5.64	4.70	3.50
50FB6L	IR	6.24	5.20	3.90

Type No.	Mfr.	EACH 1-9	10-24	25-Up
60AC40	IR	72.60	60.50	58.50
60AC60	IR	157.20	131.00	92.00
60AC80	IR	220.80	184.00	112.00
60AC100	IR	267.60	223.00	148.00

Type No.	Mfr.	EACH 1-9	10-99	100-Up
60FB05L	IR	3.84	3.20	2.45
60FB1L	IR	4.14	3.45	2.65
60FB2L	IR	5.10	4.25	3.20
60FB3L	IR	5.65	4.70	3.50
60FB4L	IR	6.84	5.70	4.25
60FB6L	IR	8.40	7.00	5.25

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them. On Zener Diodes, we ship the better tolerance device at the same price at our discretion.

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
60J2	ST	8.16	6.80	5.81	5.45
60LA	ST	7.74	6.45	5.52	5.15
60M	ST	1.02	.85	.70	.66
61-8969	IR	3.54	2.95	2.35	1.95

IR Type No.	EACH 1-9	10-24	25-Up
67D020H53 PNN	6.60	5.50	4.95
67D030H53 PNN	7.20	6.00	5.40
67D050H04 TNN	6.00	5.00	4.50
67D050H55 FNN	10.43	8.70	7.85
67D075H04 TNN	9.00	7.50	6.75
67D100H04 TNN	12.00	10.00	9.00
67D120H04 TNN	14.40	12.00	10.80
67D150H04 TNN	18.60	15.50	13.50
67D300H04 TNN	36.00	30.00	27.00

IR Type No.	EACH 1-9	10-99	100-Up
79HFP	1.45	.94	.85
100PB05	4.85	4.05	3.25
100PB1P	5.15	4.30	3.35
100PB2P	6.20	5.15	4.15
100PB3P	6.65	5.55	4.50
100PB4P	7.62	6.35	5.15
100PB6P	11.92	9.95	8.00

IR Type No.	EACH 1-9	10-24	25-Up
115PA50	108.00	90.00	66.00
115PA80	187.20	156.00	120.00
115PA100	265.20	221.00	171.00
115PA120	348.00	290.00	236.00
126HFP	1.78	1.14	1.14
		100-Up Ea.	1.05
158HFP	1.88	1.21	1.21
		100-Up Ea.	1.12
175PA50	146.40	122.00	110.00
175PA80	247.20	206.00	175.00
175PA100	309.60	258.00	223.00
175PA120	390.00	325.00	275.00
200UB5	7.56	6.30	5.70
200UB10	8.52	7.10	6.40
200UB20	13.92	11.60	10.50
200UB30	16.08	13.40	12.10
200UB40	18.36	15.30	13.80
200UB50	21.36	17.80	16.10
237HFP	2.32	1.49	1.49
		100-Up Ea.	1.35
250PA50	182.40	152.00	137.00
250PA80	309.60	258.00	220.00
250PA100	390.00	325.00	280.00
250PA120	490.80	409.00	345.00

Type No.	Mfr.	EACH 1-9	10-99	100-Up
315HFP	IR	2.86	1.83	1.68
473HFP	IR	4.14	2.65	2.44
650C0	TI	5.82	4.85	4.15
650C3	TI	5.82	4.85	4.15
651C0	TI	5.82	4.85	4.15
651C4	TI	5.82	4.85	4.15
651C9	TI	5.82	4.85	4.15
652C0	TI	5.82	4.85	4.15
652C2	TI	5.82	4.85	4.15
652C5	TI	5.82	4.85	4.15
652C7	TI	5.82	4.85	4.15
653C0	TI	5.82	4.85	4.15
653C2	TI	5.82	4.85	4.15
653C3	TI	5.82	4.85	4.15
653C4	TI	5.82	4.85	4.15
653C9	TI	5.82	4.85	4.15
654C9	TI	5.82	4.85	4.15

Type No.	Mfr.	EACH 1-9	10-99	100-Up
655C9	TI	5.82	4.85	4.15
7715-3	VA	2.64	2.20	1.80
7715-3X	VA	4.87	4.06	3.32
7715-5	VA	3.30	2.75	2.25
7715-5X	VA	6.09	5.07	4.15
7715-6	VA	3.64	3.03	2.48
7715-7	VA	3.96	3.30	2.70
7715-7X	VA	7.30	6.08	5.00
7715-10	VA	5.28	4.40	3.60
7715-10X	VA	9.72	8.10	6.65
7715-15	VA	7.92	6.60	5.40
7715-15X	VA	14.64	12.20	9.95
7715-20	VA	9.24	7.70	6.30
7715-20X	VA	17.04	14.20	11.60
7715-30	VA	11.88	9.90	8.10
7715-30X	VA	21.93	18.27	11.90
7715-40	VA	14.52	12.10	9.90
7715-40X	VA	26.78	22.32	18.27
7715-50	VA	18.48	15.40	12.60
7715-50X	VA	34.09	28.41	23.25

RCA Type No.	EACH 1-9	10-99	100-999	1000-Up
40022	1.00	.83	.60	.50
40050	1.19	.99	.72	.60
40051	1.45	1.21	.88	.73
40080	1.30	1.08	.78	.65
40081	1.69	1.41	1.02	.85
40082	4.85	4.04	2.94	2.45
40084	1.19	.99	.72	.60
40108	1.19	.99	.72	.60
40109	1.39	1.16	.84	.70
40109R	1.39	1.16	.84	.70
40110	1.89	1.57	1.14	.95
40110R	1.89	1.57	1.14	.95
40111	2.58	2.15	1.56	1.30
40112	2.98	2.48	1.80	1.50
40114	4.45	3.71	2.70	2.25
40115	7.92	6.60	4.80	4.00
40208	1.19	.99	.72	.60
40209	1.59	1.32	.96	.80
40210	2.14	1.78	1.30	1.08
40210R	2.14	1.78	1.30	1.08
40212	3.47	2.89	2.10	1.75
40213	4.36	3.63	2.64	2.20
40214	5.05	4.21	3.06	2.55
40214R	5.05	4.21	3.06	2.55
40216	50.64	42.20	34.90	29.10
40231	.57	.47	.34	.28
40232	.64	.53	.39	.32
40233	.77	.64	.47	.39
40234	.54	.45	.32	.27
40235	.73	.61	.44	.37
40236	.61	.51	.37	.31
40237	.48	.40	.30	.25
40238	.55	.46	.34	.28
40242	.73	.61	.44	.37
40243	.60	.50	.36	.30
40244	.49	.41	.30	.25
40245	.52	.43	.31	.26
40246	.49	.41	.30	.25
40250	1.39	1.16	.84	.70
40250V1	1.49	1.24	.90	.75
40251	2.28	1.90	1.38	1.15
40254	.94	.78	.57	.47
40263	.67	.56	.41	.34
40265	.42	.35	.25	.21
40266	.35	.29	.21	.175
40267	.40	.33	.24	.20
40280	5.55	4.62	3.36	2.80
40281	12.72	10.60	8.75	7.30
40282	14.28	11.90	9.85	8.20
40290	2.98	2.48	1.80	1.50
40292	13.56	11.30	9.35	7.80
40309	.84	.70	.51	.42
40309V1	.94	.78	.57	.47
40309V2	.94	.78	.57	.47
40310	1.18	.99	.72	.60
40311	.88	.73	.53	.44
40311V1	.97	.81	.59	.49
40311V2	.97	.81	.59	.49
40312	1.24	1.03	.75	.62
40313	2.68	2.23	1.62	1.35
40314	.94	.78	.57	.47
40314V1	1.03	.86	.63	.52
40314V2	1.03	.86	.63	.52
40315	.90	.75	.54	.45
40315V1	1.00	.83	.60	.50
40315V2	1.00	.83	.60	.50
40316	1.18	.99	.72	.60
40317	.94	.78	.57	.47
40317V1	1.03	.86	.63	.52
40317V2	1.03	.86	.63	.52
40318	2.52	2.10	1.52	1.27
40319	1.39	1.16	.84	.70
40319V1	1.49	1.24	.90	.75
40319V2	1.49	1.24	.90	.75
40320	.94	.78	.57	.47
40320V1	1.03	.86	.63	.52
40320V2	1.03	.86	.63	.52
40321	1.49	1.24	.90	.75
40321V1	1.59	1.32	.96	.80
40321V2	1.59	1.32	.96	.80
40322	2.28	2.15	1.56	1.30
40323	.84	.70	.51	.42
40323V1	.94	.78	.57	.47

RCA Type No.	EACH 1-9	10-99	100-999	1000-Up
40323V2	.94	.78	.57	.47
40324	1.18	.99	.72	.60
40325	2.28	1.98	1.38	1.15
40326	.94	.78	.57	.47
40326V1	1.03	.86	.63	.52
40326V2	1.03	.86	.63	.52
40327	1.49	1.24	.90	.75
40327V1	1.59	1.32	.96	.80
40327V2	1.59	1.32	.96	.80
40328	2.63	2.19	1.60	1.33
40329	.60	.50	.37	.305
40340	34.80	29.00	24.00	20.00
40341	34.80	29.00	24.00	20.00
40346	1.37	1.14	.83	.69
40346V1	1.48	1.23	.89	.74
40346V2	1.48	1.23	.89	.74
40347	.90	.75	.54	.45
40347V1	1.09	.91	.66	.55
40347V2	1.09	.91	.66	.55
40348	1.27	1.06	.77	.64
40348V1	1.37	1.14	.83	.69
40348V2	1.37	1.14	.83	.69
40349	1.87	1.56	1.13	.94
40349V1	1.97	1.64	1.19	.99
40354	1.42	1.18	.86	.71
40355	1.49	1.24	.90	.75
40359	.48	.40	.29	.24
40360	1.09	.91	.66	.55
40360V1	1.19	.99	.72	.60
40360V2	1.19	.99	.72	.60
40361	1.24	1.03	.75	.62
40361V1	1.33	1.11	.81	.67
40361V2	1.33	1.11	.81	.67
40362	1.49	1.24	.90	.75
40362V1	1.59	1.32	.96	.80
40362V2	1.59	1.32	.96	.80
40363	2.19	1.82	1.32	1.10
40364	5.75	4.79	3.48	2.90
40366	9.40	7.84	5.70	4.75
40366V1	9.51	7.92	5.75	4.80
40366V2	9.51	7.92	5.75	4.80
40367	9.40	7.84	5.70	4.75
40369	15.65	13.05	10.80	9.00
40372	1.49	1.24	.90	.75
40373	3.20	2.56	1.86	1.55
40374	3.20	2.56	1.86	1.55
40375	6.05	5.03	3.66	3.05
40378	1.77	1.47	1.07	.89
40379	2.22	1.85	1.34	1.12
40385V1	11.46	9.55	6.95	5.80
40385V2	11.46	9.55	6.95	5.80
40389	1.09	.91	.66	.55
40390	2.58	2.15	1.56	1.30
40391	1.49	1.24	.90	.75
40392	1.09	.91	.66	.55
40394	1.49	1.24	.90	.75
40395	.55	.46	.34	.28
40396	1.09	.91	.66	.55
40397	.85	.71	.52	.43
40398	.77	.64	.47	.39
40399	.71	.59	.43	.36
40400	.65	.54	.40	.33
40405	2.19	1.82	1.32	1.10
40406	1.43	1.19	.87	.72
40407	.97	.81	.59	.49
40408	1.30	1.08	.78	.65
40409	1.37	1.14	.83	.69
40410	1.58	1.32	.96	.80
40411	5.15	4.29	3.12	2.60
40412	1.27	1.06	.77	.64
40412V1	1.37	1.14	.83	.69
40421	1.54	1.28	.93	.77
40429	2.47	2.06	1.50	1.25
40430	2.87	2.39	1.74	1.45
40431	3.07	2.56	1.86	1.55
40432	3.57	2.97	2.16	1.80
40433	3.57	2.97	2.16	1.80
40437	1.19	.99	.72	.60
40439	2.38	1.98	1.44	1.20
40440	1.58	1.32	.96	.80
40442	1.00	.83	.60	.50
40446	5.15	4.29	3.12	2.60
40450	.96	.80	.58	.48
40451	1.08	.90	.65	.54
40452	.96	.80	.58	.48
40453	.88	.73	.53	.44
40456	.69	.57	.41	.34
40458	.94	.78	.57	.47
40459	1.02	.85	.62	.51
40462	1.39	1.16	.84	.70
40467A	1.49	1.24	.90	.75
40468A	.90	.75	.54	.45
40485	1.89	1.57	1.14	.95
40486	2.47	2.06	1.50	1.25
40487	.36	.30	.22	.18
40488	.27	.22	.16	.13
40489	.34	.28	.20	.165
40490	.55	.46	.34	.28
40495	.36	.30	.22	.18
40502	2.68	2.23	1.62	1.35
40503	3.07	2.56	1.86	1.55
40504	2.14	1.78	1.30	1.08
40505	2.98	2.48	1.80	1.50
40506	3.97	3.22	2.34	1.95
40507	1.96	1.63	1.19	.99
40508	2.41	2.01	1.46	1.22
40509	2.08	1.73	1.26	1.05

RCA Type No.	EACH 1-9	10-99	100-999	1000-Up
40510	2.68	2.23	1.62	1.35
40511	3.27	2.72	1.98	1.65
40512	3.77	3.14	2.28	1.90
40513	1.48	1.24	.90	.75
40514	1.51	1.26	.92	.76
40519	3.95	3.29	2.38	2.34
40525	1.89	1.57	1.14	.95
40526	2.14	1.78	1.30	1.08
40527	2.98	2.48	1.80	1.50
40528	1.89	1.57	1.14	.95
40529	1.95	1.62	1.18	.98
40530	2.77	2.31	1.68	1.40
40531	2.08	1.73	1.26	1.05
40532	2.33	1.94	1.41	1.18
40533	2.08	2.65	1.92	1.60
40534	2.08	1.73	1.26	1.05
40535	2.13	1.78	1.30	1.08
40536	2.98	2.48	1.80	1.50
40537	1.49	1.24	.90	.75
40538	1.63	1.36	.99	.82
40539	.79	.66	.48	.40
40542	1.57	1.31	.95	.79
40543	1.65	1.37	1.00	.83
40544	.90	.75	.54	.45
40553	3.30	2.75	2.00	1.67
40554	5.33	4.44	3.22	2.68
40555	5.72	4.76	3.47	2.89
40559A	.84	.70	.51	.42
40561	5.49	4.54	3.30	2.75
40562	5.49	4.54	3.30	2.75
40563	5.49	4.54	3.30	2.75
40564	5.49	4.54	3.30	2.75
40565	5.49	4.54	3.30	2.75
40566	8.92	7.43	5.40	4.50
40567	7.83	6.52	4.74	3.95
40568	8.41	7.01	5.10	4.25
40569	8.92	7.43	5.40	4.50
40570	12.90	10.75	7.80	6.50
40571	10.32	8.60	6.24	5.20
40572	8.41	7.01	5.10	4.25
40573	9.78	8.15	5.94	4.95
40574	12.90	0.75	7.80	6.50
40575	2.98	2.48	1.80	1.50
40576	3.95	3.29	2.38	1.98
40581	5.85	4.87	3.54	2.95
40582	6.15	5.12	3.72	3.10
40594	2.68	2.23	1.62	1.35
40595	2.68	2.23	1.62	1.35
40600	1.49	1.24	.90	.75
40601	1.39	1.16	.84	.70
40602	1.00	.83	.60	.50
40603	1.25	1.04	.76	.63
40604	1.13	.98	.71	.59
40606	45.96	38.30	31.70	26.40
40608	2.98	2.48	1.80	1.50
40611	.85	.71	.52	.43
40612	.85	.71	.52	.43
40613	.88	.73	.53	.44
40616	.88	.73	.53	.44
40618	.89	.74	.54	.45
40621	1.03	.86	.62	.52
40622	1.06	.88	.64	.53
40623	1.03	.86	.62	.52
40624	1.37	1.14	.83	.69
40625	1.07	.89	.65	.54
40626	1.07	.89	.65	.54
40627	1.44	1.20	.83	.73
40628	1.13	.94	.68	.57
40629	.89	.74	.54	.45
40630	1.03	.86	.62	.52
40631	1.11	.97	.71	.59
40632	1.47	1.24	.90	.75
40633	1.52	1.27	.92	.77
40634	1.55	1.29	.94	.78
40635	.89	.74	.54	.45
40636	2.77	2.31	1.68	1.40
40637	1.09	.91	.66	.55
40638	1.98	1.65	1.20	1.00
40639	2.58	2.15	1.56	1.30
40640	3.27	2.72	1.98	1.65
40641	3.42	2.85	2.08	1.73
40642	1.19	.99	.72	.60
40643	1.09	.91	.66	.55
40644	1.00	.83	.60	.50
40653	3.13	2.61	1.90	1.58
40654	1.95	1.62	1.18	.98
40655	2.44	2.03	1.48	1.23
40656	2.04	1.70	1.24	1.03
40657	2.53	2.11	1.54	1.28
40658	2.23	1.86	1.36	1.13
40659	2.63	2.19	1.60	1.33
40660	6.94	5.78	4.20	3.50
40661	9.87	8.22	5.98	4.98
40662	7.53	6.27	4.56	3.80
40663	10.45	8.71	6.34	5.28
40664	2.65	2.22	1.61	1.34
40667	2.46	2.05	1.49	1.24
40668	1.95	1.62	1.18	.98
40669	2.62	2.18	1.58	1.32
40671	13.32	11.14	8.10	6.75
40672	12.45	10.37	8.58	7.15
40673	2.47	2.06	1.50	1.25

Type No.	Mfr.	EACH 1-9	10-99	100-Up
A1B	IR	1.46	1.22	.82
A1H	IR	.52	.43	.30
AF139	MOT	2.34	1.95	1.30
AF239	MOT	2.61	2.17	1.45
A01001	ECC	1.90	1.59	1.06
A01002	ECC	1.45	1.21	.81
A01003	ECC	1.99	1.66	1.11
A01004	ECC	1.54	1.29	.86

Type No.	Mfr.	EACH 1-9	10-99	100-Up
A01012	ECC	1.90	1.59	1.06
A01014	ECC	1.99	1.66	1.11
A01021	ECC	1.69	1.41	.94
A01022	ECC	1.98	1.65	1.10
A01024	ECC	3.78	3.15	2.10
A01041	ECC	2.34	1.95	1.30
A01042	ECC	2.62	2.19	1.46
A01044	ECC	4.42	3.69	2.46
A01061	ECC	1.80	1.50	1.00
A01062	ECC	2.08	1.74	1.16
A01064	ECC	3.88	3.24	2.16
A01081	ECC	2.44	2.04	1.36
A01082	ECC	2.73	2.28	1.52
A01084	ECC	4.53	3.78	2.52
A01101	ECC	2.12	1.77	1.18
A01102	ECC	2.37	1.98	1.32
A01104	ECC	4.17	3.48	2.42
A01121	ECC	2.77	2.31	1.54
A01122	ECC	3.02	2.52	1.68
A01124	ECC	4.82	4.02	2.68
A01141	ECC	2.34	1.95	1.30
A01142	ECC	2.88	2.40	1.60
A01144	ECC	4.68	3.90	2.80
A01161	ECC	2.98	2.49	1.66
A01162	ECC	3.52	2.94	1.96
A01164	ECC	5.32	4.44	2.96
A01181	ECC	3.24	2.70	1.80
A01182	ECC	4.22	3.52	2.35
A01184	ECC	10.41	8.68	5.80
A01201	ECC	3.88	3.24	2.16
A01202	ECC	4.87	4.06	2.71
A01204	ECC	11.10	9.25	6.15
A03002	ECC	1.45	1.21	.81
A03004	ECC	1.54	1.29	.86
A03022	ECC	1.90	1.59	1.06
A03024	ECC	1.99	1.66	1.11
B18004	ECC	5.82	4.85	3.24
B18005	ECC	8.52	7.10	4.95
B18024	ECC	6.85	5.10	3.80
B18025	ECC	9.40	7.85	5.25
B19004	ECC	6.18	5.15	3.44
B19005	ECC	8.00	7.40	5.15
B19024	ECC	7.20	6.00	4.00
B19025	ECC	9.80	8.15	5.45
B19032	ECC	1.22	1.02	.68
B19033	ECC	1.36	1.14	.76
B19034	ECC	1.52	1.27	.85
B19035	ECC	1.80	1.50	1.00
B19042	ECC	1.80	1.50	1.00
B19043	ECC	2.05	1.71	1.14
B19044	ECC	2.30	1.91	1.27
B19045	ECC	2.70	2.25	1.50
B19052	ECC	2.04	1.73	1.15
B19053	ECC	2.32	1.94	1.25
B19054	ECC	2.61	2.18	1.45
B19055	ECC	3.07	2.56	1.71
B19062	ECC	3.27	3.00	2.00
B19063	ECC	4.10	3.75	2.50
B19064	ECC	4.90	4.50	3.00
B19065	ECC	6.12	5.62	3.15
B1B	IR	1.54	1.28	.86
B1H	IR	1.48	.40	.28
BC101	IR	18.00	15.00	13.50
BCF60	IR	8.22	6.85	4.00
BCF100	IR	10.72	8.95	5.30
BCR60	IR	8.22	6.85	4.00
BCR-100	IR	10.74	8.95	....
B01021	ECC	1.68	1.40	.94
B01022	ECC	1.56	1.30	.87
B01024	ECC	1.80	1.50	1.00
B01025	ECC	1.68	1.40	.94
B01051	ECC	1.69	1.41	.94
B01053	ECC	1.98	1.65	1.10
B01071	ECC	1.98	1.65	1.10
B01073	ECC	2.29	1.91	1.27
B01091	ECC	2.34	1.95	1.30
B01093	ECC	2.61	2.18	1.45
B01410	ECC	1.56	1.30	.87
B01411	ECC	1.68	1.40	.94
B01607	ECC	1.02	.85	.61
B01608	ECC	1.20	1.00	.67
B01609	ECC	1.26	1.05	.70
B01610	ECC	.90	.75	.51
B01611	ECC	1.05	.88	.59
B01612	ECC	1.14	.95	.63
B01613	ECC	1.20	1.00	.67
B01614	ECC	1.34	1.12	.74
B01615	ECC	1.52	1.27	.85
B01619	ECC	1.39	1.16	.77
B01620	ECC	1.58	1.32	.88
B01621	ECC	1.77	1.48	.98
B01625	ECC	1.63	1.36	.91
B01626	ECC	1.87	1.56	1.04
B01627	ECC	2.10	1.75	1.17
B03001	ECC	1.68	1.40	.94
B03002	ECC	1.56	1.31	.87
B03004	ECC	1.80	1.50	1.00
B03005	ECC	1.68	1.40	.94
B03601	ECC	1.02	.85	.61
B03602	ECC	1.20	1.00	.67
B03603	ECC	1.26	1.05	.70
B03604	ECC	.90	.75	.51
B03605	ECC	1.20	1.00	.67
B03606	ECC	1.14	.95	.63
B04300	ECC	1.56	1.30	.87
B04302	ECC	1.62	1.40	.94
C1B	IR	1.75	1.46	1.00
C1H	IR	.51	.42	.29

Type No.	Mfr.	EACH 1-9	10-29	30-Up
CR102	RCA	8.64	7.20	6.85
CR103	RCA	9.78	8.15	7.75

Type No.	Mfr.	EACH 1-9	10-29	30-Up
CR104	RCA	11.52	9.60	9.10
CR105	RCA	12.66	10.55	10.05
CR106	RCA	14.40	12.00	11.40
CR107	RCA	15.54	12.95	12.30
CR108	RCA	16.68	13.90	13.20
CR109	RCA	18.42	15.35	14.60
CR110	RCA	19.56	16.30	15.50
CR201	RCA	3.72	3.10	2.96
CR203	RCA	5.76	4.80	4.56
CR204	RCA	6.90	5.75	5.47
CR208	RCA	10.08	8.40	8.00
CR212	RCA	14.40	12.00	11.40

Type No.	Mfr.	EACH 1-9	10-Up
CR273/8008	RCA	72.00	60.00
CR274/872A	RCA	72.00	60.00
CR275/866A/3B28/3825	RCA	15.72	13.10

Type No.	Mfr.	EACH 1-9	10-29	30-Up
CR401	RCA	33.60	28.00	26.60
CR402	RCA	38.40	32.00	30.40
CR403	RCA	52.80	44.00	41.80
CR404	RCA	36.00	30.00	28.50
CR405	RCA	43.20	36.00	34.20
CR406	RCA	64.80	54.00	51.30
CR407	RCA	48.00	40.00	38.00
CR408	RCA	57.60	48.00	45.60
CR409	RCA	76.80	64.00	60.80
CR501	RCA	48.00	40.00	38.00
CR502	RCA	57.60	48.00	45.60
CR503	RCA	60.00	50.00	47.50
CR504	RCA	74.40	62.00	58.90
CR505	RCA	76.80	64.00	60.80
CR506	RCA	100.80	84.00	79.80

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-9999	10,000-Up
D29A4	SPR	.51	.42	.28	.21	.17
D29A5	SPR	.58	.48	.30	.23	.19

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
DD170	IR	2.34	1.95	1.75	....
DD175	IR	1.19	.99	.89	....
DD176	IR	.71	.59	.53	....
DD177	IR	1.19	.99	.89	....
E075L	IR	.53	.44	.44	.35
E150L	IR	.75	.62	.62	.44
E300L	IR	1.11	.92	.92	.61
E500L	IR	1.23	1.02	1.02	.76
E650L	IR	2.08	1.73	1.73	1.50
F-8	ST	.63	.52	.44	.41
FA6	ST	1.80	1.50	1.28	1.20
FA8	ST	1.92	1.60	1.37	1.28

Type No.	Mfr.	EACH 1-9	10-99	100-Up
G129	TI	1.20	1.00	.75
H11	TI	4.80	4.00	2.80
H35	TI	6.00	5.00	3.50
H38	TI	4.80	4.00	2.80
H60	TI	9.60	8.00	5.60
H61	TI	10.80	9.00	6.25
H62	TI	16.20	13.50	10.00

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
HVC180	ST	4.02	3.35	2.86	2.66
HVC240	ST	4.32	3.60	3.08	2.87
HVC300	ST	4.62	3.85	3.28	3.07
HVC400	ST	4.80	4.00	3.44	3.20
HVC500	ST	4.98	4.15	3.67	3.34
HVC600	ST	5.46	4.55	3.92	3.66
HVC650	ST	6.00	5.00	4.29	4.00
HVC750	ST	6.48	5.40	4.64	4.34
HVC840	ST	7.02	5.85	5.00	4.66
HVC960	ST	7.98	6.65	5.72	5.34
HVC1000	ST	8.52	7.10	6.07	5.66
HVC1200	ST	10.02	8.35	7.15	6.66
HVC1500	ST	12.48	10.40	8.94	8.34
HVC1800	ST	15.00	12.50	10.70	10.00
HVC2100	ST	17.52	14.60	12.50	11.67
HVC2500	ST	21.00	17.50	15.00	14.00
HVC3000	ST	24.96	20.80	17.90	16.70

Type No.	Mfr.	EACH 1-9	10-99	100-Up
IR106A1	IR	1.42	1.18	.79
IR106B1	IR	1.61	1.34	.89
IR106C1	IR	2.04	1.70	1.15
IR106F1	IR	1.32	1.10	.73
IR106Y1	IR	1.13	.94	.63

Type No.	Mfr.	EACH 1-9	10-24	25-Up
J14C1	IR	1.80	1.50	1.25
J14C5	IR	4.68	3.90	3.30
J14C8	IR	6.36	5.30	4.50
J29B04	IR	2.04	1.70	1.40
J29B1	IR	2.98	2.48	2.10
J29B5	IR	8.40	7.00	5.90
J29B8	IR	12.30	10.20	8.20
J58B1	IR	5.88	4.90	4.15

Type No.	Mfr.	EACH 1-9	10-24	25-Up
J58B5	IR	16.30	13.80	11.90
J58B8	IR	23.20	19.30	16.40
J116B04	IR	7.20	6.00	5.15
J116B1	IR	10.70	8.90	7.50
J116B5	IR	31.70	26.40	22.40
J116B8	IR	44.50	37.10	31.40
J135B04	IR	9.25	7.70	6.20
J135B1	IR	12.95	10.80	9.10
J135B5	IR	39.25	32.70	27.50
J135B8	IR	55.08	45.90	45.90
			100-Up Ea.	38.80
J135B17	IR	86.64	72.20	72.20
			100-Up Ea.	61.00
J280D25	IR	90.00	75.00	56.00
JD116K	IR	2.10	1.75	1.49
JD117K	IR	2.81	2.34	2.00
JD241K	IR	4.02	3.35	3.04
JD4346B	IR	22.84	19.03	16.10
K505	IR	9.54	7.95	7.95
KD2501	RCA	1.08	.90	.90
KD2503	RCA	1.30	1.08	1.08
KD2504	RCA	1.30	1.08	1.08
KD2505	RCA	1.30	1.08	1.08

Type No.	Mfr.	EACH 1-9	10-99	100-Up
KSA1DAF	IR	1.62	1.35	1.01
KSA2DAF	IR	1.86	1.55	1.16
KSA3DAF	IR	2.10	1.75	1.31
KSA4DAF	IR	2.34	1.95	1.46
KSA5DAF	IR	2.58	2.15	1.61
KSA6DBF	IR	2.82	2.35	1.76
KSA7DBF	IR	3.06	2.55	1.91
KSA8DBF	IR	3.30	2.75	2.06
KSA9DBF	IR	3.54	2.95	2.21
KSA10DBF	IR	3.78	3.15	2.36
KSA11DBF	IR	4.02	3.35	2.51
KSA12DBF	IR	4.26	3.55	2.66
KSA14DBF	IR	4.74	3.95	2.96
KSA16DBF	IR	5.22	4.35	3.26
KSA18DBF	IR	5.70	4.75	3.56
KSA20DBF	IR	6.18	5.15	3.86
KSL2DAF	IR	4.32	3.60	2.71
KSL5DAF	IR	8.27	6.90	5.20
KSL10DBF	IR	14.90	12.40	9.35
KSL19DBF	IR	26.76	22.30	16.82
KZ1DPF	IR	.78	.66	.49
KZ2DPF	IR	.97	.77	.57
KZ3DPF	IR	1.06	.88	.65
KZ4DPF	IR	1.19	.99	.73
KZ5DPF	IR	1.32	1.10	.81
KZ6DPF	IR	1.45	1.21	.89
KZ7DPF	IR	1.59	1.32	.97
KZ8DPF	IR	1.72	1.43	1.05
KZ9DPF	IR	1.85	1.54	1.13
KZ10DPF	IR	1.98	1.65	1.21
LS-400	TI	9.36	7.80	5.20
LS-600	TI	3.84	3.20	2.15
M1B	IR	2.07	1.72	1.03
M1H	IR	.67	.56	.34

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
M4L3052	4.50	3.75	3.25	2.50
M4L3053	4.06	3.38	2.90	2.25
M4L3054	4.50	3.75	3.25	2.50

Motorola Type No.	EACH 1-9	10-99	100-Up
MAC1-2	2.38	1.98	1.32
MAC1-4	3.96	3.30	2.20
MAC1-6	6.30	5.25	3.50
MAC2-2	2.64	2.20	1.47
MAC2-4	4.22	3.52	2.35
MAC2-6	6.57	5.47	3.65
MAC3-2	2.56	2.13	1.42
MAC3-4	4.14	3.45	2.30
MAC3-6	6.48	5.40	3.60
MAC4-2	2.15	1.79	1.19
MAC4-4	3.57	2.97	1.98
MAC4-6	5.66	4.72	3.15
MAC5-2	2.38	1.98	1.32
MAC5-4	3.82	3.18	2.12
MAC5-6	2.31	1.92	1.28
MAC6-2	5.90	4.92	3.28
MAC6-4	2.30	1.92	1.28
MAC6-6	2.73	3.10	2.07
MCR406-1	5.33	4.85	3.24
MCR406-2	1.26	1.05	.70
MCR406-3	1.35	1.12	.75
MCR406-4	1.53	1.27	.85
MCR407-1	.99	.82	.55
MCR407-2	1.15	.97	.65
MCR407-3	1.26	1.05	.70
MCR407-4	1.44	1.20	.80
MCR649-1	3.72	3.10	2.05
MCR649-2	4.14	3.45	2.30
MCR649-3	4.68	3.90	2.60
MCR649-4	6.30	5.25	3.50
MCR649-5	11.88	9.90	6.60
MCR649-6	13.80	11.50	7.70
MCR649-7	16.44	13.70	9.15

Motorola Type No.	EACH 1-9	10-99	100-Up
MCR649AP-1		4.08	3.40
MCR649AP-2	4.68	3.90	2.60
MCR649AP-3	6.00	5.00	3.35
MCR649AP-4	6.84	5.70	3.80
MCR649AP-5	13.44	11.20	7.50
MCR649AP-6	15.60	13.00	8.65
MCR649AP-7	18.48	15.40	10.30
MCR649P-1	3.72	3.10	2.05
MCR649P-2	4.14	3.45	2.30
MCR649P-3	4.68	3.90	2.60
MCR649P-4	6.30	5.25	3.50
MCR649P-5	11.88	9.90	6.60
MCR649P-6	13.80	11.50	7.70
MCR649P-7	16.44	13.70	9.15
MCR846-1	6.18	5.15	3.45
MCR846-3	8.82	7.35	4.90

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MCR1336-5	24.72	20.60	18.30	13.75
MCR1336-6	34.62	28.85	25.60	19.25
MCR1336-7	40.50	33.75	29.90	22.50
MCR1336-8	53.46	44.55	39.50	29.70
MCR1336-9	63.42	52.85	46.90	35.25
MCR1336-10	80.10	66.75	59.20	44.50

Motorola Type No.	EACH 1-9	10-99	100-Up
MCR1718-5	30.60	25.50	17.00
MCR1718-6	36.00	30.00	20.00
MCR1718-7	45.00	37.50	25.00
MCR1718-8	54.00	45.00	30.00
MCR1906-1	1.88	1.57	1.05
MCR1906-2	1.98	1.65	1.10
MCR1906-3	2.25	1.87	1.25
MCR1906-4	2.38	1.98	1.35
MCR1907-1	10.80	9.00	6.00
MCR1907-2	11.70	9.75	6.50
MCR1907-3	13.50	11.25	7.50
MCR1907-4	19.44	16.20	10.80
MCR1907-5	29.34	24.45	16.30
MCR1907-6	35.10	29.25	19.50
MCR2604-1	1.86	1.55	1.15
MCR2604-2	2.04	1.70	1.20
MCR2604-3	2.22	1.85	1.35
MCR2604-4	2.46	2.05	1.45
MCR2604-5	3.00	2.50	1.70
MCR2604-6	3.48	2.90	1.95
MCR2604-7	6.12	5.10	3.45
MCR2604-8	8.22	6.85	4.60
MCR2605-1	1.86	1.55	1.15
MCR2605-2	2.04	1.70	1.20
MCR2605-3	2.22	1.85	1.35
MCR2605-4	2.46	2.05	1.45
MCR2605-5	3.00	2.50	1.70
MCR2605-6	3.48	2.90	1.95
MCR2605-7	6.12	5.10	3.45
MCR2605-8	8.22	6.85	4.60
MCR3818-1	3.60	3.00	2.00
MCR3818-3	4.50	3.75	2.50
MCR3818-5	6.66	5.55	3.70
MCR3818-7	10.62	8.85	5.90
MCR3835-1	4.50	3.75	2.50
MCR3835-2	5.40	4.50	3.00
MCR3835-3	5.82	4.85	3.25
MCR3835-4	5.82	5.85	3.90
MCR3835-5	8.64	7.20	4.80
MCR3835-6	9.90	8.25	5.50
MCR3835-7	12.78	10.65	7.10
MCR3835-8	14.82	12.35	8.25
MCR3918-1	4.08	3.40	2.25
MCR3918-3	4.92	4.10	2.75
MCR3918-5	7.08	5.90	3.95
MCR3918-7	11.04	9.20	6.15
MCR3935-1	4.92	4.10	2.75
MCR3935-2	5.82	4.85	3.25
MCR3935-3	6.30	5.25	3.50
MCR3935-4	7.44	6.20	4.15
MCR3935-5	9.06	7.55	5.05
MCR3935-6	10.32	8.60	5.75
MCR3935-7	13.20	11.00	7.35
MCR3935-8	15.30	12.75	8.50
MD708	5.22	4.35	2.90
MD708A	8.10	6.75	4.50
MD708AF	18.90	15.75	10.50
MD708B	5.76	4.80	3.20
MD708BF	14.76	12.30	8.20
MD708F	10.62	8.85	5.90
MD918	9.90	8.25	5.50
MD918A	18.90	15.75	10.50
MD918AF	29.70	24.75	16.50
MD918B	15.84	13.20	8.80
MD918BF	24.30	20.25	13.50
MD918F	15.80	12.75	8.50
MD982	33.12	27.60	18.40
MD982F	59.64	49.70	33.15
MD984	3.78	3.15	2.50
MD985	10.80	9.00	6.00
MD985F	16.20	13.50	9.00
MD986	22.70	18.90	12.60
MD986F	36.20	30.15	20.10
MD990	41.70	34.75	23.15
MD1120	5.32	4.35	2.90
MD1121	6.30	5.25	3.50

Motorola Type No.	EACH 1-9	10-99	100-Up
MD1123	17.10	14.25	9.50
MD1123F	59.64	49.70	33.15
MD1124	43.20	36.00	24.00
MD1124F	77.76	64.80	43.20
MD1125	64.32	53.60	35.75
MD1125F	99.78	83.15	55.45
MD2218	8.10	6.75	4.50
MD2218F	13.50	11.25	7.50
MD2219	9.54	7.95	5.30
MD2219A	15.84	13.20	8.80
MD2369	7.02	5.85	3.90
MD2369A	13.50	11.25	7.50
MD2369AF	30.60	25.50	17.00
MD2369B	10.44	8.70	5.80
MD2369BF	25.20	21.00	14.00
MD2369F	16.20	13.50	9.00
MD2905	9.54	7.95	5.30
MD2905F	14.94	12.45	8.30
MD3133	8.82	7.35	4.90
MD3133F	13.30	11.10	7.40
MD3134	9.36	7.80	5.20
MD3134F	14.04	11.70	7.80
MD3250	11.70	9.75	6.50
MD3251	13.92	11.60	7.75
MD3251A	27.90	23.25	15.50
MD3251F	22.92	19.10	12.75
MD3251AF	36.90	30.75	20.50
MD3467	13.50	11.25	7.50
MD3467F	22.50	18.75	12.50
MD3725	12.12	10.10	6.75
MD3725F	22.02	18.35	12.25
MD3762	14.40	12.00	8.00
MD3762F	24.30	20.25	13.50
MD4957	31.50	26.25	17.50
MD5000	13.50	11.25	7.50
MD5000A	22.50	18.75	12.50
MD5000B	18.90	15.75	10.50
MD6001	12.95	10.80	7.20
MD6002	16.20	13.50	9.00
MD6002F	21.60	18.00	12.00
MD6100	17.82	14.85	9.90
MD8001	2.52	2.10	1.40
MD8002	2.70	2.25	1.50
MD8003	3.00	2.50	1.65

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MDA920-1	1.70	1.42	1.26	.95
MDA920-2	2.03	1.69	1.50	1.13
MDA920-3	2.34	1.95	1.73	1.30
MDA920-4	2.76	2.30	2.05	1.55
MDA920-5	2.88	2.40	2.10	1.60
MDA920-6	2.94	2.45	2.20	1.65
MDA920-7	3.84	3.20	2.85	2.15
MDA920A-1	1.70	1.42	1.26	.95
MDA920A-2	2.03	1.69	1.50	1.13
MDA920A-3	2.34	1.95	1.73	1.30
MDA920A-4	2.76	2.30	2.05	1.55
MDA920A-5	2.88	2.40	2.10	1.60
MDA920A-6	2.94	2.45	2.20	1.65
MDA920A-7	3.84	3.20	2.85	2.15
MDA930-3	1.17	.97	.86	.65
MDA930-4	1.37	1.14	1.01	.76
MDA930-6	1.53	1.27	1.13	.85
MDA930-7	1.98	1.65	1.46	1.10
MDA930A-1	.99	.82	.73	.55
MDA930A-2	1.08	.90	.80	.60
MDA930A-3	1.17	.97	.86	.65
MDA930A-4	1.37	1.14	1.01	.76
MDA930A-5	1.50	1.21	1.08	.81
MDA930A-6	1.53	1.27	1.13	.85
MDA930A-7	1.98	1.65	1.46	1.10
MDA940-1	.99	.82	.73	.55
MDA940-2	1.08	.90	.80	.60
MDA940-3	1.15	.97	.86	.65
MDA940-5	1.45	1.21	1.08	.81
MDA940A-1	.99	.82	.73	.55
MDA940A-2	1.08	.90	.80	.60
MDA940A-3	1.16	.97	.86	.65
MDA940A-4	1.37	1.14	1.01	.76
MDA940A-5	1.45	1.21	1.08	.81
MDA940A-6	1.53	1.27	1.13	.85
MDA940A-7	1.98	1.65	1.46	1.10
MDA942-1	3.00	2.50	2.20	1.85
MDA942-2	3.36	2.80	2.50	2.10
MDA942-3	3.90	3.25	2.95	2.45
MDA942-4	4.44	3.70	3.35	2.80
MDA942-5	5.04	4.20	3.80	3.15
MDA942-6	5.51	4.65	4.20	3.50
MDA942A-1	3.12	2.60	2.35	1.95
MDA942A-2	3.48	2.90	2.65	2.20
MDA942A-3	4.08	3.40	3.05	2.55
MDA942A-4	4.62	3.85	3.50	2.90
MDA942A-5	5.16	4.30	3.90	3.25
MDA942A-6	5.76	4.80	4.30	3.60
MDA950-4	1.37	1.14	1.01	.76
MDA950-7	1.98	1.65	1.46	1.10
MDA950A-1	.99	.82	.73	.55
MDA950A-2	1.08	.90	.80	.60
MDA950A-3	1.16	.97	.86	.65
MDA950A-4	1.37	1.14	1.01	.76
MDA950A-5	1.45	1.21	1.08	.81
MDA950A-6	1.52	1.27	1.13	.85
MDA950A-7	1.98	1.65	1.46	1.10
MDA952-1	3.90	3.25	2.95	2.45
MDA952-2	4.20	3.50	3.20	2.65

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MDA952-3	5.34	4.45	4.00	3.35
MDA952-4	5.89	4.90	4.45	3.70
MDA952-5	7.20	6.00	5.40	4.50
MDA952-6	8.76	7.30	6.60	5.50
MDA960-1	3.48	2.90	2.55	1.95
MDA960-2	4.02	3.35	2.95	2.25
MDA960-3	4.50	3.75	3.30	2.50
MDA962-1	4.38	3.65	3.30	2.75
MDA962-2	4.88	3.90	3.55	2.95
MDA962-3	5.82	4.85	4.40	3.65
MDA962-4	6.36	5.30	4.80	4.00
MDA962-5	7.68	6.40	5.75	4.80
MDA970-1	3.84	3.20	2.90	2.15
MDA970-2	4.38	3.65	3.30	2.45
MDA970-3	4.92	4.10	3.70	2.75
MDA972-1	11.56	9.65	8.70	7.25
MDA972-2	12.30	10.25	9.25	7.70
MDA972-3	13.72	11.45	10.30	8.60
MDA972-4	15.00	12.55	11.35	9.45
MDA972-5	16.50	13.75	12.40	10.35
MDA980-1	3.84	3.20	2.90	2.40
MDA980-2	4.14	3.45	3.10	2.60
MDA980-3	4.86	4.05	3.65	3.05
MDA980-4	5.40	4.50	4.10	3.40
MDA980-5	6.06	5.05	4.55	3.80
MDA980-6	8.27	6.90	6.25	5.20
MDA990-1	4.80	4.00	3.60	3.00
MDA990-2	5.10	4.25	3.85	3.20
MDA990-3	5.76	4.80	4.30	3.60
MDA990-4	6.36	5.30	4.80	4.00
MDA990-5	6.96	5.80	5.20	4.35
MDA990-6	9.41	7.85	7.10	5.90
MDA1330C	50.40	42.00	37.25	28.00
MDA1330D	50.40	42.00	37.25	28.00
MDA1330H	46.80	39.00	34.60	26.00
MDA1330U	50.40	42.00	37.25	28.00
MDA1331C	97.20	81.00	71.80	54.00
MDA1331D	97.20	81.00	71.80	54.00
MDA1331H	90.00	75.00	66.50	50.00
MDA1331U	97.20	81.00	71.80	54.00
MDA1332H	100.80	84.00	74.50	56.00
MDA1333H	180.00	150.00	133.00	100.00
MDA1491-1	3.60	3.00	2.65	2.00
MDA1491-2	3.96	3.30	2.95	2.20
MDA1491-3	4.80	4.00	3.50	2.65
MDA1491-4	5.32	4.45	3.90	2.95
MDA1491-5	6.12	5.10	4.50	3.40
MDA1491-6	7.68	6.40	5.65	4.25
MDA1505-1	6.78	5.65	5.10	4.25
MDA1505-2	7.26	6.05	5.45	4.55
MDA1505-3	8.80	7.32	6.60	5.50
MDA1505-4	9.50	7.91	7.15	5.95
MDA1505-5	11.15	9.30	8.40	7.00
MDA1505-6	12.52	10.45	9.42	7.85
MDA1591-1	3.19	2.66	2.40	2.00
MDA1591-2	3.39	2.82	2.64	2.20
MDA1591-3	4.35	3.62	3.18	2.65
MDA1591-4	4.71	3.92	3.54	2.95
MDA1591-5	5.43	4.52	4.08	3.40
MDA1591-6	6.78	5.65	5.10	4.25

Motorola Type No.	EACH 1-9	10-99	100-999	1000-Up
MFE2000	2.34	1.95	1.30	1.17
MFE2001	2.07	1.72	1.15	.80
MFE2004	2.70	2.25	1.50	1.30
MFE2005	2.22	1.85	1.25	1.00
MFE2006	3.24	2.70	1.80	1.60
MFE2007	4.38	3.65	2.45	2.20
MFE2008	5.04	4.20	2.80	2.50
MFE2009	5.26	4.80	3.20	2.85
MFE2010	5.40	4.50	3.00	2.70
MFE2011	6.42	5.25	3.50	3.15
MFE2012	7.20	6.00	4.00	3.60
MFE2093	2.52	2.10	1.40	1.20
MFE2094	2.52	2.10	1.40	1.20
MFE2095	2.52	2.10	1.40	1.20
MFE3001	2.70	2.25	1.50	1.30
MFE3002	5.40	4.50	2.25	1.75
MFE3003	3.60	3.00	2.00	1.60
MFE3004	2.16	1.80	1.20	1.08
MFE3005	8.10	6.75	4.50	3.60
MFE3006	1.80	1.50	1.00	.90
MFE3007	1.98	1.65	1.10	.99
MFE4007	4.86	4.05	2.70	2.43
MFE4008	3.84	3.20	2.15	1.94
MFE4009	3.48	2.90	1.95	1.75
MFE4010	3.30	2.75	1.85	1.66
MFE4011	3.48	2.90	1.95	1.75
MFE4012	3.84	3.20	2.15	1.94

Motorola Type No.	EACH 1-9	10-99	100-Up
MJ400	1.98	1.65	1.10
MJ413	7.80	6.50	4.82
MJ420	1.67	1.39	1.03
MJ421	1.96	1.63	1.21
MJ423	9.60	8.00	5.93
MJ431	20.76	17.30	11.50
MJ440	1.86	1.55	1.05
MJ450	11.40	9.50	6.35
MJ480	2.32	1.93	1.29
MJ481	2.94	2.45	1.64
MJ490	2.43	2.02	1.50
MJ491	2.88	2.40	1.78
MJ802	9.18	7.65	5.10
MJ2249	2.42	2.02	1.35
MJ2250	2.58	2.15	1.45
MJ2251	2.25	1.87	1.25
MJ2252	2.42	2.02	1.35
MJ2253	2.32	1.93	1.43
MJ2254	2.59	2.16	1.60

Motorola Type No.	EACH 1-9	10-99	100-Up
MJ2267	5.94	4.95	3.30
MJ2268	6.54	5.45	3.65
MJ2801	3.42	2.85	1.90
MJ2840	5.40	4.50	3.00
MJ2841	7.62	6.35	4.25
MJ2901	4.50	3.75	2.50
MJ2940	12.24	10.20	6.80
MJ2941	13.02	10.85	7.25
MJ3010	11.70	9.75	6.50
MJ3011	14.22	11.85	7.90
MJ3029	7.20	6.00	4.44
MJ3030	10.80	9.00	6.67
MJ3101	2.34	1.95	1.30
MJ3201	2.17	1.72	1.15
MJ3202	2.25	1.87	1.25
MJ3701	1.96	1.63	1.21
MJ4101	1.89	1.57	1.09
MJ4502	9.90	8.25	5.50
MJE205	2.30	1.92	1.25
MJE340	1.27	1.06	.71
MJE370	1.29	1.07	.82
MJE371	2.35	1.96	1.31
MJE520	1.13	.94	.72
MJE521	2.01	1.68	1.12
MK-10			Each .25
MK-15			Each .25
MK-20			Each .30
MK-25			Each .25
MM380	1.51	1.26	.84
MM709	1.09	.91	.61
MM1139	1.62	1.35	.90
MM1500	50.40	42.00	28.00
		1000-Up Ea.	24.00
MM1501	32.40	27.00	18.00
		1000-Up Ea.	15.80
MM1549	9.00	7.50	6.00
MM1550	27.40	22.80	18.20
MM1551	69.00	57.50	46.00
MM1557	7.68	6.40	4.28
MM1558	25.56	21.30	14.20
MM1559	48.50	40.40	26.90
MM1601	8.52	7.10	4.75
MM1602	17.16	14.30	11.10
MM1603	29.50	24.60	19.40
MM1605	16.20	13.50	9.10
		1000-Up Ea.	8.10
MM1606	13.50	11.25	7.50
		1000-Up Ea.	6.75
MM1607	9.90	8.25	5.55
		1000-Up Ea.	5.00
MM1748	.64	.53	.35
MM1803	14.04	11.70	7.80
		500-Up Ea.	7.00
MM1812	4.50	3.75	2.50
MM1941	2.34	1.95	1.30
MM2258	4.68	3.90	2.60
MM2259	5.04	4.20	2.80
MM2260	5.40	4.50	3.00
MM2483	3.78	3.15	2.10
MM2484	4.14	3.50	2.35
MM3000	1.50	1.25	.83
MM3001	1.68	1.40	.93
MM3002	1.98	1.65	1.10
MM3003	2.28	1.90	1.25
MM3724	6.30	5.25	3.50
MM3725	6.72	5.60	3.75
MM3726	8.10	6.75	4.50
MM4000	1.49	1.24	.83
MM4001	1.67	1.39	.93
MM4002	1.98	1.65	1.10
MM4003	2.22	1.85	1.25
MM4048	4.92	4.10	2.75
MM4545	10.80	9.00	6.00
MM4546	12.60	10.50	7.00
MM4547	18.00	15.00	10.00
MM5000	5.30	4.40	2.95
MM5001	3.77	3.15	2.10
MM5002	2.70	2.25	1.50
MM5043	11.17	9.75	6.50
MM5044	7.20	6.00	4.00
MM8000	3.96	3.30	2.20
		1000-Up Ea.	1.80
MM8001	4.50	3.75	2.55
		1000-Up Ea.	2.09
MM8002	5.52	4.60	3.10
		1000-Up Ea.	2.54
MMF1	27.90	23.25	15.50
		1000-Up Ea.	13.95
MMF2	27.90	23.25	15.50
		1000-Up Ea.	13.95
MMF3	18.90	15.75	10.50
		1000-Up Ea.	9.45
MMF4	18.90	15.75	10.50
		1000-Up Ea.	9.45
MMF5	15.30	12.75	8.50
		1000-Up Ea.	7.65
MMF6	15.30	12.75	8.50
		1000-Up Ea.	7.65
MMT918	3.96	3.30	2.20
MMT930	4.32	3.60	2.40
MMT2222	3.42	2.85	1.90
MMT2369	2.34	1.95	1.30
MMT2484	7.08	5.90	3.95
MMT2857	6.54	5.45	3.65
MMT2907	4.20	3.50	2.35
MMT3546	7.38	6.15	4.10
MMT3798	5.28	4.40	2.95
MMT3799	6.65	5.55	3.70
MMT3903	2.88	2.40	1.60
MMT3904	3.60	3.00	2.00
MMT3905	2.88	2.40	1.60
MMT3906	3.60	3.00	2.00
MMT3906A	12.40	10.35	6.90

Motorola Type No.	EACH 1-9	10-99	100-Up
MP110	2.00	1.67	1.12
MP110B	7.20	6.00	4.00
MP500	6.84	5.70	3.80
MP500AML	8.52	7.10	4.75
MP501AML	13.86	11.55	7.70
MP502	14.40	12.00	8.00
MP503	24.30	20.25	13.50
MP504	7.92	6.60	4.40
MP540AML	9.70	8.15	5.45
MP505	12.24	10.20	6.80
MP505AML	15.30	12.75	8.50
MP506	16.62	13.85	9.25
MP506AML	20.22	16.85	11.25
MP507	27.00	22.50	15.00
MP525	1.20	1.00	.75
MP600	2.22	1.85	1.25
MP601	2.70	2.25	1.50
MP602	3.60	3.00	2.00
MP603	4.38	3.65	2.45
MP800	61.20	51.00	46.00
MP801	50.40	42.00	37.75
MP900	132.00	110.00	100.00
MP901	145.00	121.00	110.00
MP902	158.40	132.00	120.00
MP1612	4.26	3.55	2.65
MP1612A	4.68	3.90	2.90
MP1612B	5.04	4.20	3.10
MP1613	1.62	1.35	1.00
MP2000A	2.10	1.75	1.15
MP2060	1.26	1.05	.75
MP2061	1.38	1.15	.85
MP2062	1.62	1.35	1.00
MP2063	1.98	1.65	1.25
MP2100A	2.58	2.15	1.45
MP2200A	3.30	2.75	1.85
MP2300A	5.28	4.40	2.95
MP2400A	9.42	7.85	5.25
MP3730	1.90	1.58	1.05
MP3731	2.52	2.10	1.40

Motorola Type No.	EACH 1-9	10-99	100-999	1000-Up
MPF102	.72	.60	.40	.32
MPF108	1.17	.97	.65	.52
MPF109	.90	.75	.50	.40
MPF161	.81	.67	.45	.36

Motorola Type No.	EACH 1-9	10-99	100-999	1000-4999	5000-Up
MPS404	.45	.37	.25	.19	.18
MPS404A	.54	.45	.30	.23	.21
MPS706	.54	.45	.30	.22	.21
MPS706A	.76	.63	.42	.32	.29
MPS834	.63	.52	.35	.26	.24
MPS835	.72	.60	.40	.30	.28
MPS918	1.00	.83	.55	.41	.39
MPS2369	.64	.53	.35	.26	.24
MPS2711	.41	.34	.23	.19	.15
MPS2712	.38	.32	.21	.18	.17
MPS2713	.49	.41	.27	.23	.19
MPS2714	.52	.43	.29	.24	.21
MPS2715	.94	.78	.52	.44	.39
MPS2716	1.08	.90	.60	.51	.45
MPS2923	.38	.32	.21	.18	.16
MPS2924	.41	.34	.23	.19	.17
MPS2925	.49	.41	.27	.23	.20
MPS2926	.35	.29	.19	.17	.15
MPS3392	.38	.32	.21	.18	.15
MPS3393	.38	.32	.21	.18	.15
MPS3394	.32	.27	.18	.15	.13
MPS3395	.54	.45	.30	.25	.23
MPS3398	.49	.41	.27	.23	.20
MPS3563	.46	.38	.25	.21	.19
MPS3638	.54	.45	.30	.20	.19
MPS3638A	.71	.59	.39	.35	.33
MPS3639	.41	.34	.23	.20	.17
MPS3640	.53	.44	.29	.26	.24
MPS3646	.63	.52	.34	.31	.29
MPS3693	.53	.44	.29	.26	.25
MPS3694	.53	.44	.29	.26	.25
MPS3702	.44	.37	.31	.24	.21
MPS3703	.41	.34	.28	.22	.20
MPS3704	.41	.34	.29	.22	.20
MPS3705	.35	.29	.25	.23	.21
MPS3706	.32	.27	.24	.20	.18
MPS3707	.41	.34	.29	.22	.20
MPS3708	.32	.27	.24	.21	.19
MPS3709	.35	.29	.25	.23	.21
MPS3710	.35	.29	.25	.22	.20
MPS3711	.35	.29	.25	.22	.20
MPS3721	.41	.34	.23	.17	.16
MPS6507	.64	.53	.35	.30	.26
MPS6511	.82	.68	.45	.34	.32
MPS6512	.65	.54	.36	.27	.25
MPS6513	.68	.57	.38	.28	.27
MPS6514	.72	.60	.40	.30	.28
MPS6515	.77	.64	.43	.32	.30
MPS6516	.72	.60	.40	.30	.28
MPS6517	.76	.63	.42	.31	.29
MPS6518	.80	.67	.45	.34	.31
MPS6519	.90	.75	.50	.37	.35
MPS6520	.98	.82	.55	.41	.38
MPS6521	1.08	.90	.60	.45	.42
MPS6522	1.08	.90	.60	.45	.42
MPS6523	1.16	.97	.65	.49	.45
MPS6530	.77	.64	.43	.32	.30
MPS6531	.90	.75	.50	.37	.35
MPS6532	.65	.54	.36	.27	.25

Motorola Type No.	EACH 1-9	10-99	100-999	1000-4999	5000-Up
MPS6533	.85	.71	.47	.35	.33
MPS6534	.97	.81	.54	.40	.38
MPS6535	.72	.60	.40	.30	.27
MPS6539	.72	.60	.40	.34	.30
MPS6540	.75	.63	.42	.36	.32
MPS6542	1.44	1.20	.80	.60	.56
MPS6543	1.58	1.32	.88	.66	.62
MPS6544	.65	.54	.36	.31	.27
MPS6545	1.01	.84	.56	.46	.37
MPS6546	1.49	1.24	.83	.62	.58
MPS6547	1.62	1.35	.90	.67	.63
MPS6548	1.08	.90	.60	.45	.42
MPS6560	.58	.48	.32	.27	.24
MPS6561	.54	.45	.30	.26	.23
MPS6562	.65	.54	.36	.31	.27
MPS6563	.61	.51	.34	.29	.26
MPS6565	.62	.52	.35	.26	.24
MPS6566	.68	.57	.38	.28	.27
MPS6567	1.20	1.00	.67	.50	.47
MPS6568	1.80	1.50	1.00	.75	.70
MPS6569	1.33	1.11	.74	.55	.52
MPS6570	1.15	.96	.64	.48	.45
MPS6571	.72	.60	.40	.30	.28
MPSA05	.63	.53	.35	.26	.25
MPSA06	.72	.60	.40	.30	.28
MPSA09	.65	.54	.36	.27	.25
MPSA10	.35	.29	.19	.14	.10
MPSA12	.80	.67	.45	.34	.32
MPSA13	.56	.47	.32	.24	.22
MPSA14	.65	.54	.36	.27	.25
MPSA55	.70	.59	.39	.29	.27
MPSA56	.79	.66	.44	.33	.31
MPSA65	.68	.57	.38	.29	.27
MPSA66	.75	.63	.42	.32	.29
MPSL01	.71	.59	.39	.35	.31
MPSL51	.73	.61	.42	.38	.34
MPSU01	1.33	1.15	.77	.58	.54
MPSU02	1.19	.99	.66	.49	.46
MPSU03	1.69	1.41	.94	.70	.66
MPSU04	1.94	1.62	1.08	.81	.76
MPSU05	1.39	1.16	.77	.58	.54
MPSU06	1.61	1.34	.89	.67	.62
MPSU51	1.60	1.33	.89	.67	.62
MPSU52	1.39	1.15	.77	.58	.54
MPSU55	1.61	1.34	.89	.67	.62
MPSU56	1.80	1.50	1.00	.75	.70

Motorola Type No.	EACH 1-9	10-99	100-999	1000-Up
MPT20	.80	.67	.45	.38
MPT28	.80	.67	.45	.38
MPT32	.80	.67	.45	.38
MPT36	.82	.68	.45	.39

Motorola Type No.	EACH 1-9	10-99	100-Ass't	100-Up
MPZ5-16B	53.16	44.30	38.30	33.30
MPZ5-32B	31.74	26.45	22.90	19.90
MPZ5-32C	53.16	44.30	38.30	33.30
MPZ5-180A	31.74	26.45	22.90	19.90
MPZ5-180B	53.16	44.30	38.30	33.30
MPZ5-180C	74.22	61.85	53.45	46.50

Motorola Type No.	EACH 1-9	10-99	100-Up
MQ3467	53.10	44.25	29.50
MQ3725	48.20	40.10	26.75
MQ3762	57.20	47.60	31.75
MQ3799	51.30	42.75	28.50
MQ3799A	95.50	79.50	53.00

Motorola Type No.	EACH 1-9	10-99	100-999	1000-Up
MR322	.81	.67	.45	.40
MR323	.91	.76	.51	.46
MR324	1.33	1.11	.74	.67
MR325	1.53	.127	.85	.76
MR326	1.78	1.48	.99	.89
MR327	2.88	2.40	1.60	1.45
MR328	4.02	3.35	2.25	2.00
MR330	8.10	6.75	4.50	4.05
MR331	11.70	9.75	6.50	5.85
MR810	.81	.67	.45	....
MR811	.90	.75	.50	....
MR812	1.17	.97	.65	....
MR816	2.88	2.40	1.60	....
MR830	2.88	2.40	1.60	....
MR831	3.30	2.75	1.85	....
MR832	4.02	3.35	2.25	....
MR834	6.72	5.60	3.75	....
MR836	11.22	9.35	6.25	....
MR840	1.53	1.27	.85	....
MR841	1.71	1.42	.95	....
MR842	2.16	1.80	1.20	....
MR844	3.06	2.55	1.70	....
MR846	6.72	5.60	3.75	....
MR880	2.52	2.10	1.40	....
MR881	2.94	2.45	1.65	....
MR882	3.96	3.30	2.20	....
MR884	8.28	6.90	4.60	....
MR886	10.44	8.70	5.80	....

Motorola Type No.	EACH 1-9	10-99	100-999	1000-Up
MR890	4.50	3.75	2.50	....
MR891	5.04	4.20	2.80	....
MR892	6.18	5.15	3.45	....
MR894	12.42	10.35	6.90	....
MR896	17.88	14.90	9.95	....
MR990A	.90	.75	.50	....
MR991A	.99	.82	.55	....
MR992A	1.08	.90	.60	....
MR993A	1.17	.97	.65	....
MR994A	1.26	1.05	.70	....
MR995A	1.44	1.20	.80	....
MR996A	1.62	1.35	.90	....
MR1033A	1.12	.93	.62	.59
MR1033B	1.12	.93	.62	.59
MR1035A	1.59	1.32	.88	.84
MR1035B	1.59	1.32	.88	.84
MR1120	1.37	1.14	.76	....
MR1121	1.54	1.23	.82	....
MR1122	1.59	1.32	.88	....
MR1123	1.78	1.48	.99	....
MR1124	1.98	1.65	1.10	....
MR1125	2.43	2.02	1.35	....
MR1126	2.94	2.45	1.65	....
MR1128	6.72	5.60	3.75	....
MR1130	9.42	7.85	5.25	....

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MR1200FL	4.80	4.00	3.60	3.00
MR1200FLR	4.80	4.00	3.60	3.00
MR1201FL	4.92	4.10	3.70	3.10
MR1201FLR	4.92	4.10	3.70	3.10
MR1202FL	6.72	5.60	5.05	4.20
MR1203FL	6.72	5.60	5.05	4.20
MR1203FLR	6.72	5.60	5.05	4.20
MR1205FL	7.68	6.40	5.75	4.80
MR1207FL	8.76	7.30	6.60	5.50
MR1207FLR	8.76	7.30	6.60	5.50
MR1208FL	10.38	8.65	7.80	6.50
MR1209FL	12.36	10.30	9.30	7.75
MR1210SB	6.24	5.20	4.70	3.90
MR1210SBR	6.24	5.20	4.70	3.90
MR1210SL	6.00	5.00	4.50	3.75
MR1210SLR	6.00	5.00	4.50	3.75
MR1211SB	6.78	5.65	5.10	4.25
MR1211SL	6.54	5.45	4.90	4.10
MR1211SLR	6.54	5.45	4.90	4.10
MR1212SB	8.40	7.00	6.30	5.25
MR1212SL	7.92	6.60	5.95	4.95
MR1213SB	8.40	7.00	6.30	5.25
MR1213SL	7.92	6.60	5.95	4.95
MR1213SLR	7.92	6.60	5.95	4.95
MR1214SB	9.78	8.15	7.40	6.15
MR1214SL	9.36	7.80	7.00	5.85
MR1215SB	9.78	8.15	7.40	6.15
MR1215SBR	9.78	8.15	7.40	6.15
MR1215SL	9.36	7.80	7.00	5.85
MR1216SB	12.42	10.35	9.35	7.80
MR1216SL	11.94	9.95	9.00	7.50
MR1217SB	12.42	10.35	9.35	7.80
MR1217SBR	12.42	10.35	9.35	7.80
MR1217SL	11.94	9.95	9.00	7.50
MR1218SB	13.56	11.30	10.20	8.50
MR1218SL	13.08	10.90	9.85	8.20
MR1219SB	16.26	13.55	12.25	10.20
MR1219SL	15.78	13.15	11.90	9.90
MR1220FB	14.34	11.95	10.80	9.00
MR1220FL	14.34	11.95	10.80	9.00
MR1220SB	14.34	11.95	10.80	9.00
MR1220SBR	14.34	11.95	10.80	9.00
MR1220SL	14.34	11.95	10.80	9.00
MR1221FL	14.34	11.95	10.80	9.00
MR1221SB	14.34	11.95	10.80	9.00
MR1221SBR	14.34	11.95	10.80	9.00
MR1221SL	14.34	11.95	10.80	9.00
MR1222FB	15.18	12.65	11.40	9.50
MR1222FL	15.18	12.65	11.40	9.50
MR1222SB	15.18	12.65	11.40	9.50
MR1222SL	15.18	12.65	11.40	9.50
MR1223SB	15.18	12.65	11.40	9.50
MR1225FB	18.36	15.30	13.80	11.50
MR1225FL	17.88	14.90	13.45	11.20
MR1225SB	18.36	15.30	13.80	11.50
MR1225SL	18.36	15.30	13.80	11.50
MR1227FB	21.54	17.95	16.20	13.50
MR1227SB	21.54	17.95	16.20	13.50
MR1227SL	21.54	17.95	16.20	13.50
MR1228FB	23.94	19.95	18.00	15.00
MR1228FL	23.46	19.55	17.65	14.70
MR1228SB	23.94	19.95	18.00	15.00
MR1228SL	23.94	19.95	18.00	15.00
MR1229FB	28.74	23.95	21.60	18.00
MR1229FL	28.74	23.55	21.25	17.70
MR1229SB	28.74	23.95	21.60	18.00
MR1229SL	28.74	23.95	21.60	18.00
MR1230FB	18.36	15.30	13.80	11.50
MR1230FL	17.58	14.65	13.20	11.00
MR1230SB	18.36	15.30	13.80	11.50
MR1230SB	18.36	15.30	13.80	11.50
MR1231FB	19.56	16.30	14.70	12.25
MR1231SB	19.56	16.30	14.70	12.25
MR1231SL	19.56	16.30	14.70	12.25
MR1231SL	19.56	16.30	14.70	12.25
MR1232FB	20.76	17.30	15.60	13.00
MR1232FL	19.56	16.30	14.70	12.25
MR1232SB	20.76	17.30	15.60	13.00

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MR1232SL	20.76	17.30	15.60	13.00
MR1233FB	20.76	17.30	15.60	13.00
MR1233SB	20.76	17.30	15.60	13.00
MR1233SL	20.76	17.30	15.60	13.00
MR1235FL	21.60	18.00	16.25	13.55
MR1235SB	23.52	19.60	17.70	14.75
MR1235SL	23.52	19.60	17.70	14.75
MR1237FB	29.10	24.25	21.90	18.25
MR1237SB	29.10	24.25	21.90	18.25
MR1237SL	29.10	24.25	21.90	18.25
MR1241FB	28.74	23.95	21.60	18.00
MR1241FL	28.74	23.95	21.60	18.00
MR1241SB	28.74	23.95	21.60	18.00
MR1241SL	28.74	23.95	21.60	18.00
MR1242FB	30.30	25.25	22.80	19.00
MR1242FL	30.30	25.25	22.80	19.00
MR1242SB	30.30	25.25	22.80	19.00
MR1242SL	30.30	25.25	22.80	19.00
MR1243FL	30.30	25.25	22.80	19.00
MR1243SB	30.30	25.25	22.80	19.00
MR1243SL	30.30	25.25	22.80	19.00
MR1247FL	36.06	30.05	27.10	22.60
MR1247FLR	36.06	30.05	27.10	22.60
MR1247SB	37.68	31.40	28.30	23.60
MR1247SL	37.68	31.40	28.30	23.60
MR1247SLR	37.68	31.40	28.30	23.60
MR1260FL	55.86	46.55	42.00	35.00
MR1261FL	55.86	46.55	42.00	35.00
MR1261FLR	55.86	46.55	42.00	35.00
MR1262FL	66.24	55.20	49.80	41.50
MR1263FL	66.24	55.20	49.80	41.50
MR1265FL	73.44	61.20	55.20	46.00
MR1267FL	81.42	67.85	61.20	51.00

Motorola Type No.	EACH 1-9	10-24	25-Up
MR1290	72.00	60.00	54.00
MR1291	79.80	66.50	60.00
MR1292	91.80	76.50	69.00
MR1293	91.80	76.50	69.00
MR1295	105.00	87.50	79.00
MR1297	118.20	98.50	88.75
MR1298	183.54	152.95	138.00
MR1299	239.40	199.50	180.00

Motorola Type No.	EACH 1-9	10-99	100-Up
MR1337-1	4.02	3.35	2.25
MR1337-2	5.94	4.95	3.30
MR1337-3	8.10	6.75	4.50
MR1366	22.50	18.75	12.50
MR1376	30.12	25.10	16.75
MR1386	33.30	27.75	18.50
MR1396	45.00	37.50	25.00

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MR1810SB	6.54	5.45	4.90	4.10
MR1810SL	6.06	5.05	4.55	3.80
MR1811SB	7.56	6.30	5.70	4.75
MR1811SL	7.08	5.90	5.35	4.45
MR1812SB	9.18	7.65	6.90	5.75
MR1812SL	8.70	7.25	6.55	5.45
MR1813SB	9.48	7.65	6.90	5.75
MR1813SL	8.70	7.25	6.55	5.45
MR1814SB	10.44	8.70	7.85	6.55
MR1814SL	9.96	8.30	7.50	6.25
MR1815SB	10.44	8.70	7.85	6.55
MR1815SL	9.96	8.30	7.50	6.25
MR1816SB	13.26	11.05	9.95	8.30
MR1816SL	12.78	10.65	9.60	8.00
MR1817SB	13.26	11.05	9.95	8.30
MR1817SL	12.78	10.65	9.60	8.00
MR1818SB	14.30	11.95	10.80	9.00
MR1818SL	13.86	11.55	10.45	8.70
MR1819SB	17.10	14.25	12.85	10.70
MR1819SL	16.62	13.85	12.50	10.40

Motorola Type No.	EACH 1-9	10-99	100-Up
MR2064	.36	.30	.20
MR2065	.43	.36	.24
MR2066	.51	.42	.28
MR2067	.82	.68	.45
MR2068	.90	.75	.50

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MR2080HA	59.04	49.20	44.40	37.00
MR2081HA	59.04	49.20	44.40	37.00
MR2082HA	69.42	57.85	52.20	43.50
MR2083HA	76.74	63.85	57.60	48.00
MR2084HA	85.38	71.15	64.20	53.50
MR2100HA	71.82	59.85	54.00	45.00
MR2101HA	79.80	66.50	60.00	50.00
MR2102HA	91.74	76.45	69.00	57.50
MR2103HA	105.36	87.80	79.20	66.00
MR2104HA	118.08	98.40	88.80	74.00

Motorola Type No.	EACH 1-9	10-99	100-Up
MR2266	1.30	1.08	.72
MR2272	.69	.57	.38
MR2273	.58	.48	.32

Motorola Type No.	EACH 1-9	10-24	25-99	100-Up
MRA130	23.16	19.30	17.40	14.50
MRA130B	54.24	45.20	40.80	34.00
MRA131	26.34	21.95	19.80	16.50
MRA131B	60.66	50.55	45.60	38.00
MRA132	32.70	27.25	24.60	20.50
MRA132B	73.44	61.20	55.20	46.00
MRA133	37.50	31.25	28.20	23.50
MRA133B	81.42	67.85	61.20	51.00
MRA134	43.26	36.55	33.00	27.50
MRA134B	92.58	77.15	69.60	58.00
MRA160	42.30	35.25	31.80	26.50
MRA160B	92.58	77.15	69.60	58.00
MRA161	45.48	37.90	34.20	28.50
MRA161B	93.94	82.45	74.40	62.00
MRA162	53.46	44.55	40.20	33.50
MRA162B	114.90	95.75	86.40	72.00
MRA163	58.26	48.55	43.80	36.50
MRA163B	122.88	102.40	92.40	77.00
MRA164	67.80	56.50	51.00	42.50
MRA164B	140.46	117.05	105.60	88.00
MRA330	24.72	20.60	18.60	15.50
MRA330B	57.48	47.90	43.20	36.00
MRA331	27.54	22.95	20.70	17.25
MRA331B	63.06	52.55	47.40	39.50
MRA332	33.90	28.25	25.50	21.25
MRA332B	75.00	62.50	56.40	47.00
MRA333	39.12	32.60	29.40	24.50
MRA333B	82.98	69.15	62.40	52.00
MRA334	45.06	37.55	33.90	28.25
MRA334B	94.14	78.45	70.80	59.00
MRA360	43.86	36.55	33.00	27.50
MRA360B	95.76	79.80	72.00	60.00
MRA361	47.10	39.25	35.40	29.50
MRA361B	102.12	85.10	76.80	64.00
MRA362	55.08	45.90	41.40	34.50
MRA362B	118.08	98.40	88.80	74.00
MRA363	59.82	49.85	45.00	37.50
MRA363B	126.06	105.05	94.80	79.00
MRA364	69.42	57.85	52.20	43.50
MRA364B	143.64	119.70	108.00	90.00
MRD100	1.80	1.50	1.50	1.00
MRD150	1.44	1.20	1.20	.80
MRD200	4.68	3.90	3.90	2.60
MRD210	4.14	3.45	3.45	2.30
MRD250	4.32	3.60	3.60	2.40
MRD300	12.60	10.50	10.50	7.25
MRD310	7.08	5.90	5.90	3.95
MRD450	1.80	1.50	1.50	1.00
MRD600	3.78	3.15	3.15	2.10

Type No.	Mfr.	EACH 1-9	10-99	100-Up
MRK-200	MOT	113.40	94.50	94.50
MS-10	MOT		Each	2.00
MMD6100	MOT	.43	.36	.24
			1000-4999 Ea.	.18
			5000-Up Ea.	.17
MU4891	MOT	10.80	.90	.60
MU4892	MOT	1.38	1.15	.77
MU4893	MOT	1.15	.96	.64
MU4894	MOT	1.26	1.05	.70
			1000-Up Ea.	.59
MV830	MOT	1.62	1.35	.90
MV832	MOT	1.62	1.35	.90
MV833	MOT	1.62	1.35	.90
MV834	MOT	1.62	1.35	.90
MV835	MOT	1.62	1.35	.90
MV836	MOT	1.62	1.35	.90
MV837	MOT	1.62	1.35	.90
MV838	MOT	1.62	1.35	.90
MV839	MOT	1.62	1.35	.90
MV840	MOT	1.62	1.35	.90
MV1401	MOT	10.74	8.95	5.95
MV1403	MOT	10.74	8.95	5.95
MV1405	MOT	10.74	8.95	5.95
MV1620	MOT	1.71	1.42	.95
MV1622	MOT	1.71	1.42	.95
MV1624	MOT	1.71	1.42	.95
MV1626	MOT	1.71	1.42	.95
MV1628	MOT	1.71	1.42	.95
MV1630	MOT	1.71	1.42	.95
MV1632	MOT	1.71	1.42	.95
MV1634	MOT	1.71	1.42	.95
MV1636	MOT	1.71	1.42	.95
MV1638	MOT	1.71	1.42	.95
MV1640	MOT	1.71	1.42	.95
MV1642	MOT	1.71	1.42	.95
MV1644	MOT	1.71	1.42	.95
MV1646	MOT	1.71	1.42	.95
MV1648	MOT	1.71	1.42	.95
MV1650	MOT	1.71	1.42	.95
MV1652	MOT	4.32	3.60	2.40
MV1654	MOT	4.32	3.60	2.40
MV1656	MOT	4.32	3.60	2.40
MV1658	MOT	4.32	3.60	2.40
MV1660	MOT	4.32	3.60	2.40
MV1662	MOT	4.32	3.60	2.40
MV1664	MOT	4.32	3.60	2.40
MV1666	MOT	4.32	3.60	2.40
MV1805C	MOT	50.40	42.00	28.00
MV1809C	MOT	50.40	42.00	28.00
MV1809C1	MOT	56.40	47.00	31.00
MV1816A	MOT	50.40	42.00	28.00
MV1816A1	MOT	56.40	47.00	31.00
MV1816B	MOT	50.40	42.00	28.00
MV1816B1	MOT	56.40	47.00	31.00
MV1817A	MOT	50.40	42.00	28.00
MV1817A1	MOT	56.40	47.00	31.00
MV1817B	MOT	50.40	42.00	28.00
MV1817B1	MOT	56.40	47.00	31.00
MV1858D	MOT	14.40	12.00	....
MV1860D	MOT	14.40	12.00	....
MV1862D	MOT	14.40	12.00	....

Type No.	Mfr.	EACH 1-9	10-99	100-Up
MV1863D	MOT	14.40	12.00	....
MV1864D	MOT	14.40	12.00	....
MV1865D	MOT	14.40	12.00	....
MV1866D	MOT	14.40	12.00	....
MV1868D	MOT	14.40	12.00	....
MV1870D	MOT	14.40	12.00	....
MV1876	MOT	12.60	10.50	....
MV2101	MOT	1.08	.90	....
MV2102	MOT	1.08	.90	.60
MV2103	MOT	1.08	.90	.60
MV2104	MOT	1.08	.90	.60
MV2105	MOT	1.08	.90	.60
MV2106	MOT	1.08	.90	.60
MV2107	MOT	1.08	.90	.60
MV2108	MOT	1.08	.90	.60
MV2109	MOT	1.08	.90	.60
MV2110	MOT	1.08	.90	.60
MV2111	MOT	1.08	.90	.60
MV2112	MOT	1.08	.90	.60
MV2113	MOT	1.08	.90	.60
MV2114	MOT	1.08	.90	.60
MV2115	MOT	1.08	.90	.60

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
MZ605	MOT	65.46	54.55	47.15	41.00
MZ610	MOT	33.36	27.80	24.05	20.90
MZ620	MOT	25.14	20.95	18.10	15.75
MZ640	MOT	22.26	18.55	16.05	13.95
MZ805	MOT	55.86	46.55	40.25	35.00
MZ810	MOT	26.82	22.35	19.30	16.80
MZ820	MOT	19.56	16.30	14.10	12.25
MZ840	MOT	16.74	13.95	12.05	10.50
MZ2360	MOT	.34	.28	.19	....
MZ2361	MOT	.69	.57	.38	....

Type No.	Mfr.	EACH 1-9	10-99	100 Ass't	100-Up
MZ4614	MOT	4.62	3.85	3.35	2.90
MZ4615	MOT	4.62	3.85	3.35	2.90
MZ4616	MOT	4.62	3.85	3.35	2.90
MZ4617	MOT	4.62	3.85	3.35	2.90
MZ4618	MOT	4.62	3.85	3.35	2.90
MZ4619	MOT	4.62	3.85	3.35	2.90
MZ4620	MOT	4.62	3.85	3.35	2.90
MZ4621	MOT	4.62	3.85	3.35	2.90
MZ4622	MOT	4.62	3.85	3.35	2.90
MZ4623	MOT	4.62	3.85	3.35	2.90
MZ4624	MOT	4.62	3.85	3.35	2.90
MZ4625	MOT	4.62	3.85	3.35	2.90
MZ4626	MOT	4.62	3.85	3.35	2.90
MZ4627	MOT	4.62	3.85	3.35	2.90
MZK100	MOT			Each	79.00

Type No.	Mfr.	EACH 1-9	10-99	100-Up
Q1B	IR	.49	.41	.33
Q4B	IR	1.87	1.56	.94
Q15	ECC	2.34	1.95	1.30
Q16	ECC	3.24	2.70	1.80
Q2001MS2	ECC	1.90	1.59	1.06
Q2001MT2	ECC	1.90	1.59	1.06
Q2001P	ECC	1.90	1.59	1.06
Q2025C	ECC	7.44	6.20	4.13
Q2025D	ECC	7.80	6.50	4.33
Q2040PFC	ECC	9.52	7.95	5.30
Q2040PFD	ECC	9.90	8.25	5.50
Q4001MS2	ECC	1.99	1.66	1.11
Q4001MT2	ECC	1.99	1.66	1.11
Q4001P	ECC	1.99	1.66	1.11
Q4025C	ECC	10.38	8.65	5.76
Q4925D	ECC	10.74	8.95	5.96
Q4040PFC	ECC	14.34	11.95	7.95
Q4040PFD	ECC	14.70	12.25	8.15
Q6025C	ECC	12.54	10.45	6.97
Q6025D	ECC	12.90	10.75	7.17
Q6040PFC	ECC	19.74	16.45	10.95
Q4040PFD	ECC	20.10	16.75	11.15

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
S-256	ST	2.86	2.38	1.71	1.52
S-490	ST	2.64	2.20	1.58	1.41
S-5130	ST	27.00	22.50	19.30	18.00
S-5343	ST	21.72	18.10	15.50	14.50
S-5991	ST	4.20	3.50	3.00	2.80
S-6121	ST	4.81	4.01	3.43	3.19
S-6121-1	ST	5.05	4.21	3.60	3.35
S-6121-2	ST	5.23	4.36	3.73	3.47
S-6211	ST	2.55	2.12	1.82	1.69
S-6211-1	ST	2.81	2.34	2.00	1.86
S-6211-2	ST	3.07	2.56	2.19	2.04
S-6230	ST	1.72	1.47	1.26	1.19
S-6230-1	ST	2.13	1.77	1.52	1.41
S-6230-2	ST	2.53	2.11	1.80	1.68
S-6240	ST	4.52	3.76	3.22	3.00
S-6240-1	ST	6.18	5.15	4.40	4.00
S-6240-2	ST	8.32	6.93	5.93	5.40

Type No.	Mfr.	EACH 1-9	10-99	100-Up
SD-91	IR	.64	.53	.35
SD-91A	IR	.71	.59	.39
SD-92	IR	.76	.63	.42
SD-92A	IR	.82	.68	.46
SD-93	IR	.88	.73	.52
SD-93A	IR	1.03	.86	.57
SD-94	IR	1.07	.89	.60
SD-94A	IR	1.15	.96	.64

Type No.	Mfr.	EACH 1-9	10-99	100-Up
SD-95	IR	1.19	.99	.67
SD-95A	IR	1.27	1.06	.71

Type No.	Mfr.	EACH 1-99
SK-3003	RCA	.99
SK-3004	RCA	1.14
SK-3005	RCA	1.17
SK-3006	RCA	1.41
SK-3007	RCA	1.26
SK-3008	RCA	1.23
SK-3009	RCA	2.34
SK-3010	RCA	1.26
SK-3011	RCA	1.62
SK-3012	RCA	4.38
SK-3013	RCA	4.68
SK-3014	RCA	3.15
SK-3015	RCA	6.30
SK-3016	RCA	.57
SK-3017A	RCA	.60
SK-3018	RCA	1.35
SK-3019	RCA	1.47
SK-3020	RCA	1.32
SK-3021	RCA	1.95
SK-3022	RCA	3.96
SK-3023	RCA	3.96
SK-3024	RCA	1.98
SK-3025	RCA	2.70
SK-3026	RCA	1.80
SK-3027	RCA	3.15
SK-3028	RCA	3.60
SK-3029	RCA	6.30
SK-3030	RCA	.42
SK-3031	RCA	.51
SK-3032	RCA	.61
SK-3033	RCA	.81
SK-3034	RCA	4.50
SK-3035	RCA	5.49
SK-3036	RCA	5.85
SK-3037	RCA	11.70
SK-3038	RCA	1.44
SK-3039	RCA	1.98
SK-3040	RCA	2.25
SK-3041	RCA	2.52

Type No.	Mfr.	EACH 1-9	10-24	25-Up
ST-14C	IR	5.04	4.20	3.75

Type No.	Mfr.	EACH 1-9
SYA-3200	SYL	210.00
SYA-3200A	SYL	235.00
SYA-3200B	SYL	270.00
SYA-3201	SYL	210.00
SYA-3201A	SYL	235.00
SYA-3201B	SYL	270.00
SYA-3205	SYL	300.00
SYA-3205A	SYL	465.00
SYA-3205B	SYL	575.00
SYA-3206	SYL	270.00
SYA-3206A	SYL	300.00
SYA-3206B	SYL	465.00
SYA-3220	SYL	167.00

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-Up
TD-100	SPR	2.70	2.25	1.50	1.20
TD-101	SPR	1.80	1.50	1.00	.80
TD-102	SPR	1.62	1.35	.90	.72
TD-400	SPR	3.60	3.00	2.00	1.60
TD-401	SPR	2.34	1.95	1.30	1.05
TD-402	SPR	2.16	1.80	1.20	.95
TD-600	SPR	3.24	2.70	1.80	1.45
TD-601	SPR	1.98	1.65	1.10	.88
TD-602	SPR	1.80	1.50	1.00	.80
TD-2905	SPR	3.06	2.55	1.70	1.35
TD-2219	SPR	3.06	2.25	1.50	1.20

Type No.	Mfr.	EACH 1-9	10-99	100-Up
TI-40A0	TI	2.04	1.70	1.18
TI-40A1	TI	2.22	1.85	1.28
TI-40A2	TI	2.46	2.05	1.52
TI-40A3	TI	4.38	3.65	2.45
TI-40A4	TI	6.60	5.50	3.55
TI-42	TI	1.05	.87	.58
TI-43	TI	1.23	1.02	.68
TI-51	TI	.47	.39	.26
TI-52	TI	.51	.42	.28
TI-53	TI	.54	.45	.30
TI-54	TI	.60	.50	.33
TI-55	TI	.69	.57	.34
TI-56	TI	.78	.65	.40
TI-57	TI	.88	.73	.46
TI-59	TI	1.08	.90	.60
TI-145A0	TI	1.98	1.65	1.10
TI-145A2	TI	2.52	2.10	1.40
TI-145A4	TI	6.30	5.25	3.50
TI-480	TI	1.86	1.55	1.20
TI-481	TI	2.28	1.90	1.45
TI-482	TI	6.84	5.70	3.78
TI-483	TI	7.62	6.35	4.23
TI-484	TI	9.30	7.75	5.16
TI-486	TI	5.88	4.90	3.25
TI-487	TI	6.72	5.60	3.75
TI-492	TI	1.86	1.55	1.20

Type No.	Mfr.	EACH 1-9	10-99	100-Up
TI-493	TI	2.28	1.90	1.45
TI-494	TI	3.00	2.50	1.90
TI-495	TI	3.60	3.00	2.30
TI-496	TI	2.10	1.75	1.35
TI-550	TI	10.32	8.60	6.50
TI-551	TI	11.52	9.60	7.50
TI-1121	TI	21.60	18.00	12.00
TI-1122	TI	19.56	16.30	10.85
TI-1124	TI	15.24	12.70	8.45
TI-1134	TI	15.66	13.05	8.70
TI-1141	TI	26.64	22.20	14.80
TI-1143	TI	23.94	19.95	13.30
TI-1144	TI	20.88	17.40	11.60
TI-1145	TI	17.82	14.85	9.90
TI-1151	TI	27.54	22.95	15.30
TI-1152	TI	25.38	21.15	14.10
TI-1154	TI	21.78	18.15	12.10
TI-1156	TI	16.20	13.50	9.00
TI-3027	TI	1.44	1.20	.80
TI-3028	TI	1.72	1.43	.95
TIC44	TI	.93	.77	.51
TIC45	TI	1.00	.83	.55
TIC47	TI	1.31	1.09	.85
TID32	TI	2.76	2.30	1.09
TID33	TI	2.53	2.11	1.02
TID34	TI	2.44	2.03	.97
TID35	TI	2.33	1.94	.88
TID36	TI	1.74	1.45	.82
TID37	TI	1.74	1.45	.84
TID40	TI	2.79	2.32	1.74
TID41	TI	2.52	2.10	1.58
TID42	TI	2.64	2.20	1.65
TID44	TI	3.07	2.56	1.92
TIL601	TI	3.90	3.25	2.36
TIL602	TI	4.44	3.70	2.48
TIL603	TI	4.56	3.80	2.60
TIL604	TI	4.92	4.10	2.75
TIL605	TI	4.44	3.70	2.48
TIL606	TI	4.75	3.97	2.66
TIL607	TI	4.98	4.15	2.77
TIL608	TI	5.23	4.36	2.92
TIL609	TI	4.23	3.52	2.36
TIL610	TI	4.44	3.70	2.48
TIL611	TI	4.66	3.88	2.60
TIL612	TI	4.92	4.10	2.75
TIL613	TI	4.44	3.70	2.48
TIL614	TI	4.75	3.97	2.66
TIL615	TI	4.96	4.13	2.77
TIL616	TI	5.23	4.36	2.92
TIS14	TI	3.00	2.50	1.90
TIS26	TI	10.20	8.50	6.90
TIS27	TI	8.64	7.20	5.85
TIS37	TI	.46	.38	.34
TIS38	TI	.42	.35	.31
TIS43	TI	.91	.76	.66
TIS58	TI	.75	.62	.55
TIS59	TI	.74	.61	.53
TIS73	TI	2.11	1.76	1.54
TIS74	TI	1.85	1.54	1.34
TIS75	TI	1.92	1.60	1.40
TIS78	TI	1.85	1.54	1.34
TIS79	TI	1.44	1.20	1.05
TIXL101	TI	14.40	12.00	8.05
TIXL102	TI	12.00	10.00	6.70
TIXL103	TI	14.40	12.00	8.05

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
TIX104	TI	59.40	49.50	42.50	36.00
TIX105	TI	59.40	49.50	42.50	36.00
TIX106	TI	81.00	67.50	56.25	47.00

Type No.	Mfr.	EACH 1-9	10-99	100-999	1000-9999	10,000-Up
TN53	SPR	1.02	.85	.57	.52	....
TN59	SPR	.78	.65	.45	.41	....
TN60	SPR	.78	.65	.45	.41	....
TN61	SPR	.72	.60	.40	.35	....
TP3638	SPR	.51	.42	.28	.22	.18
TP3638A	SPR	.54	.45	.30	.24	.20
TO59	SPR	1.19	.99	.68	.62	....
TZ81	SPR	.51	.42	.28	.22	.18
TZ82	SPR	.46	.38	.25	.20	.16
TZ581	SPR	.61	.51	.34	.27	.22
TZ582	SPR	.54	.45	.30	.24	.20

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
US16HFP	IR	.99	.82	.52	.48
US24HFP	IR	1.11	.92	.59	.54
US48HFP	IR	1.37	1.14	.73	.66
US79HFP	IR	1.74	1.45	.94	.85
US126HFP	IR	2.14	1.78	1.14	1.05
US158HFP	IR	2.26	1.88	1.21	1.12
US237HFP	IR	2.75	2.32	1.49	1.35
US315HFP	IR	3.43	2.86	1.83	1.68
US473HFP	IR	4.97	4.14	2.65	2.44

Type No.	Mfr.	EACH 1-9	10-99	100-Up
VB10	VA	1.69	1.41	1.07
VB10X	VA	2.26	1.88	1.43

Type No.	Mfr.	EACH 1-9	10-99	100-Up
VB15	VA	1.81	1.51	1.15
VB15X	VA	2.41	2.01	1.53
VB20	VA	1.91	1.59	1.20
VB20X	VA	2.55	2.12	1.60
VB25	VA	2.07	1.72	1.30
VB25X	VA	2.76	2.30	1.73
VB30	VA	2.26	1.88	1.42
VB30X	VA	3.00	2.50	1.90
VB40	VA	2.46	2.05	1.56
VB40X	VA	3.29	2.74	2.08
VB50	VA	2.88	2.40	1.82
VB50X	VA	3.84	3.20	2.42
VB60	VA	3.15	2.62	1.99
VC20	VA	6.24	5.20	4.00
VC30	VA	6.63	5.52	4.25
VC40	VA	7.02	5.85	4.50
VC50	VA	7.42	6.18	4.75
VC60	VA	7.80	6.50	5.00
VC70	VA	8.19	6.82	5.25
VC80	VA	8.58	7.15	5.50
VE18	VA	1.20	1.00	.90
VE27	VA	1.44	1.20	1.10
VE28	VA	1.32	1.10	1.00
VE47	VA	1.56	1.30	1.20
VE48	VA	1.44	1.20	1.10
VE67	VA	1.91	1.59	1.45
VE68	VA	1.79	1.49	1.35
VF5-5	VA	1.92	1.60	1.36
VF5-5X	VA	2.15	1.77	1.50
VF5-7	VA	2.05	1.71	1.45
VF5-7X	VA	2.27	1.89	1.60
VF5-10	VA	2.35	1.96	1.66
VF5-10X	VA	2.59	2.16	1.83
VF5-12	VA	2.65	2.22	1.88
VF5-12X	VA	2.93	2.44	2.07
VF5-15	VA	2.76	2.30	1.95
VF5-15X	VA	3.48	2.54	2.15
VF5-20	VA	3.57	2.97	2.52
VF5-20X	VA	3.92	3.27	2.77
VF5-25	VA	4.47	3.72	3.15
VF5-25X	VA	4.91	4.09	3.47
VF5-30	VA	5.35	4.46	3.78
VF5-30X	VA	5.89	4.91	4.16
VF5-40	VA	7.14	5.95	5.04
VF5-40X	VA	7.85	6.54	5.54
VF10-5	VA	2.13	1.77	1.50
VF10-5X	VA	2.34	1.95	1.65
VF10-7	VA	2.27	1.89	1.60
VF10-7X	VA	2.50	2.08	1.76
VF10-10	VA	2.59	2.16	1.83
VF10-10X	VA	2.86	2.38	2.02
VF10-12	VA	2.93	2.44	2.07
VF10-12X	VA	3.22	2.68	2.27
VF10-15	VA	3.05	2.54	2.15
VF10-15X	VA	3.36	2.80	2.37
VF10-20	VA	3.93	3.27	2.77
VF10-20X	VA	4.32	3.60	3.05
VF10-25	VA	4.91	4.09	3.47
VF10-25X	VA	5.42	4.51	3.82
VF10-30	VA	5.89	4.91	4.16
VF10-30X	VA	6.47	5.39	4.57
VF10-40	VA	7.85	6.54	5.54
VF10-40X	VA	8.64	7.20	6.10
VF25-5	VA	2.34	1.95	1.65
VF25-5X	VA	2.57	2.14	1.81
VF25-7	VA	2.50	2.08	1.76
VF25-7X	VA	2.75	2.29	1.94
VF25-10	VA	2.86	2.38	2.02
VF25-10X	VA	3.15	2.62	2.22
VF25-12	VA	3.22	2.68	2.27
VF25-12X	VA	3.53	2.94	2.49
VF25-15	VA	3.36	2.80	2.37
VF25-15X	VA	3.97	3.08	2.61
VF25-20	VA	4.32	3.60	3.05
VF25-20X	VA	4.74	3.95	3.35
VF25-25	VA	5.42	4.51	3.82
VF25-25X	VA	5.95	4.96	4.20
VF25-30	VA	6.47	5.39	4.57
VF25-30X	VA	7.13	5.94	5.03
VF25-40	VA	8.64	7.20	6.10
VF25-40X	VA	9.49	7.91	6.70
VH148	VA	2.31	1.93	1.58
VH247	VA	2.70	2.25	1.85
VH248	VA	2.58	2.15	1.75
VH447	VA	3.11	2.59	2.13
VH448	VA	2.99	2.49	2.03
VH647	VA	3.57	2.98	2.45
VH648	VA	3.46	2.88	2.35

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
VR6	ST	.75	.62	.53	.49
VR6A	ST	.80	.67	.57	.53
VR7	ST	.75	.62	.53	.49
VR7A	ST	.80	.67	.57	.53
VR8.5	ST	.75	.62	.53	.49
VR8.5A	ST	.80	.67	.57	.53
VR10	ST	.75	.62	.53	.49
VR10A	ST	.80	.67	.57	.53
VR12	ST	.75	.62	.53	.49
VR12A	ST	.80	.67	.57	.53
VR14	ST	.75	.62	.53	.49
VR14A	ST	.80	.67	.57	.53
VR18	ST	.75	.62	.53	.49
VR18A	ST	.80	.67	.57	.53
VR20	ST	.75	.62	.53	.49

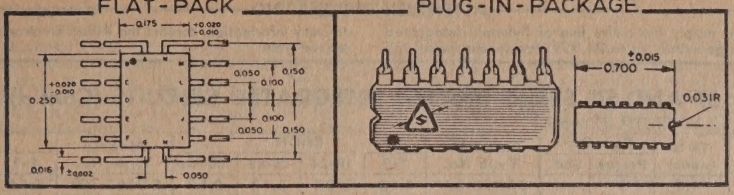
Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
VR20A	ST	.80	.67	.57	.53
VR24	ST	.75	.62	.53	.49
VR24A	ST	.80	.67	.57	.53
VR28	ST	.75	.62	.53	.49
VR28A	ST	.80	.67	.57	.53
VR33	ST	.75	.62	.53	.49
VR33A	ST	.80	.67	.57	.53
VR39	ST	.75	.62	.53	.49
VR39A	ST	.80	.67	.57	.53
VR47	ST	.75	.62	.53	.49
VR47A	ST	.80	.67	.57	.53
VR56	ST	.75	.62	.53	.49
VR56A	ST	.80	.67	.57	.53
VR67	ST	.75	.62	.53	.49
VR67A	ST	.80	.67	.57	.53
VR80	ST	.75	.62	.53	.49
VR80A	ST	.80	.67	.57	.53
VR90	ST	.75	.62	.53	.49
VR90A	ST	.80	.67	.57	.53
VR100X	VA	7.56	6.30	6.30	5.05
VR100X/S/F	VA	8.04	6.70	6.70	5.35
VR100X/T/F	VA	7.86	6.55	6.55	5.25
VR105	ST	.99	.82	.70	.65
VR105A	ST	1.05	.87	.73	.69
VR110	ST	.99	.82	.70	.65
VR110A	ST	1.05	.87	.73	.69
VR120	ST	.99	.82	.70	.65
VR120A	ST	1.05	.87	.73	.69
VR130	ST	.99	.82	.70	.65
VR130A	ST	1.05	.87	.73	.69
VR150	ST	.99	.82	.70	.65
VR150A	ST	1.05	.87	.73	.69
VR160	ST	.99	.82	.70	.65
VR160A	ST	1.05	.87	.73	.69
VR200	ST	.99	.82	.70	.65
VR200A	ST	1.05	.87	.73	.69
VR200X	VA	8.94	7.45	7.45	5.95
VR200X/S/F	VA	9.42	7.85	7.85	6.25
VR200X/T/F	VA	9.24	7.70	7.70	6.15
VR400X	VA	13.08	10.90	10.90	8.00
VR400X/S/F	VA	13.56	11.30	11.30	8.30
VR400X/T/F	VA	13.56	11.15	11.15	8.20

Type No.	Mfr.	EACH 1-9	10-99	100-Up
VS148X	VA	1.98	1.65	1.50
VS247	VA	1.44	1.20	1.10
VS248	VA	1.32	1.10	1.00
VS248X	VA	2.17	1.81	1.65
VS447	VA	1.56	1.30	1.20
VS448	VA	1.44	1.20	1.10
VS448X	VA	2.38	1.98	1.81
VS647	VA	1.92	1.60	1.50
VS648	VA	1.80	1.50	1.40
VT200	VA	6.42	5.35	3.95
VT200/S	VA	6.90	5.75	4.25
VT200/T	VA	6.72	5.60	4.15
VT400	VA	8.40	7.00	5.30
VT400/S	VA	8.88	7.40	5.60
VT400/T	VA	8.70	7.25	5.50
VT600	VA	11.82	9.85	7.10
VT600/S	VA	12.30	10.25	7.40
VT600/T	VA	12.12	10.10	7.30
VY100X	VA	9.79	8.16	6.54
VY100X/S	VA	10.27	8.56	6.84
VY100X/ST	VA	10.09	8.41	6.74
VY200X	VA	11.52	9.60	7.70
VY200X/S	VA	12.00	10.00	8.00
VY200XTS	VA	11.82	9.85	7.90
VY400X	VA	16.80	14.00	10.60
VY400X/S	VA	17.28	14.40	10.95
VY400XTS	VA	17.10	14.25	10.80
W110	VA	1.08	.90	.81
W111	VA	1.14	.95	.85

Type No.	Mfr.	EACH 1-9	10-24	25-99	100-Up
Z1138	IR	1.02	.85	.74	.67

Be sure to specify the Manufacturer's Name and Type Number when ordering. As new types are released by manufacturers, Allied Electronics will stock them. On Zener Diodes, we ship the better tolerance device at the same price at our discretion.

Sylvania Integrated Circuits



Additions to the famous SF and SG line of Sylvania Digital Integrated Circuits. Consist of two SUHL (Sylvania Universal High Level Logic) lines. SUHL I integrated circuits provide the largest selection of compatible digital functions. Specially designed for applications up to and including 50 MHz, with gate propagation delays in the range of 10 nanoseconds. SUHL II integrated circuits satisfy extreme high-speed requirements while maintaining full levels of efficiency. Feature 6 nanosecond gates and up to 50 MHz J-K flip-flops. Both lines are compatible, and both are interchangeable, pin-for-pin. All units have industrial operating temperature range of 0° to +75° C. All units are available in either 14-lead flat pack (designated by suffix −02 in Type No.) or plug-in pack (designated by suffix −03 in Type No.). Integrated circuits below are all SUHL I types except those with *which are SUHL II types.

SF AND SG SERIES DIGITAL INTEGRATED CIRCUITS (Noise Immunity: +1.1, −1.5 V; §+1.0, −1.5 V)

All Sylvania Military and Commercial Integrated Circuits Are Available from Allied, Though They May Not Be Listed

Circuit Function	TPD (nsec)	Fan-out Prime	Fan-out Std.	Flat Pack Type No.	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-Up	Plug-In Type No.	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-Up
Dual 4 Input	10	12	.....	SG42-02	3.78	3.15	2.55	2.10	SG42-03	5.10	4.25	3.40	2.90
NAND/NOR Gate	10	.....	6	SG43-02	3.06	2.55	2.05	1.70	SG43-03	4.14	3.45	2.75	2.30
Expandable Quad	12	12	.....	SG52-02	3.78	3.15	2.55	2.10	SG52-03	5.10	4.25	3.40	2.90
2 Input or Gate	12	.....	6	SG53-02	3.06	2.55	2.05	1.70	SG53-03	4.14	3.45	2.75	2.30
Single 8 Input	12	12	.....	SG62-02	3.78	3.15	2.55	2.10	SG62-03	5.10	4.25	3.40	2.90
NAND/NOR Gate	12	.....	6	SG63-02	3.06	2.55	2.05	1.70	SG63-03	4.14	3.45	2.75	2.30
Expandable Dual 2-	12	12	.....	SG72-02	3.78	3.15	2.55	2.10	SG72-03	5.10	4.25	3.40	2.90
Input Exclusive Gate	12	.....	6	SG73-02	3.06	2.55	2.05	1.70	SG73-03	4.14	3.45	2.75	2.30
Dual Pulse Shaper/	11	12	.....	SG82-02	5.88	4.90	3.90	3.30	SG82-03	5.10	4.90	3.90	3.30
Delay AND Gate	11	.....	6	SG83-02	4.74	3.95	3.10	2.65	SG83-03	4.14	3.45	2.75	2.30
Exclusive or	12	12	.....	SG92-02	3.78	3.15	2.55	2.10	SG92-03	5.10	4.25	3.40	2.90
with compliment	12	.....	6	SG93-02	3.06	2.55	2.05	1.70	SG93-03	4.14	3.45	2.75	2.30
Expandable Triple	12	12	.....	SG102-02	3.78	3.15	2.55	2.10	SG102-03	5.10	4.25	3.40	2.90
3 Input or Gate	12	.....	6	SG103-02	3.06	2.55	2.05	1.70	SG103-03	4.14	3.45	2.75	2.30
Expandable Dual	12	12	.....	SG112-02	3.78	3.15	2.55	2.10	SG112-03	5.10	4.25	3.40	2.90
4 Input or Gate	12	.....	6	SG113-02	3.06	2.55	2.05	1.70	SG113-03	4.14	3.45	2.75	2.30
Exp. Single 8	18	12	.....	SG122-02	3.78	3.15	2.55	2.10	SG122-03	5.10	4.25	3.40	2.90
I.P. NAND/NOR Gate	18	.....	6	SG123-02	3.06	2.55	2.05	1.70	SG123-03	4.14	3.45	2.75	2.30
Dual 4 Input Line	25	12	.....	SG132-02	5.40	4.50	3.65	3.05	SG132-03	5.64	4.70	3.75	3.15
Drvr./Lamp Drvr.	25	.....	6	SG133-02	4.38	3.65	2.90	2.40	SG133-03	4.56	3.80	3.00	2.50
Quad 2 Input	10	12	.....	SG142-02	3.78	3.15	2.55	2.10	SG142-03	5.10	4.25	3.40	2.90
NAND/NOR Gate	10	.....	6	SG143-02	3.06	2.55	2.05	1.70	SG143-03	4.14	3.45	2.75	2.30
Quad 2 Input	4	.....	.....	SG152-02	3.24	2.70	2.15	1.80	SG152-03	3.66	3.05	2.40	2.05
or Expander	4	.....	.....	SG153-02	3.24	2.70	2.15	1.80	SG153-03	3.66	3.05	2.40	2.05
Triple 2 Input	15	12	.....	SG162-02	5.40	4.50	3.65	3.05	SG162-03	5.64	4.70	3.75	3.15
Bus Driver	15	.....	6	SG163-02	4.38	3.65	2.90	2.40	SG163-03	4.56	3.80	3.00	2.50
Dual 4 Input	3	.....	.....	SG172-02	3.24	2.70	2.15	1.80	SG172-03	3.66	3.05	2.40	2.05
or Expander	3	.....	.....	SG173-02	3.24	2.70	2.15	1.80	SG173-03	3.66	3.05	2.40	2.05
Dual 4 Input and	.....	.....	.....	SG182-02	3.24	2.70	2.15	1.80	SG182-03	3.66	3.05	2.40	2.05
Expander	.....	.....	.....	SG183-02	3.24	2.70	2.15	1.80	SG183-03	3.66	3.05	2.40	2.05
Triple 3 Input	10	12	.....	SG192-02	3.78	3.15	2.55	2.10	SG192-03	5.10	4.25	3.40	2.90
NAND/NOR Gate	10	.....	6	SG193-02	3.06	2.55	2.05	1.70	SG193-03	4.14	3.45	2.75	2.30
Single-Phase SRT	12 MHz	12	.....	SF32-02	5.88	4.90	3.90	3.25	SF32-03	7.92	6.60	5.25	4.40
Flip-Flop	12 MHz	.....	6	SF33-02	4.74	3.95	3.15	2.60	SF33-03	7.14	5.95	4.75	3.95
J-K Flip-Flop	20 MHz	12	.....	SF52-02	6.84	5.70	4.55	3.85	SF52-03	6.84	5.70	4.55	3.85
(and inputs)	20 MHz	.....	6	SF53-02	5.76	4.80	3.85	3.25	SF53-03	5.76	4.80	3.85	3.25
J-K Flip-Flop	20 MHz	12	.....	SF62-02	6.84	5.70	4.55	3.85	SF62-03	6.84	5.70	4.55	3.85
(or inputs)	20 MHz	.....	6	SF63-02	5.76	4.80	3.85	3.25	SF63-03	5.76	4.80	3.85	3.25
Dual "D"	20 MHz	10	.....	SF81-02	15.48	12.90	10.30	8.80	SF81-03	15.48	12.90	10.30	8.80
Flip-Flop	20 MHz	.....	5	SF83-02	8.76	7.30	5.80	4.95	SF83-03	8.76	7.30	5.80	4.95
Dual 35 MHz J-K Flip-	35 MHz	9	.....	SF102-02§	10.56	8.80	7.05	5.95	SF102-03§	10.56	8.80	7.05	5.95
Flop. Separate Clock	35 MHz	.....	6	SF103-02§	8.82	7.35	5.85	4.95	SF103-03§	8.82	7.35	5.85	4.95
Dual 35 MHz J-K Flip-	35 MHz	9	.....	SF112-02§	10.56	8.80	7.05	5.95	SF112-03§	10.56	8.80	7.03	5.95
Flop, Common Clock	35 MHz	.....	5	SF113-02§	8.82	7.35	5.85	4.95	SF113-03§	8.82	7.35	5.85	4.95
Dual 50 MHz J-K Flip-	50 MHz	9	.....	SF122-02§	11.76	9.80	7.80	6.60	SF122-03§	11.76	9.80	7.80	6.60
Flop, Separate Clock	50 MHz	.....	5	SF123-02§	9.78	8.15	6.50	5.50	SF123-03§	9.78	8.15	6.50	5.50
Dual 50 MHz J-K Flip-	50 MHz	9	.....	SF132-02	11.76	9.80	7.80	6.60	SF132-03	11.76	9.80	7.80	6.60
Flop, Common Clock	50 MHz	.....	5	SF133-02	9.78	8.15	6.50	5.50	SF133-03	9.78	8.15	6.50	5.50
Expandable Single 8-In-	8	9	.....	SG202-02*	4.62	3.85	3.10	2.60	SG202-03*	5.64	4.70	3.75	3.15
put NAND/NOR Gate	8	.....	5	SG203-02*	3.72	3.10	2.50	2.05	SG303-03*	4.56	3.80	3.00	2.50
Expandable Dual	7	9	.....	SG212-02	4.62	3.85	3.10	2.60	SG212-03*	5.64	4.70	3.75	3.15
4 Input or Gate	7	.....	5	SG213-02*	3.72	3.10	2.50	2.05	SG213-03*	4.56	3.80	3.00	2.50
Quad 2 Input	6	9	.....	SG222-02*	4.62	3.85	3.10	2.60	SG222-03*	5.64	4.70	3.75	3.15
NAND/NOR Gate	6	.....	5	SG233-02*	3.72	3.10	2.50	2.05	SG223-03*	4.56	3.80	3.00	2.50
Quad 2 Input or	2	.....	.....	SG232-02*	3.24	2.70	2.15	1.80	SG232-03*	3.66	3.05	2.40	2.05
Expander	2	.....	.....	SG233-02*	3.24	2.70	2.15	1.80	SG233-03*	3.66	3.05	2.40	2.05
Dual 4 Input	6	9	.....	SG242-02*	4.62	3.85	3.10	2.60	SG242-03*	5.64	4.70	3.75	3.15
NAND/NOR Gate	6	.....	5	SG243-02*	3.72	3.10	2.50	2.05	SG243-03*	4.56	3.80	3.00	2.50

See Page 42 for Continuation of Sylvania Integrated Circuit Listing

Sylvania Integrated Circuits

ATTENTION PURCHASING

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SF AND SG SERIES DIGITAL INTEGRATED CIRCUITS (Cont'd)

(Noise Immunity: +1.0, —1.5 V.) *SUHL II types.

Circuit Function	TPD (nsec)	Fan-Out Prime	Fan-Out Std.	Flat Pack Type No.	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-Up	Plug-In Type No.	EACH 1-9	EACH 10-49	EACH 25-99	EACH 100-Up
Expandable Quad 2 Input or Gate	7.5	9	.....	SG252-02*	4.62	3.85	3.10	2.60	SG252-03*	5.64	4.70	3.75	3.15
	7.5	.....	5	SG253-02*	3.72	3.10	2.50	2.05	SG253-03*	4.56	3.80	3.00	2.50
Single 8 Input NAND/NOR Gate	8	9	.....	SG262-02*	4.62	3.85	3.10	2.60	SG262-03*	5.64	4.70	3.75	3.15
	8	.....	5	SG263-02*	3.72	3.10	2.50	2.05	SG263-03*	4.56	3.80	3.00	2.50
Dual 4 Input or Expander	2	.....	.....	SG272-02*	3.24	2.70	2.15	1.80	SG272-03*	3.66	3.05	2.40	2.05
	2	.....	.....	SG273-02*	3.24	2.70	2.15	1.80	SG273-03*	3.66	3.05	2.40	2.05
Expandable Dual 4-Input AND/OR Gate	11	9	.....	SG282-02*	5.46	4.55	3.65	3.05	SG282-03*	5.64	4.70	3.75	3.15
	11	.....	5	SG283-02*	4.38	3.65	2.85	2.45	SG283-03*	4.56	3.80	3.00	2.50
Dual 2 and 3 Input Expander	7	.....	.....	SG292-02*	4.56	3.80	3.05	2.55	SG292-03*	5.64	4.70	3.75	3.15
	7	.....	.....	SG293-02*	3.66	3.05	2.40	2.05	SG293-03*	3.80	3.80	3.00	2.50
Expander Triple 3-Input AND/NOR Gate	7	9	.....	SG302-02*	4.62	3.85	3.10	2.60	SG302-03*	5.64	4.70	3.75	3.15
	7	.....	5	SG303-02*	3.72	3.10	2.50	2.05	SG303-03*	4.56	3.80	3.00	2.50
Expandable Dual 2-Input Exclusive OR Gate	7	9	.....	SG312-02*	4.62	3.85	3.10	2.60	SG312-03*	5.64	4.70	3.75	3.15
	7	.....	5	SG313-02*	3.72	3.10	2.50	2.05	SG313-03*	4.56	3.80	3.00	2.50
Triple 3 Input NAND/NOR Gate	6	11	.....	SG320-02	7.38	6.15	4.90	4.10	SG320-03	9.00	7.50	6.00	5.00
	6	.....	6	SG321-02	5.82	4.85	3.85	3.20	SG321-03	7.08	5.90	4.70	3.95
	6	9	.....	SG322-02	4.62	3.85	3.10	2.60	SG322-03	5.64	4.70	3.75	3.15
	6	.....	.....	SG323-02	3.72	3.10	2.50	2.05	SG323-03	4.56	3.80	3.00	2.50
Quad 2 Input Lamp Driver	30	10	.....	SG351-02	7.32	6.10	4.85	4.05	SG351-03	9.90	8.25	6.55	5.45
	30	.....	5	SG353-02	4.56	3.80	3.05	2.55	SG353-03	4.92	4.10	3.25	2.75
Single 50 MHz J-K Flip-Flop AND Input	50 MHz	9	.....	SF202-02*	8.28	6.90	5.50	4.55	SF202-03*	8.46	7.05	5.65	4.75
	50 MHz	.....	5	SF203-02*	6.72	5.60	4.50	3.80	SF203-03*	6.72	5.60	4.50	3.80
Single 50 MHz J-K Flip-Flop OR Input	50 MHz	9	....	SF212-02*	8.28	6.90	5.50	4.55	SF212-03*	8.46	7.05	5.65	4.75
	50 MHz	.....	5	SF213-02*	6.72	5.60	4.50	3.80	SF213-03*	6.72	5.60	4.50	3.80
J-K Flip-Flop and Inputs	30 MHz	9	.....	SF252-02*	8.52	7.10	5.65	4.80	SF252-03*	8.52	7.10	5.65	4.80
	30 MHz	.....	5	SF253-02*	7.08	5.90	4.70	4.00	SF253-03*	7.08	5.90	4.70	4.00
J-K Flip-Flop (or Inputs)	30 MHz	9	.....	SF262-02*	8.52	7.10	5.65	4.80	SF262-03*	8.52	7.10	5.65	4.80
	30 MHz	.....	5	SF263-02*	7.08	5.90	4.70	4.00	SF263-03*	7.08	5.90	4.70	4.00

SM SERIES INTEGRATED CIRCUITS

Monolithic digital functional arrays combining as many as 172 conventional IC functions in a single package. Faster speed capabilities, less power drain, fewer external connections. Designed for greater reliability, less costly system assembly. Compatible with SUHL I and II. Noise immunity, ±1.0 V. Temperature range: MIL, —55° to +125° C. Ceramic flat pack measures ¼x¼". Dividers marked † in the table below are programmable, § indicates 4-bit shift, right shift, left register.

Circuit Function	TPD (nsec)	Drive	Flat Pack Type No.	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-Up	Plug-In Type No.	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-Up
Full Adder	input to	20 mA at 0.45 V	SM10-02	11.94	9.95	7.95	6.75	SM10-03	11.94	9.95	7.95	6.75
		10 mA at 0.45 V	SM11-02	9.12	7.60	6.05	5.15	SM11-03	9.12	7.60	6.05	5.15
		20 mA at 0.45 V	SM12-02	7.26	6.05	4.85	4.10	SM12-03	7.26	6.05	4.85	4.10
		10 mA at 0.45 V	SM13-02	6.00	5.00	4.00	3.40	SM13-03	6 00	5.00	4.00	3.00
Dependent Carry Fast Adder	sum out 22	20 mA at 0.45 V	SM20-02	13.68	11.40	9.10	7.70	SM20-03	13.68	11.40	9.10	7.70
		10 mA at 0.45 V	SM21-02	10.50	8.75	6.95	5.90	SM21-03	10.50	8.75	6.95	5.90
		20 mA at 0.45 V	SM22-02	8.22	6.85	5.50	4.65	SM22-03	8.22	6.85	5.50	4.65
		10 mA at 0.45 V	SM23-02	6.84	5.70	4.55	3.85	SM23-03	6.84	5.70	4.55	3.85
Independent Carry For Adder	input to carry out	20 mA at 0.45 V	SM30-02	13.68	11.40	9.10	7.70	SM30-03	13.68	11.40	9.10	7.70
		10 mA at 0.45 V	SM31-02	10.50	8.75	6.95	5.90	SM31-03	10.50	8.75	6.95	5.90
		20 mA at 0.45 V	SM32-02	8.22	6.85	5.50	4.65	SM32-03	8.22	6.85	5.50	4.65
		10 mA at 0.45 V	SM33-02	6.84	5.70	4.55	3.85	SM33-03	6.84	5.70	4.55	3.85
Carry Decoder	2	10 mA at 0.45 V	SM41-02	8.82	7.35	5.85	4.95	SM41-03	8.82	7.35	5.85	4.95
	2	10 mA at 0.45 V	SM43-02	5.76	4.80	3.85	3.25	SM43-03	5.76	4.80	3.85	3.25
4-Bit Reg. Wired "or"	20	10 mA at 0.45 V	SM61-02	15.84	13.20	10.55	8.95	SM61-03	15.84	13 20	10.55	8.95
	20	10 mA at 0.45 V	SM63-02	7.92	6.60	5.30	4.45	SM63-03	7.92	6.60	5 30	4.45
4 Bit Reg. High Cap. Dr.	20	10 mA at 0.45 V	SM71-02	15.84	13.20	10.55	8.95	SM71-03	15.84	13.20	10.55	8.95
	20	10 mA at 0.45 V	SM73-02	7.92	6.60	5.30	4.45	SM73-03	7.92	6.60	5.30	4.45
16 Bit Scratch Pad Memory	25	.....	SM81-02	29.46	24.55	19.60	16.71	SM81-03	23.88	19.90	15.90	13.55
	25	.....	SM82-02	19.68	16.40	13.05	11.16	SM82-03	16.38	13.65	10.85	9.28
	25	.....	SM83-02	18.72	15.60	12.45	10.60	SM83-03	15.36	12.80	10.20	8.70
Decade Frequency Divider	20	20 mA at 0.45 V	SM90-02	30.36	25.30	20.15	17.10	SM90-03	30.36	25.30	20.15	17.10
	17	10 mA at 0.45 V	SM91-02	30.36	25.30	20.15	17.10	SM91-03	30.36	25.30	20.15	17.10
	20	20 mA at 0.45 V	SM92-02	15.18	12.65	10.10	8.55	SM92-03	15.18	12.65	10.10	8.55
	17	10 mA at 0.45 V	SM93-02	15.18	12.65	10.10	8.55	SM93-03	15.18	12.65	10.10	8.55
4-Bit Shift §	25 MHz	16.6 mA at 0.4 V	SM113-02	15.66	13.05	10.40	8.80	SM113-03	12.30	10.25	8.15	6.97
Parity Generator Checker	22	11.6 mA at 0.4 V	SM121-02	23.52	19.60	15.60	13.20	SM121-03	23.52	19.60	15.60	13.20
		11.6 mA at 0.4 V	SM123-02	11.76	9.80	7.80	6.60	SM123-03	11.76	9.80	7.80	6.60
Comparator 2-Wd. 4-Bit	17	11.6 mA at 0.4 V	SM131-02	23.52	19.60	15.60	13.20	SM131-03	23.52	19.60	15.60	13.20
		11.6 mA at 0.4 V	SM133-02	11.76	9.80	7.80	6.60	SM133-03	11.76	9.80	7.80	6.60
Binary Divider†	25 MHz	11.6 mA at 0.4 V	SM143-02	15.66	13.05	10.40	8.80	SM143-03	11.46	9.55	7.60	6.50
Decade Divider†	25 MHz	11.6 mA at 0.4 V	SM153-02	15.66	13.05	10.40	8.80	SM153-03	11.46	9.55	7.60	6.50
Binary Counter	25 MHz	11.6 mA at 0.4 V	SM163-02	11.76	9.80	7.80	6.60	SM163-03	11.76	9.80	7.80	6.60
Decade Counter	25 MHz	11.6 mA at 0.4 V	SM173-02	11.76	9.80	7.80	6.60	SM173-03	11.76	9.80	7.80	6.60
Bin. Up/Dn Counter	25 MHz	11.6 mA at 0.4 V	SM183-02	16.62	13.85	11.10	9.35	SM183-03	16.62	13.85	11.10	9.35
Dec. Up/Dn Counter	25 MHz	11.6 mA at 0.4 V	SM193-02	16.62	13.85	11.10	9.35	SM193-03	16.62	13.85	11.10	9.35
Select In Control	10-20	11.6 mA at 0.4 V	SM211-02	20.64	17.20	13.75	11.70	SM211-03	18 72	15.60	12.45	10.60
		11.6 mA at 0.4 V	SM213-02	10.38	8.65	6.90	5.85	SM213-03	9.42	7.85	6.25	5.30
Select Out Control	9-14	11.6 mA at 0.4 V	SM221-02	20.64	17.20	13.75	11.70	SM221-03	18.72	15.60	12.45	10 60
		11.6 mA at 0.4 V	SM223-02	10.38	8.65	6.90	5.85	SM223-03	9.42	7.85	6.25	5.30

Sylvania Cerdip TTL Integrated Circuits

CERDIP PACKS

High-quality Sylvania Universal High Level Logic integrated circuits, also available in economical molded plastic package. Use glassivated wires and chips providing inert interface between plastic and active device. Glass-coated chips are moisture-proof and protected from contamination from foreign matter for long-life performance and added reliability. Heat dissipation capability equivalent to that of a ceramic flat pack. Leads are attached to chips using special aluminum-to-aluminum, ultra sonic bonding method. No possibility of self-generated bond failure due to "purple plague." All units have industrial operating temperature range of 0° to +75° C. Storage temperature range is −65° to +150° C. Noise immunity, +1.0, −1.5 volts. Average shpg. wt. 2 oz.

SUHL I

The first of two SUHL (Sylvania Universal High Level Logic) lines. SUHL I integrated circuits provide the largest selection of compatible digital functions. Specially designed for applications up to and including 50 MHz, with gate propagation delays in the range of 10 nanoseconds.

Type No.	Circuit Function	EACH 1-9	10-24	25-99	100-Up
SF52-01	J-K Flip-Flop	4.50	3.75	2.95	2.60
SF53-01	AND Input	4.26	3.55	2.80	2.50
SF62-01	J-K Flip-Flop	4.50	3.75	2.95	2.60
SF63-01	OR Input	4.26	3.55	2.80	2.50
SF83-01	Dual "D" Flip-Flop	6.60	5.50	4.35	3.85
SF102-01	Dual 35mc J-K Flip-	6.60	5.50	4.35	3.85
SF103-01	Flop Separate Clock	6.24	5.20	4.10	3.65
SF112-01	Dual 35mc J-K Flip-	6.60	5.50	4.35	3.85
SF113-01	Flop Common Clock	6.24	5.20	4.10	3.65
SG42-01	Dual 4-Input NAND/	2.70	2.25	1.80	1.58
SG43-01	NOR Gate	2.23	1.86	1.48	1.26
SG52-01	Expandable Quad 2-	2.70	2.25	1.80	1.58
SG53-01	Input OR Gate	2.23	1.86	1.48	1.26
SG62-01	Single 8-Input NAND/	2.70	2.25	1.80	1.58
SG63-01	NOR Gate	2.23	1.86	1.48	1.26
SG72-01	Expandable Dual 2-	2.70	2.25	1.80	1.58
SG73-01	Input Exclusive OR Gate	2.23	1.86	1.48	1.26
SG82-01	Dual Pulse Shaper/	3.81	3.17	2.53	2.17
SG83-01	Delay AND Gate	3.12	2.60	2.05	1.85
SG92-01	Exclusive OR	2.70	2.25	1.80	1.58
SG93-01	with Complement	2.23	1.86	1.48	1.26
SG102-01	Expandable Triple	2.70	2.25	1.80	1.58
SG103-01	3-Input OR Gate	2.23	1.86	1.48	1.26
SG112-01	Expandable Dual	2.70	2.25	1.80	1.58
SG113-01	4-Input OR Gate	2.23	1.86	1.48	1.26
SG122-01	Expandable Single 8-	2.70	2.25	1.80	1.58
SG123-01	Input NAND/NOR Gate	2.23	1.86	1.48	1.26
SG132-01	Dual 4-Input Line	3.46	2.88	2.30	1.97
SG133-01	Driver/Lamp Driver	3.31	2.76	2.19	1.90
SG142-01	Quad 2-Input	2.70	2.25	1.80	1.58
SG143-01	NAND/NOR Gate	2.23	1.86	1.48	1.26
SG152-01	Quad 2-Input	2.34	1.95	1.55	1.35
SG153-01	OR Expander	2.34	1.95	1.55	1.35
SG162-01	Triple 2-Input	3.46	2.88	2.30	1.97
SG163-01	Buss Driver	3.31	2.76	2.19	1.90
SG172-01	Dual 4-Input	2.34	1.95	1.55	1.35
SG173-01	OR Expander	2.34	1.95	1.55	1.35
SG182-01	Dual 4-Input	2.34	1.95	1.55	1.35
SG183-01	AND Expander	2.34	1.95	1.55	1.35
SG192-01	Triple 3-Input	2.70	2.25	1.80	1.58
SG193-01	NAND/NOR Gate	2.23	1.86	1.48	1.26
SG332-01	Quad 2-Input	3.58	2.98	2.48	1.76
SG333-01	NOR Gate	2.56	2.13	1.70	1.45
SG353-01	Quad 2-Input Lamp Driver	3.46	2.88	2.30	1.97
SD372-01	Hex	3.46	2.88	2.30	1.97
SG373-01	Inverter	2.80	2.33	1.85	1.58

SUHL II

Satisfy extreme high-speed requirements while maintaining full levels of efficiency. Feature 6 nanosecond gates and up to 50 MHz J-K flip-flops. Both lines are compatible, and both are interchangeable, pin-for-pin. All units have industrial operating temperature range of 0° to +75°C. All units are available in 14-lead flat pack or plug-in pack.

Type No.	Circuit Function	EACH 1-9	10-24	25-99	100-Up
SF93-01	Dual "D" Flip-Flop	7.20	6.00	4.75	4.20
SF122-01	Dual 50MHz J-K Flip-	7.20	6.00	4.75	4.20
SF123-01	Flop Separate Clock	6.84	5.70	4.50	4.00
SF132-01	Dual 50MHz J-K Flip-	7.20	6.00	4.75	4.20
SF133-01	Flop Common Clock	6.84	5.70	4.50	4.00
SF202-01	Single 50MHz J-K Flip-	5.16	4.30	40	3.00
SF203-01	Flop AND Input	4.92	4.10	25	2.85
SF212-01	Single 50MHz J-K Flop-	5.16	4.30	3.40	3.00
SF213-01	Flop OR Input	4.92	4.10	3.25	2.85

SUHL II (cont.)

Type No.	Circuit Function	EACH 1-9	10-24	25-99	100-Up
SG202-01	Expandable Single 8-	3.00	2.50	2.00	1.75
SG203-01	Input NAND/NOR Gate	2.80	2.33	1.85	1.58
SG212-01	Expandable Dual 4-	3.00	2.50	2.00	1.75
SG213-01	Input OR Gate	2.80	2.33	1.85	1.58
SG222-01	Quad 2-Input	3.00	2.50	2.00	1.75
SG223-01	NAND/NOR Gate	2.80	2.33	1.85	1.58
SG232-01	Quad 2-Input	2.34	1.95	1.55	1.35
SG233-01	OR Expander	2.34	1.95	1.55	1.35
SG242-01	Dual 4-Input	3.00	2.50	2.00	1.75
SG243-01	NAND/NOR Gate	2.80	2.33	1.85	1.58
SG252-01	Expandable Quad	3.00	2.50	2.00	1.75
SG253-01	2-Input OR Gate	2.80	2.33	1.85	1.58
SG262-01	Single 8-Input	3.00	2.50	2.00	1.75
SG263-01	NAND/NOR Gate	2.80	2.33	1.85	1.58
SG272-01	Dual 4-Input	2.34	1.95	1.55	1.35
SG273-01	OR Expander	2.34	1.95	1.55	1.35
SG282-01	Expandable Dual 4-	3.81	3.17	2.53	2.17
SG283-01	Input AND/OR Gate	3.12	2.60	2.05	1.85
SG292-01	Dual 2 & 3 Input	3.00	2.50	2.00	1.75
SG293-01	OR Expander	2.80	2.33	1.85	1.68
SG302-01	Expandable Triple 3-	3.00	2.50	2.00	1.75
SG303-01	Input AND/NOR Gate	2.80	2.33	1.85	1.68
SG312-01	Expandable	3.00	2.50	2.00	1.75
SG313-01	Dual 2-Input	2.80	2.33	1.85	1.68
SG322-01	Triple 3-Input	3.00	2.50	2.00	1.75
SG323-01	NAND/NOR Gate	2.80	2.33	1.85	1.68
SG342-01	Quad 2-Input	3.00	2.50	2.00	1.75
SG343-01	NOR Gate	2.80	2.33	1.85	1.58
SG382-01	Hex	3.81	3.17	2.53	2.17
SG383-01	Inverter	3.12	2.60	2.05	1.85

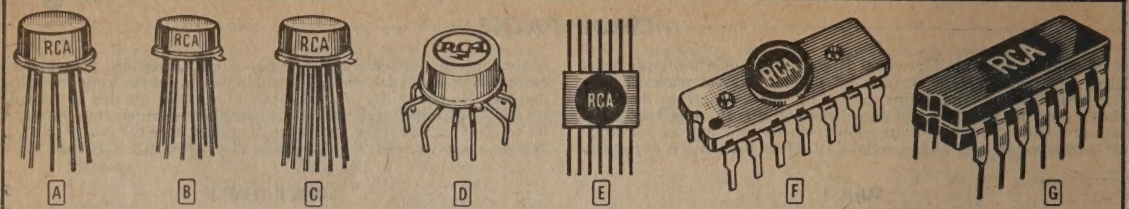
7400 SERIES INTEGRATED CIRCUITS

Excellent quality integrated circuits that offer a full range of logic functions. Ideal for applications in such fields as computerized maskmaking; new bonding techniques; automated production equipment, more. Have all-aluminum system which prevents purple plague. Guaranteed hermeticity of 1×10^{-7} cc/sec, 2% AQL. Tapered lead ends. Solderability and salt atmosphere tests meet the most rigid requirements. Rolled leads provide strength and facilitate socket insertion.

Mfr's Type No.	Circuit Function	EACH 1-9	10-24	25-99	100-Up
SG7400N	Quad 2 NAND Gate	1.53	1.27	1.01	.85
SG7401N	Quad 2 NAND Gate (Open)	1.53	1.27	1.01	.85
SG7402N	Quad 2 NOR Gate	1.74	1.45	1.16	.97
SG7403N	Quad 2 NAND Gate (Open)	1.53	1.27	1.01	.85
SG7410N	Triple 3 NAND Gate	1.53	1.27	1.01	.85
SG7420N	Dual 4 NAND Gate	1.53	1.27	1.01	.85
SG7430N	Single 8 NAND Gate	1.53	1.27	1.01	.85
SG7440N	Dual 4 Buffer Gate	1.74	1.45	1.16	.97
SM7442N	BCD to Decimal Decoder	8.01	6.67	5.31	4.53
SM7443N	Excess 3 to Decimal Decoder	11.40	9.50	7.57	6.45
SM7444N	Excess 3 Gray Code to Dec. Decoder	11.40	9.50	7.57	6.45
SG7450N	Dual 2x2 AND-OR Gate/Exp. Inputs	1.53	1.27	1.01	.85
SG7451N	Dual AND-OR-Inverter	1.53	1.27	1.01	.85
SG7453NN	4x2 AND-OR-Invert Gate with Exp.	1.53	1.27	1.01	.85
SM7475N	Quad Bistable Latch	6.57	5.47	4.36	3.72
SM7481N	16-Bit Memory	8.03	6.69	5.33	4.54
SM7491N	8-Bit Shift Register	10.26	8.55	6.81	5.81
SG7454N	Single AND-OR-Inverter	1.53	1.27	1.01	.85
SG7460N	Dual 4-Input Expander	1.38	1.15	.92	.77
SF7472N	Master/Slave J-K Flip-Flop	2.34	1.95	1.56	1.31
SF7473N	Dual Master/Slave J-K Flip-Flop	3.84	3.20	2.56	2.15
SF7474N	Dual Trigger Flip-Flop	3.36	2.80	2.24	1.88

Be sure to specify manufacturer's type number when ordering. As new types are released, Allied Electronics will stock them.

RCA Linear Integrated Circuits



Broad capability integrated circuits offering linear and digital lines for a wide range of industrial, military, and commercial applications. A variety of packages is geared to today's most popular pin configurations. Feature single-chip, monolithic silicon, epitaxial passivated construction. Packages and cases referred to in Table below and on opposite page are illustrated above.

OPERATIONAL AMPLIFIERS

Type No.	Circuit Applications	Pkg. Fig.	Oper. Temp. Range	Input Signal Voltage	Device Dissipation	Input Offset Voltage	Input Bias Current	Gain dB @ 1 kHz	Com. Mode Rejection Ratio	−3 dB Bandwidth	EACH 1-9	10-99	100-999	1000 Up
CA3008	Narrow-Band and Bandpass, Feedback, Video and DC Amplifier, Servo Driver, Scaling Adder, Oscillator, Balanced Modulator, Driver, Comparator, Multivibrator, Operational Functions	E	−55°C to	−4,	30 mW	1.08 mV	5.3 μA	60	94 dB	300	7.72	6.44	4.68	3.90
CA3008A		E	+125°C	+1 V	40 mW	0.9 mV	2.5 μA	60	@ 1 kHz	kHz	11.69	9.74	7.08	4.90
CA3010		C	−55°C to	−4,	30 mW	1.08 mV	5.3 μA	60	94 dB	300	3.14	2.61	1.90	1.58
CA3010A		C	+125°C	+1 V	40 mW	0.9 mV	2.5 μA	60	@ 1 kHz	kHz	5.75	4.79	3.48	2.90
CA3015		C	−55°C to	−8,	175 mW	1.37 mV	9.6 mA	70	103 dB	320	4.75	3.96	2.88	2.40
CA3015A		C	+125°C	+1 V		1 mV	4.7 μA	70	@ 1 kHz	kHz	7.72	6.44	4.68	3.90
CA3016		E	−55°C to	−8,	175 mW	1.37 mV	9.6 μA	70	103 dB	320	10.70	8.91	6.48	5.40
CA3016A		E	+125°C	+1 V		1 mV	4.7 μA	70	@ 1 kHz	kHz	13.65	11.38	8.28	6.90
CA3029		G	0°C to	−4,	30 mW	1.08 mV	5.3 μA	60	94 dB	300	1.95	1.62	1.18	.98
CA3029A		G	+70°C	+1 V	40 mW	0.9 mV	2.5 μA	60	@ 1 kHz	kHz	3.77	3.14	2.28	1.90
CA3030		G	0°C to	−8,	175 mW	1.37 mV	9.6 μA	70	103 dB	320	3.14	2.61	1.90	1.58
CA3030A		G	+70°C	+1 V		1 mA	4.7 μA	70	@ 1 kHz	kHz	5.75	4.79	3.48	2.90
CA3033		F	−55°C to +125°C	−10, +10 V	120 mW	2.6 mV	83 nA	90	100 dB @ 1 kHz	230 kHz	5.75	4.79	3.48	2.90
CA3033A		F		−13, +10 V	250 mW	2.9 mV	103 nA	96	108 dB @ 1 kHz	360 kHz	9.70	8.09	5.88	4.90
CA3037		F		−4,	30 mW	1.08 mV	5.3 μA	60	94 dB	300 kHz	3.77	3.14	2.28	1.90
CA3037A		F		+1 V	40 mW	0.9 mV	2.5 μA	60	@ 1 kHz	300 kHz	5.75	4.79	3.48	2.90
CA3038		F		−8,	175 mW	1.37 mV	9.6 μA	70	103 dB	320 kHz	5.75	4.79	3.48	2.90
CA3038A		F		+1 V	175 mW	1 mV	4.7 μA	70	@ 1 kHz	320 kHz	7.72	6.44	4.68	3.90
CA3047		G	0°C to +70°C	−10 V, +10 V	120 mW	2.6 mV	83 μA	90	100 dB @ 1 kHz	230 kHz	3.14	2.61	1.90	1.58
CA3047A		G		−13 V, +10 V	250 mW	2.9 mV	103 μA	90	108 dB @ 1 kHz	360 kHz	5.75	4.79	3.48	2.90

RF AMPLIFIERS

CA3004	Push-Pull In and Out; Wide and Narrow Band, Modulator, AGC; Detector; Mixer; Limiter; Casc. Amp	C	−55°C to +125°C	−3.5, +3.5 V	26 mW	1.7 mV	21 μA	12 dB @ 100 MHz	98 dB @ 1 kHz	100 MHz	4.45	3.71	2.70	2.25
CA3005		C			26 mW	2.6 mV	19 μA	16 dB @ 100 MHz	101 dB @ 1 kHz	100 MHz	2.98	2.48	1.80	1.50
CA3006		C			26 mW	0.8 mV	19 μA	16 dB @ 100 MHz	101 dB @ 1 kHz	100 MHz	6.96	5.80	4.20	3.50

VIDEO AND WIDEBAND AMPLIFIERS

CA3001	DC, IF Video Amp; Schmidt Trigger; Mixer; Phase Inverter; AM/FM IF Amp; Gain-Controlled Linear Amp; Limiter; Low-Power Wideband Amp; Diff. Input Amp; Gen Purpose Amp; Dual Phase Detector; Compensated Reference Voltage Supply	C	−55°C to +125°C	−2.5 V, +2.5 V	78 mW	1.5 mV	16 μA	19 @ 1.75 MHz	88 dB @ 1 kHz	16 MHz	6.66	5.55	4.00	3.35
CA3021		C		−3 V, +3 V max.	4 mW	Quies. Output Voltage 2.2 V	AGC Source Current 0.8 mA	56 @ 0.5 MHz	NF 4.2 dB	2.4 MHz	3.77	3.14	2.28	1.90
CA3022		C			12.5 mW	1.9 V	0.8 mA	57 @ 2.5 MHz	4.4 dB	7.5 MHz	3.17	2.64	1.92	1.60
CA3023		C			35 mW	1.3 V	0.8 mA	53 @ 5 MHz	6.5 dB	16 MHz	3.07	2.56	1.86	1.55
CA3035		B		1 V P to P	Wideband Amplifier (3) Array Diss., 300 mW. Amp 1—44 dB gain Supply V, 15 V. Amp 2—46 dB gain Input V, 1 V p-p. Amp 3—42 dB gain				6 dB	500 kHz	2.98	2.48	1.80	1.50
CA3035VI		D							.....	2.5 MHz	2.98	2.48	1.80	1.50
									.....	2.5 MHz				
CA3040		C	−55°C to +125°C	−3 V, +3 V	450 mW	Output Voltage 2.7 V	15 μA	Diff push-pull voltage gain 37 dB single-ended voltage gain 31 dB		55 MHz	5.84	4.87	3.54	2.95

AF AMPLIFIER

CA3007	Direct-Coupled Driver for Class B AF Output Stage	C	−55°C to +125°C	−2.5, +2.5 V	30 mW	0.57 mV unbal.	11 μA	22 @ 1 kHz	77 dB @ 1 kHz	20 kHz	6.42	5.35	3.90	3.25

MULTI-PURPOSE WIDEBAND POWER AMPLIFIER

CA3020	Preamp, Phase Inverter, Driver, Power Output Stage	C	−55°C to +125°C	−3, +3 V	CA3020: S/N ratio, 70 dB. Max. power output. 550 mW. CA3020A: S/N ratio, 66 dB. Max. Power output, 1 W. Transducer power Gain, 58 dB					6 MHz	3.07	2.56	1.86	1.55
CA3020A											3.92	3.26	2.37	1.98

Integrated Circuit Listings Continued on the Following Pages

Linear Integrated Circuits

RCA

DC AMPLIFIER (Operating Temperature Range: −55° C to +125° C) (Case B)

Type No.	Circuit Applications	Input Signal Voltage	Device Dissipation	Input Offset Voltage	Input Bias Current	Gain dB	Com. Mode Rejection Ratio	−3 dB Bandwidth	EACH 1-9	10-99	100-999	1000-Up
CA3000	Mixer, Modulator, RC Coupled Feedback Amp; Crystal Oscillator; Sense Amp; Comparator; Schmitt Trigger	−2, +2 V	30 mW	1.4 mV	23 μA	37 @ 1 kHz	98 dB @ 1 kHz	650 kHz	4.56	3.80	2.76	2.30

IF AMPLIFIER (Operating Temperature Range: −55° C to +125° C) (Case B)

CA3002	Product Detector, AM Detector, IF and Video Amplifier	−3.5, +3.5 V	55 mW	2.2 mV unbal.	20 μA	24 @ 1.75 MHz	.....	11 MHz	4.45	3.71	2.70	2.25

DIFFERENTIAL/CASCODE AMPLIFIERS (Operating Temperature Range, −55° C to +125° C) (Case A)

CA3028A	RF and IF Amp; DC, Audio and Sense Amp; Converter in Comm. FM; Oscillator; Mixer; Limiter	6 V P-P	260 mW max.	.....	16.6 μA	17 @ 100 MHz	NF= −6.7 dB	120	1.77	1.47	1.07	.89
CA3028B		6 V P-P	220 mW max.	5 mV max.	16.6 μA	17 @ 100 MHz	NF= −6.7 dB	.....	2.47	2.06	1.50	1.25
CA3053		6 V P-P	150 mW max.	.....	.....	32 @ 10.7 MHz	.....	.....	.97	.81	.59	.49

DUAL DIFFERENTIAL AMPLIFIERS (Operating Temperature Range, −55° C to +125° C.) (3050, Case F; 3051, Case G)

CA3050	Matched Dual Amp, Dual Sense Amp, Dual Schmitt Triggers, Mixers, Detectors	.....	150 mW max.	5 mV max.	200 nA	.....	65 dB @ 1 kHz	43 MHz	4.45	3.71	2.70	2.25
CA3051		.....	150 mW max.	5 mV max.	200 nA	.....	65 dB @ 1 kHz	43 MHz	3.27	2.72	1.98	1.65

FM IF AMPLIFIERS

Type No.	Circuit Applications	Pkg. Fig.	Oper. Temp. Range	Input Signal Voltage	Device Dissipation	DC Supply Voltage	Voltage Gain	Noise Figure	Input Limiting V (Knee)	EACH 1-9	10-99	100-999	1000-Up
CA3011	High-Gain Wideband IF Amplifier for FM Broadcast and TV Sound	B	−55°C to +125°C	−3, +3 V	120 mW	7.5V	67 dB @ 4.5 MHz	8.7 dB	300 μV	1.77	1.47	1.07	.89
CA3012				−3, +3 V	120 mW 190 mW	7.5 V 10 V	67 dB @ 4.5 MHz	8.7 dB	300 μV	2.19	1.82	1.32	1.10

FM IF AMPLIFIERS—DISCRIMINATORS—AF AMPLIFIERS

CA3013	IF Amplifier; AM and Noise Limiter: FM Detector; Audio Preamplifier	B	−55°C to +125°C	−3, +3 V	120 mW	7.5 V	67 dB @ 4.5 MHz	8.7 dB	300 μV	2.58	2.15	1.56	1.30
CA3014		B		−3, +3 V	120 mW 90 mW	7.5 V 10 V	67 dB @ 4.5 MHz	8.7 dB	300 μV	2.98	2.48	1.80	1.50

WIDEBAND AMPLIFIER—FM DETECTOR—AF PREAMPLIFIER/DRIVERS

CA3041	TV/FM IF Circuits	G	0°C to +85°C	Drives audio output tube (e. g. 6AQ5) directly; Drives NPN audio power output transistor (e. g. RCA 40424) directly, or high-gain power pentode (e. g. 12FX5 or 6EH5) directly	150 μV	2.47	2.06	1.50	1.25
CA3042		G			150 μV	2.47	2.06	1.50	1.25
CA3043	.....	C	−55°C to +125°C	A major sub-system for the IF sections of Comm. & hi-fi receiver	50 μV at 10.7 MHz	3.37	2.81	2.04	1.70
CA3065	.....	G	−40°C to +85°C	For sound system of TV receivers	200 μV	2.77	2.31	1.68	1.40

TV AUTOMATIC FINE-TUNING CIRCUIT

CA3044	Primarily for AFC applications	B	−55°C to +125°C	With internal Zener-diode voltage regulator	.....	2.77	2.31	1.68	1.40
CA3044-V1		D			.....	2.77	2.31	1.68	1.40
CA3064		D	−40°C to +85°C		.....	2.77	2.31	1.68	1.40
CA3075	FM IF amplifier limiter, detector & audio preamp., in communication receivers	G	−40°C to +85°C	Storage temperature −65°C to +125°C	.....	2.77	2.31	1.68	1.40
CA3076	High-gain, wide-band IF amplifier limiter in communications receivers and hi-fi receivers.	A	−55°C to +125°C	Storage temperature −66°C to +125°C	.....	3.17	2.64	1.92	1.60

TRANSISTOR ARRAYS

Type No.	Circuit Applications	Pkg. Fig.	Oper. Temp. Range	Device Diss.	EACH TRANSISTOR V_{CEO}	EACH TRANSISTOR I_C	I_{CBO} TA=25° C	Typ. h_{fe}	Typ. f_T	EACH 1-9	10-99	100-999	1000-Up
CA3018	Final IF Amplifier and 2nd Detector; Cascode and Video	C	−55° to +125° C	300 mW max.	15 V max.	50 mA max.	0.1 μA max.	110 @ 1 kHz	500 MHz	1.95	1.62	1.18	.98
CA3018A	Amps; 100-MHz Cascode and 15-kHz Tuned RF Amps	C					0.04 μA max.			2.67	2.22	1.62	1.35
CA3026	6 Transistors Connected as 2 Differential Amps with Constant Current Sinks	C	−55° to +125° C	300 mW max.	15 V max.	.....	0.1 μA max.	110 @ 1 kHz	550 MHz	2.47	2.06	1.50	1.25
CA3045	Signal Processing Systems from DC to VHF	F		300 mW max.	15 V max.	.....	0.04 μA max.	110 @ 1 kHz	550 MHz	2.97	2.47	1.80	1.50
CA3046	Applications Requiring Limited Temp. Range	G	0° to +85° C	300 mW max.	15 V max.	.....	0.04 μA max.	110 @ 1 kHz	550 MHz	1.94	1.61	1.17	.98
CA3049	VHF Amp, VHF Mixer, IF Amp, Detectors, Multi-Function Combinations	C	−55° to +125° C	300 mW max.	15 V max.	50 mA max.	100 mA max.	.....	1.3 GHz	3.86	3.22	2.34	1.95
CA3054	Same as CA3026 except that Temperature Range is 0°C to +85°C, and G pkg.									2.47	2.06	1.50	1.25

RCA Linear and Digital Integrated Circuits

DUAL DARLINGTON ARRAY

Type No.	Circuit Applications	Pkg. Fig.	Oper. Temp. Range	Device Diss.	EACH TRANS. V_{CEO}	EACH TRANS. I_C	I_{CBO} TA=25° C	Typ. h_{fe}	Typ. f_T	EACH 1-9	EACH 10-99	EACH 100-999	EACH 1000-Up
CA3036	2 Independent Low-Noise Wideband Amplifier Channels	B	−55° to +125° C	300 mW max.	15 V max.	50 mA max.	0.5 μA max. 82 @ 1 mA	110 A 1 kHz	200 MHz	1.76	1.47	1.07	.89

DIODE ARRAYS

Type No.	Circuit Applications	Pkg. Fig.	Oper. Temp. Range	Device Diss.	EACH DIODE V_F	EACH DIODE $V_{(BR)R}$	Voltage Limits	DC Reverse I_R Typ.	EACH 1-9	EACH 10-99	EACH 100-999	EACH 1000-Up
CA3019	Diode Gate for Chopper-Modulator Use, Modulator, Mixer, Balanced Modulator, Analog Switch	B	−55° to +125° C	120 mW max.	0.73 V	4 V	−3 to +12	10 μA	1.94	1.62	1.18	.98
CA3039	Six Matched Diodes, Ultra-Fast Switching, Low Capacitance	C	−55° to +125° C	450 mW max.	0.73 V	5 V	.....	.....	1.93	1.61	1.17	.98

ULTRA-HIGH GAIN WIDEBAND AMPLIFIER ARRAYS

Type No.	Circuit Applications	Pkg. Fig.	Oper. Temp. Range	CHARACTERISTICS	EACH 1-9	EACH 10-99	EACH 100-999	EACH 1000-Up
CA3035	3 Independent General-Purpose Amplifiers	B	−55° to +125°C	Maximum Limits: Input Signal Volt., 1 V p-p; Device Dissipation, 300 mW; Supply Voltage, 15 V — Typical Values: Cascade Voltage Gain @ 40 kHz, 129 dB; Noise Figure (Amplifier 1), 6 dB; Sensitivity, 100 μV	2.98	2.48	1.80	1.50
CA3035V1		D			2.98	2.48	1.80	1.50
CA3048	Multi-Channel or Cascade Oper., Low-Level Preamp, Equalizers, Mixers	G	−25° to +85°C	Typical Noise Fig. at 1 kHz, 2 dB; High Voltage Gain, 53 dB min.; AC Input Voltage, 0.5 V rms	4.84	4.04	2.94	2.45

VOLTAGE REGULATOR

Type No.	Circuit Applications	Pkg. Fig.	Oper. Temp. Range	Device Diss.	Ref. Volt.	Input Volt. Range	Output Volt. Range	Output Noise Volt.	Standby Current	EACH 1-9	EACH 10-99	EACH 100-999	EACH 1000-Up
CA3055	High-current voltage, shunt voltage, or switching voltage regulator	A	−55° C to +125° C	630 mW max.	1.6 V typ.	7.5-40 V	1.6-36 V	700 μV	7 mA	5.83	4.86	3.54	2.95

ZERO-VOLTAGE SWITCH

Type No.	Circuit Applications	Pkg. Fig.	Oper. Temp. Range	Device Diss.	Characteristics	EACH 1-9	EACH 10-99	EACH 100-999	EACH 1000-Up
CA3059	For AC power controls of Thyristors	G	−40° C to +85° C	700 mW max.	Eliminates RFI, operates direct AC line fail-safe protection, sensitive to 1-3% change in sensor resistance	3.84	3.20	2.35	1.95

OPERATIONAL TRANSCONDUCTANCE AMPLIFIER ARRAY (OTA)

Type No.	Applications	Pkg. Fig.	Oper. Temp. Range	Device Diss.	DC Supply Volt	Diff. Input Volt	Input Sig. Cur. Ea. Amp.	Amp. Bias Current Ea. Amp.	EACH 1-9	EACH 10-99	EACH 100-999	EACH 1000-Up
CA3060	Low power conventional op amp applications, active filters, gyrators, mixers, modulators, multipliers	F	−55° C to	200 mW max.	14 V	±5 V	±1 mA	2 mA	11.80	9.82	7.14	5.95

PHOTO DETECTOR AND POWER AMPLIFIER

Type No.	Pkg. Fig.	Oper. Temp. Range	Device Diss.	Characteristics	EACH 1-9	EACH 10-99	EACH 100-999	EACH 1000-Up
CA3062	Modified C	−55° C to +125° C	200 mW max.	5 to 15 volt DC supply. 100 mA output capability. Compatible with RCA 40736R IR Emitter	5.83	4.86	3.54	2.95

DIGITAL INTEGRATED CIRCUITS

ULTRA-HIGH-SPEED ECCSL GATES (OR/NOR Positive Logic) (Fig. A, Page 52)

*Output connected to −1.6 V through 100-ohm resistor. †Power supply current drain.

Type No.	Gate Description	Applications	Operating Conditions: Supply Oper. Temp. Range °C	Operating Conditions: Max. Supply Voltage Range V	Operating Conditions: Max. Fan-out per Gate (each output)	Typ. Characteristics—TA=25° C: Logic Levels "0" V	Logic Levels "1" V	DC Input Curr. mA	Noise Immunity V	Device Dissipation mW	Propagation Delay (Avg.): Speed ns	Propagation Delay (Avg.): Load Fan-out	EACH 1-9	EACH 10-99	EACH 100-999	EACH 1000-Up
CD2150	Dual 4-Input	3rd Generation Business Computers; High Speed Commercial Industrial and Scientific Computers	10 to 60	−4.5 to −5.5	6*	−1.6	−0.8	0.1	0.33	44 mA†	3.6	1+10 pF	4.75	3.96	2.88	2.40
CD2151	Dual 4-Input w/"Phantom OR"				6*	−1.6	−0.8	0.1	0.33	35 mA†	3.6	1+10 pF	4.75	3.96	2.88	2.40
CD2152	8-Input with "Phantom OR"				6*	−1.6	−0.8	0.1	0.33	40 mA†	3.6	1+10 pF	4.75	3.96	2.88	2.40
CD2153	Quadruple 2-Input w/"Phantom OR"				6*	−1.6	−0.8	0.1	0.33	35 mA†	3.6	1+10 pF	6.25	5.20	3.80	3.15
CD2150	Quadruple 2-input nor-positive logic	.....	.....	.....	6*	−1.6	−0.8	0.1	0.33	49 mA†	3.6	1+10 pF	6.25	5.20	3.80	3.15

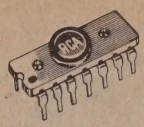
Highest Percentage of Orders Filled in the U.S.A.

Digital Integrated Circuits

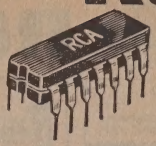
RCA

RCA's growing line of digital integrated circuits now includes the following types: **Ultra-High-Speed ECCSL Gates**—CD2150 Series in 14-lead ceramic flat packages. **High-Speed ECCSL Gates**—CD2100 Series in 14-lead ceramic flat package. **Low-Power DTL Gates**—CD2200 Series in 14-lead ceramic flat package; CD2200D Series in 14-lead dual-in-line ceramic package. **CD4000 Series are COS/MOS.**

A — 14-Lead Flat Pack



B — TO-116 Dual In-Line Ceramic



C — 14-Lead Dual In-Line Plastic

ULTRA-HIGH-SPEED ECCSL 16-BIT NDRO READ-MEMORY (Fig. B)

Type No.	Operating Temp.	Applications	EACH 1-9	10-99	100-999	1000-Up
CD2155D	0°C to +75°C	For "Scratch-Pads," High-Speed Registers, Table Translation, Buffer and Cache-Type Memories, and Microprogramming	27.80	23.20	19.20	16.00

HIGH-SPEED ECCSL GATES (OR/NOR Positive Logic) (Fig. A)

‡Outputs unloaded. §Output unterminated.

Type No.	Gate Description	Applications	Operating Conditions: Supply Oper. Temp. Range °C	Max. Supply Voltage Range V	Max. Fan-out per Gate (each output)	Typ. Characteristics—TA=25°C: Logic Levels "0" V	Logic Levels "1" V	DC Input Curr. mA	Noise Immunity V	Device Dissipation mW	Propagation Delay (Avg.) Speed ns	Propagation Delay (Avg.) Load Fan-out	EACH 1-9	10-99	100-999	1000-Up
CD2100	Dual 4-Input	High-Speed Comm., Ind. and Mil. Computers; Electronic Control and High-Frequency Digital Communications Equipment	−55 to +125	−4.68 to −5.72	12§	−1.55‡	−0.75‡	0.05	0.32	88	5.6	1+10 pF	7.44	6.20	4.50	3.75
CD2101	Quadruple 2-Input NOR				12§	−1.55‡	−0.75‡	0.05	0.32	120	5.6	1+10 pF	7.80	6.50	4.75	3.95

LOW-POWER DTL GATES (NAND Positive Logic) (Fig. A; D Types Fig. B)

Type No.	Gate Description	Applications	Operating Conditions: Supply Oper. Temp. Range °C	Max. Supply Voltage Range V	Max. Fan-out per Gate (each output)	Typ. Characteristics—TA=25°C: Logic Levels "0" V	Logic Levels "1" V	DC Input Curr. mA	Noise Immunity V	Device Dissipation mW	Propagation Delay (Avg.) Speed ns	Propagation Delay (Avg.) Load Fan-out	EACH 1-9	10-99	100-999	1000-Up
CD2200	Dual 4-Input	Aerospace, Airborne Computers, Portable Military Equipment, Instrumentation, and Industrial Control Equipment; other uses where circuits with low device dissipation and high noise immunity are required	−55 to +125	+3.8 to +6.3	6	+0.1	+3.4	−0.33	1.2	2.3/gate	55	6+60 pF	12.88	10.72	7.80	6.50
CD2200D	w/Expander Node												12.88	10.72	7.80	6.50
CD2201	Quadruple 2-Input				6	+0.1	+3.4	−0.33	1.2	2.3/gate	55	6+60 pF	12.88	10.72	7.80	6.50
CD2201D													12.88	10.72	7.80	6.50
CD2202	Dual 4-Input Buffer/Exp. Node				25	+0.1	+3.4	−0.33	1.2	12/gate	48	25+250 pF	12.88	10.72	7.80	6.50
CD2202D													12.88	10.72	7.80	6.50
CD2203	J-K Flip-Flop				5	+0.1	+3.4	−0.33	1.2	7/pkg.	130	5+50 pF	14.80	12.33	10.20	8.50
CD2203D	w/Set-Reset												14.80	12.33	10.20	8.50
CD2204	Dual 4-Input Expander		Cap. expand. Fan-in to over 20 ECCSL. Compat. w/all inputs LPDTL Series gates Temp. Range, −55 to 125°C.			Low Cap. loading on expanded gate 4 pF typ. Forward Voltage, 0.72 V Typical Leakage Current, 5 nA.							7.92	6.60	4.80	4.00
CD2204D													7.92	6.60	4.80	4.00
CD2205	Dual 3-Input Expandable AND/OR/NOT		−55 to +125	−3.8 to +6.3	6-Inv. Fan-out	+0.1	+3.4	−0.33	1.2	5/pkg.	71	6+60 pF	12.88	10.72	7.80	6.50
CD2205D													12.88	10.72	7.80	6.50

BCD TO 7-SEGMENT DECODER-DRIVERS (Fig. C with 16 leads)

Type No.	Operating Temp.	Applications	EACH 1-9	10-99	100-999	1000-Up
CD2500E	0°C to +75°C	30mA/Segment with decimal point output	13.38	11.14	8.10	6.75
CD2501E		30mA/Segment with ripple blanking	13.38	11.14	8.10	6.75
CD2502E		80mA/Segment (high current version of CD2500E)	13.82	11.60	9.60	8.00
CD2503E		80mA/Segment (high current version of CD2501E)	13.82	11.60	9.60	8.00

CD4000 FAMILY OF COS/MOS INTEGRATED CIRCUITS

- Ultra-Low Power Dissipation
- Single 10-Volt Power Supply
- 10-Volt Logic Swing
- 4-Volts Noise Immunity
- Fan-Outs Up to 50
- Temp. Range, −55° to −125°C

GATES

Type No.	Description	Pkg. Fig.	EACH 1-9	10-99	100-999	1000-Up
CD4000	Dual 3-Input	A	9.90	8.25	6.20	5.00
CD4000D	NOR Gate plus Inverter	B	7.92	6.60	4.80	4.00
CD4001	Quad 2-Input	A	11.40	9.50	6.90	5.75
CD4001D	NOR Gate	B	9.42	7.85	5.70	4.75
CD4002	Dual 4-Input	A	10.92	9.10	6.60	5.50
CD4002D	NOR Gate	B	8.94	7.45	5.40	4.50

FLIP-FLOPS

CD4013	Dual D-Type	A	15.65	13.05	10.80	9.00
CD4013D	Set/Reset	C	13.92	11.60	9.60	8.00

BUFFER/CONVERTERS

CD4009D	Inverting Type	16-lead	13.85	11.55	8.40	7.00
CD4010D	Non-Inverting	C	13.85	11.55	8.40	7.00

MSI (Medium-Scale Integration)

Type No.	Description	Pkg. Fig.	EACH 1-9	10-99	100-999	1000-Up
CD4004	7-Stage Ripple	A	19.15	15.95	13.20	11.00
CD4004T	Counter/Freq. Divider	TO-5	17.40	14.50	12.00	10.00
CD4005	16-Bit NDRO	A	19.15	15.95	13.20	11.00
CD4005D	Memory	B	17.40	14.50	12.00	10.00
CD4006	18-Bit Shift	A	31.80	26.50	21.90	18.25
CD4006D	Register	B	30.00	25.00	20.70	17.25
CD4008D	4-Bit Full Adder	16-lead C	11.40	9.50	6.90	5.74
CD4016	4-Channel Multiplexer	A B	16.26	13.56	11.22	9.35
CD4017D	Decade Counter/Divider	16-lead B	24.00	20.00	16.56	13.80

GENERAL-PURPOSE

CD4007	Dual Compl. Pair plus	A	0.00	6.60	4.80	4.00
CD4007D	Inverter	B	0.00	4.95	3.60	3.00

IC Kits and Integrated Circuits

IC KITS AND EXPERIMENTER'S KITS

ONLY A SOLDERING IRON NEEDED!

Perfect for beginners, hobbyists, Hams, educators, technicians, engineers—anyone who wants to extend his knowledge of integrated circuits.

RCA Project Kits are complete with active and passive components, pre-drilled printed circuit boards and easy-to-follow instructions. Less batteries.

EXPERIMENTER'S KITS

KD2105 EXPERIMENTER'S KIT. Has all the active components (additional passive components are required) for building 10 practical control circuits described in RCA's Experimenter's Manual KM-71.
KD2105. Shpg. wt. 8 oz. 9.95

KD2106 LIGHT SENSOR KIT. Has one photocell. For use in conjunction with KD2105 Experimentor's Kit (above).
KD2106. Shpg. wt. 10 oz. 2.75

KD2117 IC VARIETY PACK. Everything an engineer or hobbyist needs to extend his knowledge of IC's. Full instructions.
KD2117. Shpg. wt. 8 oz. 4.40

IC PROJECT KITS

KC4000 MIKE PREAMPLIFIER. High-gain, wide band. Hi-Z/lo-Z inputs.
KC4000. Shpg. wt. 3 oz. 5.95

KC4001 2-CHANNEL MIXER. Mix audio from 2 mikes, etc. into one input.
KC4001. Shpg. wt. 3 oz. 6.50

KC4002 AUDIO OSCILLATOR. Use as a code-practice oscillator or to test Amateur radio transmitters or hi-fi, etc.
KC4002. Shpg. wt. 3 oz. 4.95

KC4003 OSCILLATOR AND AMPLIFIER. Build a 500-mW audio amplifier or a variable-tone audio oscillator.
KC4003. Shpg. wt. 4 oz. 8.95

KC4004 9-V REGULATED POWER SUPPLY. Supplies 9-volts DC output with voltage regulation of 3% at a maximum current of 250 mA.
KC4004. Shpg. wt. 5 oz. 10.95

KC4006 FIRE ALARM. An invaluable protection aid. Special low-melting-point solder sets off super-sensitive circuit for a fire warning device.
KC4006. Shpg. wt. 3 oz. 7.95

KC4005 INTRUDER ALARM. A specially designed circuit that develops a "whooping" signal for security system. Ideal for home, business, auto, etc.
KC4005. Shpg. wt. 3 oz. 7.95

KC4500 KIT ENCLOSURE AND HARDWARE PACK. Case with input, output jacks, switch, and other hardware. Provides enclosure for KC4000, KC4001 and KC4002.
KC4500. Shpg. wt. 4 oz. 4.75

IC KITS FOR ADAPTING RADIOS TO TUNE PUBLIC SERVICE BANDS

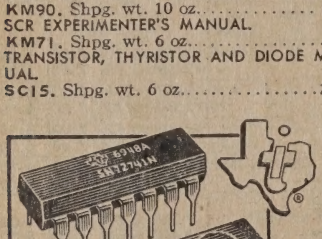
KC4007. Aircraft Band Converter Kit. 108-130 MHz. 1 lb. 10.95
KC4008. Ham, Government Space Research Band Kit. 1 lb. 10.95
KC4009. Maritime, Mobile, Fire and Police Band Kit. 1 lb. 10.95
KC4010. Police and Fire Band Kit. 1 lb. 10.95

RCA EXPERIMENTER/HOBBYIST BOOKS

SOLID-STATE HOBBY CIRCUITS MANUAL.
KM90. Shpg. wt. 10 oz. 1.75

SCR EXPERIMENTER'S MANUAL.
KM71. Shpg. wt. 6 oz. ..... .95

TRANSISTOR, THYRISTOR AND DIODE MANUAL.
SC15. Shpg. wt. 6 oz. 2.50



LINEAR INTEGRATED CIRCUITS

DIFFERENTIAL/OPERATIONAL AMPLIFIERS

- Low Input and Output Offset Characteristics
- High Common-Mode Input Capability
- Most Circuits Are Available in Plastic Dual-In-Line Package

State-of-the-art linear integrated circuits. Series 52 have operating temperature range from −55°C to +125°C; Series 72 have temperature range from 0° to +70°C. Most circuits are available in economical plastic dual-in-line packages. Feature low input and low output offset characteristics. All share high common mode input capability. Average shpg. wt. 1 oz.

SERIES 52 700/5510/5511 LINEAR INTEGRATED CIRCUITS

Mfr's. Type	Description	1-9	10-99	100-Up
SN52702N	General-Purpose Op Amp	1.92	1.60	1.45
SN52709N	High-Performance Op Amp	1.80	1.50	1.35
SN52710N	Differential Comparator	1.92	1.60	1.45
SN52711N	Dual Differential Comparator	2.10	1.75	1.60
SN5510L	Wide-Band Video Amplifier	7.92	6.60	5.90

SERIES 72 700/7510 (Operating Temperature Range 0° C to 70° C)

SN72702N	General-Purpose Op Amp	1.26	1.05	.90
SN72709N	High-Performance Op Amp	1.20	1.00	.85
SN72710N	Differential Comparator	1.26	1.05	.90
SN72711N	Dual Differential Comparator	1.32	1.10	.95
SN72720N	Dual Differential Comparator	1.80	1.50	1.35
SN72741N	Internally Compensated Op Amp	2.70	2.25	2.00
SN72741P	Internally Compensated Op Amp	2.16	1.80	1.50
SN7510L	Wide-Band Video Amplifier	5.16	4.30	3.80

SYSTEMS INTERFACE CIRCUITS

7520 Sense Amplifiers

Mfr's Type	Description	1-9	10-99	100-Up
SN7520N	FF or Register-Type Output	8.88	7.40	6.55
SN7521N	FF or Register-Type Output	6.54	5.45	4.85
SN7522N	Open-Collector Output	8.10	6.75	5.97
SN7523N	Open-Collector Output	6.09	5.07	4.48
SN7524N	Separate AND Outputs	7.50	6.25	5.50
SN7525N	Separate AND Outputs	5.76	4.80	4.25
SN7528N	Separate AND Outputs	7.62	6.35	5.64
SN7529N	Separate AND Outputs	5.94	4.95	4.37
SN7526N	Including Data Register	8.58	7.15	6.77
SN7527N	Including Data Register	7.11	5.92	5.23

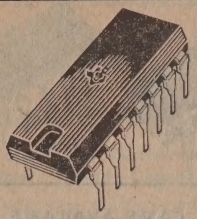
75105 Dual-Line Devices

Mfr's Type	Description	1-9	10-99	100-U
SN75107N	Receiver with SN5400 (TTL) Gate Output	4.32	3.60	3.05
SN75108N	Receiver with SN5401 (Open-Collector) Gate Output	4.32	3.60	3.05
SN75109N	Driver with 6-mA Typical Line Current	4.44	3.70	3.15
SN75110N	Driver with 12-mA Typical Line Current	4.68	3.90	3.30
SN75450N	Dual Lamp, Relay	1.78	1.48	1.10
SN75451P	Memory Driver	1.38	1.15	.97

Texas Instruments Integrated Circuits

WHEN YOU ORDER FROM ALLIED ELECTRONICS

It's the best buying decision you can make. Allied will process your order without delay—eliminates the worry about costly work stoppages and down time. For prompt service use the facilities of the Allied Electronics office nearest you. See page 3 or Back Cover for locations.



Applications Include:
- High-Speed Digital Processors
- Instrumentation
- Communications

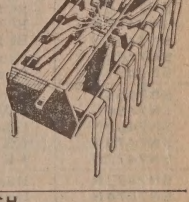
ULTRA-HIGH-SPEED TTL AND ECL INTEGRATED CIRCUITS WITH SCHOTTKY-CLAMPED TRANSISTORS FOR THE FASTEST DIGITAL SYSTEMS

Offer flexibility, higher complexity, ease of use and low power dissipation. Also give high speeds needed in digital systems. Free from minority carriers, eliminating stored charge. Shallower diffusions plus smaller device geometries reduce internal capacitance and increase circuit speed. Provide superior clamping protection. Forward bias voltage is lower than conventional silicon diodes. Active pulldown network squares transfer curves and improves logical "1" noise immunity. High current sink capability is maintained by relatively oversized output transistors.

Advantages over conventional TTL include: ultra high speeds—faster than other TTL family; best speed/power unit available today; higher logical "1" output level; switching time is less sensitive to power supply and temperature variations. Is fully compatible with all popular TTL and DTL families. Also has lower dynamic power dissipation. Standard 5-volt power supplies are not required with critical regulation. Better noise margins and smaller line reflections with unterminated lines—permits use of conventional PC boards. Power dissipation remains constant over a wide operating range permitting low power at frequencies of up to 50 Hz.

Type No.	Description	EACH 1-9	10-24	25-99	100-Up
SN74S00N	Quad 2-Input NAND Gate	4.67	3.89	3.10	2.64
SN74S03N	Quad 2-Input NAND (open collector) Gate	4.67	3.89	3.10	2.64
SN74S04N	Hex Inverter	5.61	4.67	3.72	3.17
SN74S10N	Triple 3-Input NAND Gate	4.67	3.89	3.10	2.64
SN74S11N	Triple 3-Input AND Gate	4.67	3.89	3.10	2.64
SN74S20N	Dual 4-Input NAND Gate	4.67	3.89	3.10	2.64
SN74S22N	Dual 4-Input NAND (open collector) Gate	4.67	3.89	3.10	2.64
SN74S122N	Dual J-K Negative Edge Triggered Flip-Flop with Separate Preset Clear & Clock	12.64	10.53	8.38	7.15

ECL2500 SERIES ULTRA-HIGH-SPEED INTEGRATED CIRCUITS



Compatible family of ECL functions with basic gate delays of 2 to 3 ns per stage. Specifically designed for operation from 0°C to 75°C. Feature high speed—typical gate propagation delay time of 2.5 ns. Complementary OR/NOR outputs with capability for wired-OR connections. Designed for use with transmission lines to ensure maximum signal transmission without noise. Characterized for 50-ohm lines. High noise immunity: ±225 mV typical at 25° C. Good heat conductivity of molding compound minimizes temperature rise of package. Low mounting of circuit permits uphill bonding—prevents internal shorts. Solid molded package supports bonding wires—gives maximum resistance to shock vibration and acceleration. All leads are firmly anchored in package for mechanical strength. Special molding compound adheres tightly to leads over temperature range of −40 to +150°C . . prevents moisture intrusion. Pin shoulders support package above PC board, permitting free air circulation and preventing formation of moisture pockets. Extra stiff leads with 0.080" shoulders give added strength and stability for convenient, automatic insertion and handling.

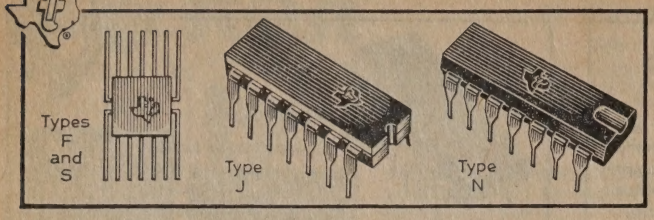
Type No.	Logic Function		EACH 1-9	10-24	25-Up
ECL2500N	Dual 4-Input	OR/NOR	7.37	6.14	4.87
ECL2501N	9-Input	OR/NOR	7.37	6.14	4.87
ECL2502N	Triple 2-Input	OR/NOR	10.18	8.48	6.72
ECL2503N	Quad 2-Input	NOR	10.18	8.48	6.72
ECL2504N	Quad Delay/Inverter		10.18	8.48	6.72
ECL2505N	Triple 3-Input	NOR	8.91	7.42	5.88
ECL2506N	4-Wide 3-Input	NOR-OR	13.99	11.66	9.24
ECL2507N	5-Wide 2-Input	NOR-OR	12.97	10.81	8.57
ECL2508N	6-Wide 2-Input	NOR-OR	15.77	13.14	10.42
ECL2509N	4-Wide 2-Input	OR-AND/NOR-OR	11.70	9.75	7.73
ECL2510N	4-Wide 3-3-3-2 Input	OR-AND/NOR-OR	13.99	11.66	9.24
ECL2511N	Quad 2-Input (Common Base)	OR	9.79	8.16	6.47
ECL2512N	Dual 3-Wide 2-Input (Common Base)	NOR-OR	19.33	16.11	12.77
ECL2513N	Dual 2-Wide 2-Input (Common Base)	OR-AND/NOR-OR	11.70	9.75	7.73
ECL2520N	Dual 2-Input (3 OR Output/Gate) (1 NOR Output/Gate)	OR/NOR	8.52	7.10	5.63
ECL2521N	Dual 3-Input (3 OR Outputs/Gate)	OR	9.16	7.63	6.05
ECL2522N	Dual 4-Input (2 NOR Outputs/Gate)	NOR	9.16	7.63	6.05
ECL2523N	Dual 3-Input (3 NOR Outputs/Gate)	NOR	9.16	7.63	6.05
ECL2530N	Dual Differential-Amplifier Receiver		7.37	6.14	4.87
ECL2531N	Dual Line Driver		7.63	6.36	5.04
ECL2536N	Dual HLL/ECL	OR/NOR	9.79	8.16	6.47
ECL2537N	Dual ECL/HLL	OR/NOR	9.79	8.16	6.47
ECL2540N	Dual "D" latches		9.79	8.16	6.47

ATTENTION BUYERS

Cut costs by making "one order" purchases from Allied. You pay OEM factory prices, reduce paper work in purchasing and receiving. You also get prompt shipment from the world's largest stock of electronic equipment.

Integrated Circuit Listings Continued on the Following Page

Texas Instruments Integrated Circuits



TTL DIGITAL INTEGRATED CIRCUITS

Digital integrated circuits for a wide variety of applications. Available in two operating temperature ranges: SN5400 Series for −55° C to +125° C and SN7400 Series for 0° C to +70° C. The SN7400N Series listed below is in plastic dual inline case with 14, 16 and 24 leads. TTL Series is available in all cases described immediately below. All types are available from Allied. Call for information on types not listed.

CASES AVAILABLE AT ALLIED ELECTRONICS

SN5400F and SN7400F. Ceramic flat pack. 10 and 14 lead case insulated from circuit. **SN5400S and SN7400S.** Ceramic flat pack. 10 and 14 lead case shorted to circuit.

SN5400J and SN7400J. Ceramic dual inline. 14 and 16 leads, insulated case. **SN7400N.** Plastic dual inline. 14, 16 and 24 leads. Case insulated from circuit.

Type No.	Description	EACH			
		1-9	10-24	25-99	100-Up
SN7400N	Quadruple 2-Input Positive NAND Gate	1.87	1.56	1.24	1.06
SN7401N	Quad 2-Input Positive NAND Gate with Open Collector Output	1.87	1.56	1.24	1.06
SN7402N	Quadruple 2-Input Positive NOR Gate	1.87	1.56	1.24	1.06
SN7403N	Quadruple 2-Input Positive NAND Gate	1.87	1.56	1.24	1.06
SN7404N	Hex Inverter	2.33	1.94	1.55	1.32
SN7405N	Hex Inverter with Open-Collector Output	2.33	1.94	1.55	1.32
SN7406N	Hex Inverter Buffer/Driver with 30-V Open-Collector Output	4.20	3.50	2.79	2.38
SN7407N	Hex Buffer/Driver with 30-V Open-Collector Output	4.20	3.50	2.79	2.38
SN7408N	Quadruple 2-Input Positive AND Gate	2.04	1.70	1.35	1.15
SN7409N	Quad 2-Input Positive AND Gate with Open-Collector Output	2.04	1.70	1.35	1.15
SN7410N	Triple 3-Input Positive NAND Gate	1.87	1.56	1.24	1.06
SN7413N	Dual Schmitt Trigger 4 Input NAND	2.92	2.43	1.93	1.65
SN7416N	Hex Inverter Buffer/Driver with 15-V Open-Collector Output	3.50	2.92	2.32	1.98
SN7417N	Hex Buffer/Driver with 15-V Open-Collector Output	3.50	2.92	2.32	1.98
SN7420N	Dual 4-Input Positive NAND Gate	1.87	1.56	1.24	1.06
SN7426N	Quadruple 2-Input High-Voltage (MOS) Interface NAND Gate	2.23	1.86	1.48	1.26
SN7430N	8-Input Positive NAND Gate	1.87	1.56	1.24	1.06
SN7437N	Quadruple 2-Input Positive NAND Buffer	2.61	2.17	1.73	1.47
SN7438N	Quadruple 2-Input Positive NAND Buffer Open Collector	2 61	2.17	1.73	1.47
SN7440N	Dual 4-Input Positive NAND Buffer	2.04	1.70	1.35	1.15
SN7441AN	BCD to Decimal Decoder Driver	10.35	8.63	6.88	5.86
SN7442N	BCD-to-Decimal Decoder	8.00	6.67	5.31	4.53
SN7443N	Excess-3-to-Decimal Decoder	11.40	9.50	7.57	6.45
SN7444N	Excess-3-Gray-to-Decimal Decoder	11.40	9.50	7.57	6.45
SN7445N	BCD-to-Decimal Decoder/Driver (30-V Outputs)	14.50	12.10	9.64	8.22
SN7446N	BCD-to-Seven-Segment Decoder/Driver (30-V Outputs)	11.95	9.96	7.93	6.76
SN7447N	BCD-to-Seven-Segment Decoder/Driver (15-V Outputs)	11.02	9.20	7.33	6.25
SN7448N	BCD-to-Seven-Segment Decoder/Driver	9.50	7.92	6.31	5.38
SN7450N	Expandable Dual 2-Wide 2-Input AND-OR-INVERT Gate	1.87	1.56	1.24	1.06
SN7451N	Dual 2-Wide 2-Input AND-OR-INVERT Gate	1.87	1.56	1.24	1.06
SN7453N	Expandable 4-Wide 2-Input AND-OR-INVERT Gate	1.87	1.56	1.24	1.06
SN7454N	4-Wide 2-Input AND-OR-INVERT Gate	1.87	1.56	1.24	1.06
SN7460N	Dual 4-Input Expander	1.67	1.39	1.11	.95
SN7470N	J-K Flip-Flop	2.98	2.48	1.97	1.68
SN7472N	J-K Master-Slave Flip-Flop	2.60	2.17	1.73	1.47
SN7473N	Dual J-K Master-Slave Flip-Flop	4.27	3.56	2.84	2.42
SN7474N	Dual D-Type Edge-Triggered Flip-Flop	3.73	3.11	2.48	2.11
SN7475N	Quadruple Bistable Latch	6.58	5.48	4.36	3.72
SN7476N	Dual J-K Master-Slave Flip-Flop	4.48	3.73	2.97	2.53
SN7480N	Gated Full Adder	5.04	4.20	3.34	2.85
SN7481N	16-Bit Active-Element Memory	8.02	6.69	5.33	4.54
SN7482N	2-Bit Binary Full Adder	7.46	6.22	4.95	4.22
SN7483N	4-Bit Binary Full Adder	11.85	9.87	7.86	6.70
SN7484N	16-Bit Active-Element Memory (Gated Write Inputs)	8.20	6.84	5.44	4.64
SN7486N	Quadruple 2-Input Exclusive-OR Gate	3.35	2.79	2.22	1.89
SN7490N	Decade Counter	7.28	6.07	4.84	4.12
SN7491AN	8-Bit Shift Register	10.25	8.55	6.81	5.81
SN7492N	Divide-by-Twelve Counter	7.29	6.07	4.84	4.12
SN7493N	4-Bit Binary Counter	7.29	6.07	4.84	4.12
SN7494N	4-Bit Shift Register (Parallel-In, Serial Out)	8.22	6.85	5.46	4.65
SN7495N	4-Bit Right-Shift/Left-Shift Register (Parallel-In, Parallel-Out)	8.22	6.85	5.46	4.65
SN7496N	5-Bit Shift Register (Dual-Parallel-In, Parallel-Out)	9.88	8.23	6.55	5.59
SN74100N	8-Bit Bistable Latch	9.32	7.78	6.19	5.28
SN74104N	Grated J-K Master-Slave Flip-Flop	3.27	2.72	2.17	1.85
SN74105N	Gated J-KK Master-Slave Flip-Flop	3.27	2.72	2.17	1.85
SN74107N	Dual J-K Master-Slave Flip-Flop	4.27	3.56	2.84	2.42
SN74121N	Monostable Multivibrator (One-Shot)	5.21	4.34	3.46	2.95
SN74141N	BCD-to-Decimal Decoder/Driver	10.35	8.63	6.88	5.86
SN74145N	BCD-to-Decimal Decoder/Driver (15-V Output)	8.40	7.00	5.57	4.75
SN74150N	16-Bit Data Selector/Multiplexer	12.30	10.25	8.17	6.96
SN74151N	8-Bit Data Selector/Multiplexer with Strobe	6.14	5.12	4.08	3.48
SN74152N	8-Bit Data Selector/Multiplexer	9.41	7.84	6.24	5.32
SN74153N	Dual 4-Line-to-1-Line Data Selector/Multiplexer	5.72	4.67	3.72	3.17
SN74154N	4-Line-to-16-Line (1 of 16) Decoder/Demultiplexer	9.40	7.84	6.24	5.32
SN74155N	Dual 2-Line-to-4-Line Decoder/Demultiplexer	5.34	4.45	3.55	3.03
SN74156N	Dual 2-Line-to-4-Line Decoder/Demultiplexer with Open-Collector Output	5.34	4.45	3.55	3.03
SN74180N	8-Bit Odd/Even Parity Generator/Checker	7.46	6.22	4.95	4.22
SN74181N	4-Bit Arithmetic Logic Unit (ALU) and Function Generator	29.15	24.30	19.35	16.50
SN74182N	Look-Ahead Carry Generator (for ALU)	6.42	5.35	4.29	3.63
SN74192N	Synchronous Up/Down Decade Counter	13.62	11.34	9.03	7.70
SN74193N	Synchronous Up/Down 4-Bit Binary Counter	13.62	11.34	9.03	7.70

Depend on Allied Electronics for the Latest in Integrated Circuits

Texas Instruments Integrated Circuits

HIGH-SPEED AND LOW-POWER TTL INTEGRATED CIRCUITS

Available in two operating temperature ranges: SN54H00 and SN54L00 Series, −55° C to +125° C; SN74H00 and SN74L00 Series, 0° to +70° C. Available in same case styles as standard SN54/SN74 series—see case description on page 50. All types available from Allied. The SN74H00N and SN74L00N plastic dual inline types are listed below.

74H HIGH SPEED TTL INTEGRATED CIRCUITS

- 32 High-Speed TTL Circuits—Featuring 6 Nanosecond Speed and 22 Milliwatt per Gate Performance
- 20 Gate Circuits • 10 Flip-Flop Circuits • 1 MSI Circuit • Diode-Clamped Inputs

Series 54H/74H high-speed TTL offers you six nanoseconds per gate performance. Applications include critical portions of digital systems such as high-speed computation and data processing sections. Thirty-one circuit functions include both AND and NAND gates, plus single wire expanders so that you can design simple, less costly systems. In addition, open-collector output gates are offered to facilitate the wire-AND function. Series 54H/74H includes five master-slave flip-flops and five edge-triggered flip-flops. The edge-triggered flip-flops will operate with clock input frequencies as high as 50 MHz. Can interface directly with all other Series 54/74 ICs. Typical Characteristics: Supply voltage, 5 V; Logical 0 output voltage, 0.2 V; Logical 1 output voltage, 3 V; Noise immunity, 1 V. Series SN74H00N 0° C to +70° C plastic dual inline listed below. Other styles available—see page 50.

Type No.	Description	EACH			
		1-9	10-24	25-99	100-Up
SN74H00N	Quadruple 2-Input Positive NAND Gate	2.80	2.33	1.85	1.58
SN74H01N	Quad 2-Input Positive NAND Gate with Open-Collector Output	2.80	2.33	1.85	1.58
SN74H04N	Hex Inverter	3.49	2.91	2.32	1.97
SN74H05N	Hex Inverter with Open-Collector Output	3.49	2.91	2.32	1.97
SN74H10N	Triple 3-Input Positive NAND Gate	2.80	2.33	1.85	1.58
SN74H11N	Triple 3-Input Positive AND Gate	3.06	2.55	2.03	1.73
SN74H20N	Dual 4-Input Positive NAND Gate	2.36	1.97	1.57	1.34
SN74H21N	Dual 4-Input Positive AND Gate	3.06	2.55	2.03	1.73
SN74H22N	Dual 4-Input Positive NAND Gate with Open-Collector Output	2.36	1.97	1.57	1.34
SN74H30N	8-Input Positive NAND Gate	2.36	1.97	1.57	1.34
SN74H40N	Dual 4-Input Positive NAND Buffer	3.06	2.55	2.03	1.73
SN74H50N	Expandable Dual 2-Wide 2-Input AND-OR-INVERT Gate	2.80	2.33	1.85	1.58
SN74H51N	Dual 2-Wide 2-Input AND-OR-INVERT Gate	2.80	2.33	1.85	1.58
SN74H52N	Expandable 4-Wide 2-2-2-3-Input AND-OR Gate	2.80	2.33	1.85	1.58
SN74H53N	Expandable 4-Wide 2-2-2-3-Input AND-OR-INVERT Gate	2.80	2.33	1.85	1.58
SN74H54N	4-Wide 2-Input AND-OR-INVERT Gate	2.80	2.33	1.85	1.58
SN74H55N	Expandable 2-Wide 4-Input AND-OR-INVERT Gate	2.80	2.33	1.85	1.58
SN74H60	Dual 4-Input Expander	2.09	1.74	1.39	1.18
SN74H61N	Triple 3-Input Expander	2.09	1.74	1.39	1.18
SN74H62N	3-2-2-3-Input AND-OR Expander	2.09	1.74	1.39	1.18
SN74H71N	J-K Flip-Flop with AND-OR Inputs	4.46	3.72	2.96	2.52
SN74H72N	J-K Master-Slave Flip-Flop	4.46	3.72	2.96	2.52
SN74H73N	Dual J-K Master-Slave Flip-Flop	7.28	6.07	4.83	4.12
SN74H74N	Dual D-Type Edge-Triggered Flip-Flop	5.64	4.69	3.74	3.18
SN74H76N	Dual J-K Master-Slave Flip-Flop	7.72	6.43	5.12	4.36
SN74H78N	Dual J-K Master-Slave Flip-Flop	7.28	6.07	4.83	4.12
SN74H101N	J-K Negative Edge-Triggered Flip-Flop with AND-OR Inputs (50 MHz)	4.46	3.72	2.96	2.52
SN74H102N	J-K Negative Edge-Triggered Flip-Flop with AND Inputs (50 MHz)	4.46	3.72	2.96	2.52
SN74H103N	Dual J-K Negative Edge-Triggered Flip-Flop (50 MHz)	7.28	6.07	4.83	4.12
SN74H106N	Dual J-K Negative Edge-Triggered Flip-Flop with Individual Preset and Clear (50 MHz)	7.72	6.43	5.12	4.36
SN74H108N	Dual J-K Negative Edge-Triggered Flip-Flop with Common Clock (50 MHz)	7.28	6.07	4.83	4.12
SN74H183N	Dual Carry-Save Full Adders	11.08	9.23	7.35	6.27

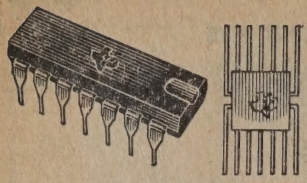
74L LOW POWER TTL INTEGRATED CIRCUITS

- 20 Low Power TTL Circuits—Featuring 1 Milliwatt and 33 Nanosecond per Gate Performance
- 8 Gate Circuits • 4 Flip-Flop Circuits • 4 MSI Functions

Series 54L/74L low-power TTL gives you the best speed/power product of any logic form today! These circuits feature power requirements less than one-tenth that of standard ICs . . yet speeds are approximately twice as fast as other circuits with similar power dissipation. They are ideal for applications where power consumption and heat dissipation are critical. They may be combined with standard and high-speed TTL circuits to provide almost any desired speed/power combination the system designer requires. A complete family of twenty low-power TTL circuits are available, including dual flip-flops and MSI circuits. Series SN74L00N 0° C to +70° C plastic dual inline listed below. Other styles available from Allied—see page 50.

Type No.	Description	EACH			
		1-9	10-24	25-99	100-Up
SN74L00N	Quadruple 2-Input Positive NAND Gate	1.73	1.44	1.17	.99
SN74L04N	Hex Inverter	2.15	1.79	1.46	1.23
SN74L10N	Triple 3-Input Positive NAND Gate	1.73	1.44	1.17	.99
SN74L20N	Dual 4-Input Positive NAND Gate	1.73	1.44	1.17	.99
SN74L30N	8-Input Positive NAND Gate	1.73	1.44	1.17	.99
SN74L51N	Dual 2-Wide 2-Input AND-OR-INVERT Gate	1.73	1.44	1.17	.99
SN74L54N	Expandable 4-Wide 2-2-2-3 Input AND-OR-INVERT Gate	1.73	1.44	1.17	.99
SN74L55N	Expandable 2-Wide 4-Input AND-OR-INVERT Gate	1.73	1.44	1.17	.99
SN74L71N	R-S Master-Slave Flip-Flop	2.42	2.02	1.64	1.39
SN74L72N	J-K Master-Slave Flip-Flop	2.42	2.02	1.64	1.39
SN74L73N	Dual J-K Master-Slave Flip-Flop	3.94	3.28	2.66	2.25
SN74L74N	Dual D-Type Edge-Triggered Flip-Flop	3.43	2.86	2.33	1.97
SN74L78N	Dual J-K Master-Slave Flip-Flop	3.94	3.28	2.66	2.25
SN74L85N	4-Bit Magnitude Comparator	10.33	8.61	6.99	5.92
SN74L86N	Quadruple 2-Input Exclusive-OR Gate	3.61	3.01	2.44	2.07
SN74L91N	8-Bit Shift Register	9.44	7.87	6.40	5.41
SN74L93N	4-Bit Binary Counter	7.75	6.46	5.25	4.44
SN74L95N	4-Bit Right-Shift/Left-Shift Register (Parallel-In, Parallel-Out)	8.70	7.25	5.89	4.98
SN74L98N	4-Bit Data Selector Storage Register	9.45	7.87	6.40	5.41
SN74L99N	4-Bit Right-Shift, Left-Shift Register with JK and DD	9.45	7.87	6.40	5.41

Texas Instruments, Sprague Integrated Circuits



TEXAS INSTRUMENTS HIGH-SPEED DIGITAL DTL INTEGRATED CIRCUITS

The Texas Instruments line of Integrated Circuits includes a wide range of devices to give you a broad selection of digital and linear functions with full levels of efficiency and high speed. Ideal for applications in military, industrial and commercial equipment that requires high performance characteristics. High-speed, digital integrated circuits below offer two versions for a wide variety of uses in military or industrial environments. Feature high speed, low power dissipation and high noise immunity. Multiple circuit functions per package for wide versatility. Single-ended outputs.

Circuit Description	−55°C +125°C Type	EACH 1-9	10-24	25-99	100-Up	0° to +75°C Type	EACH 1-24	25-99	100-Up
Dual 4-Input NAND Gate (6kΩ)	SN15930N	2.02	1.68	1.50	1.08	SN15830N	1.08	.90	.75
J-K/R-S Flip-Flop	SN15931N	2.95	2.46	2.10	1.65	SN15831N	1.38	1.15	1.02
Dual 4-Input Expandable Buffer	SN15932N	2.02	1.68	1.50	1.08	SN15832N	1.08	.90	.75
Dual 4-Input Expander	SN15933N	1.81	1.51	1.31	1.06	SN15833N	1.08	.90	.75
Hex Inverter (6kΩ)						SN15834N	1.18	.98	.85
Hex Inverter (open collector)						SN15835N	1.18	.98	.85
Hex Inverter (6kΩ)	SN15936N	2.22	1.85	1.65	1.19	SN15836N	1.18	.98	.85
Hex Inverter (2kΩ)	SN15937N	2.22	1.85	1.65	1.19	SN15837N	1.18	.98	.85
Hex Inverter (open collector)						SN15838N	1.18	.98	.85
Dual 4-Input NAND Power Gate	SN15944N	2.02	1.68	1.50	1.08	SN15844N	1.08	.90	.75
J-K/R-S Flip-Flop (6kΩ)	SN15945N	2.95	2.46	2.10	1.65	SN15845N	1.38	1.15	1.02
Quad 2-Input NAND Gate	SN15946N	2.02	1.68	1.50	1.08	SN15846N	1.08	.90	.75
J-K/R-S Flip-Flop (2kΩ)	SN15948N	2.95	2.46	2.10	1.65	SN15848N	1.38	1.15	1.02
Quad 2-Input NAND/NOR Gate	SN15949N	2.02	1.68	1.50	1.19	SN15849N	1.08	.90	.75
A-C Flip-Flop	SN15950N	6.06	5.05	4.50	3.42	SN15850N	4.50	3.75	3.50
Monostable Multivibrator	SN15951N	6.06	5.05	4.50	3.42	SN15851N	4.50	3.75	3.50
Quad 2-Input Buffer Power Gate						SN15857N	1.08	.90	.75
Quad 2-Input NAND Power Gate						SN15858N	1.08	.90	.75

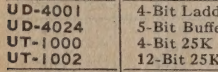
Description	−55°C +125°C Type	EACH 1-9	10-24	25-99	100-Up	0° to +75°C Type	EACH 1-9	10-99	100-Up
Dual 4-Input NAND/NOR Gate (2kΩ)	SN15961N	2.02	1.68	1.50	1.08	SN15861N	1.08	.90	.75
Triple 3-Input NAND Gate (6kΩ)	SN15962N	2.02	1.68	1.50	1.08	SN15862N	1.08	.90	.75
Triple 3-Input Fast NAND/NOR (2kΩ)	SN15963N	2.02	1.68	1.50	1.08	SN15863N	1.08	.90	.75
Dual J-K Master-Slave Flip-Flop (6kΩ)	SN15909N	3.63	3.02	2.70	1.95	SN158093N	1.87	1.56	1.36
Dual J-K Master-Slave Flip-Flop (2kΩ)	SN15909 4N	3.63	3.02	2.70	1.95	SN158094N	1.87	1.56	1.36
Dual J-K Master-Slave Common Clear and Clock Flip-Flop (2k)Ω	SN159097N	3.63	3.02	2.70	1.95	SN158097N	1.87	1.56	1.36
Dual J-K Master-Slave Common Clear and Clock Flip-Flop (6kΩ)	SN159099N	3.63	3.02	2.70	1.95	SN158099N	1.87	1.56	1.36
Dual 5-Input NAND Gate (6kΩ)						SN151800N	1.08	.90	.75
Dual 5-Input NAND Gate (2kΩ)						SN151801N	1.08	.90	.75
8-Input Expandable NAND Gate (6kΩ)						SN151802N	1.08	.90	.75
8-Input Expandable NAND Gate (2kΩ)						SN151803N	1.08	.90	.75
10-Input NAND Gate (6kΩ)						SN151804N	1.08	.90	.75
10-Input NAND Gate (2kΩ)						SN151805N	1.08	.90	.75
Quad 2-Input NOR Gate (6kΩ)						SN151810N	1.08	.90	.75
Quad 2-Input NOR Gate (2kΩ)						SN151811N	1.08	.90	.75

TEXAS INSTRUMENTS MOS INTEGRATED CIRCUITS

Texas Instruments MOS Integrated Circuits are presently the most popular type of MOS digital ICs. They offer the advantages of small size for large scale integrations, low power dissipation and low bit cost. In addition to replacing existing shift registers in many applications, they can perform functions that are not practical with conventional ICs. High-capacity digital delay lines and recirculating memories are among the most obvious applications. Industrial uses with serial data transmission and storage utilize MOS shift registers. The first of the two suffix letters indicates the general type of package. J indicates ceramic dual-in-line packages, L indicates TO-99 and TO-100 types. These are usually not the same as the packages used for bipolar integrated circuits. *Read Only Memories integrated circuits may be programmed to your special requirements.

Mfr's Type	Circuit Description	EACH 1-9	10-24	25-99	100-Up
TMS-2400OJC	2240 Bit (ROM*) Output	40.32	33.60	20.40	17.50
TMS-2403JC	2240 Bit ASC II (ROM*)	36.00	30.00	18.10	15.60
TMS-2404JC	2240 Bit EBC (ROM*)	36.00	30.00	18.10	15.60
TMX-2600JC	2048 Bit (ROM*)	43.20	36.00	21.70	18.80
TMS-3000LR	Dual 25 Bit Static Shift Reg.	12.72	10.60	6.40	5.50
TMS-3001LR	Dual 32 Bit Static Shift Reg.	13.20	11.00	6.65	5.75
TMS-3002LR	Dual 50 Bit Static Shift Reg.	14.40	12.00	7.25	6.25
TMS-3003LR	Dual 100 Bit Static Shift Reg.	16.80	14.00	8.70	7.50
TMS-3012JR	Dual 128 Bit Static Accumulator	52.32	43.60	26.40	22.70
TMS-3016LR	Dual 16 Bit Static Shift Reg.	10.32	8.60	5.20	4.50
TMS-3021LR	21 Bit Static Shift Reg.	12.36	10.30	6.25	5.40
TMX-3026JR	6 Bit Series to Parallel Conv.	29.40	24.50	14.80	12.75
TMX-3028LR	Dual 128 Bit Static Shift Reg.	23.76	19.80	11.96	10.31
TMX-3304LR	3x66 Dynamic Shift Reg.	20.16	16.80	10.20	8.75
TMX-3305LR	3x64 Dynamic Shift Reg.	20.16	16.80	10.20	8.75
TMS-3406LR	Dual 100 Bit Dynamic Shift Reg.	15.00	12.50	7.55	6.50

Mfr's Type	Circuit Description	EACH 1-9	10-24	25-99	100-Up
TMS-4003JC	256 Bit Random Access Memory	49.20	41.00	27.80	24.00
TMS-4006JC	2024 Bit Random Access Memory	86.40	72.00	43.50	37.50
TMS-4100JC	(ROM*) Character Generator	43.20	36.00	21.70	18.80
TMS-4103JC	2240 Bit (ROM*)	38.88	32.40	19.60	16.90
TMS-4177JC	7x5 ASCII (ROM*)	38.88	32.40	19.60	16.90
TMS-4178JC	C G 12 Piece Kit	38.88	32.40	19.60	16.90
TMS-4179JC	5x5 EBC DIC (ROM*)	38.88	32.40	19.60	16.90
TMS-4300JC	4096 Bit (ROM*)	72.00	60.00	36.20	31.20
TMS-4305JC	4096 Bit (ROM*)	72.00	60.00	36.20	31.20
TMX-4500JC	2048 128x16 High Speed (ROM*)	72.00	60.00	36.20	31.20
TMX-4600JC	2048 256x8 High Speed (ROM*)	57.60	48.00	29.00	25.00
TMX-4700JC	2048 512x4 High Speed (ROM*)	57.60	48.00	29.00	25.00
TMS-4880JC	2812 Bit (ROM*)	86.40	72.00	43.50	37.50
TMS-4886JC	(ROM*) Char. Gen. USAC II Code	86.40	72.00	43.50	37.50
TMS-6005JR	6-Channel Analog Switch	23.04	19.20	11.60	10.00
TMS-6009JR	6-Channel Analog Switch	25.80	21.50	13.00	11.25



SPRAGUE STANDARD HYBRID INTEGRATED CIRCUITS

Standard hybrid integrated circuits, now available in familiar flat-packs or new dual-in-line plastic packs. Complete line especially suited for military, computer, industrial, commercial and consumer markets.

HERMETIC FLAT PACKS

Complete line of hermetic flat packs, hermetic kits (right) and non-hermetic devices. *At right indicates dual-in-line. 1 oz.

Type	Circuit Function	EACH 1-9	10-99	100-Up
UD-4001	4-Bit Ladder Switch	66.43	55.28	46.07
UD-4024	5-Bit Buffer	52.36	47.80	39.90
UT-1000	4-Bit 25K Ladder	45.15	37.62	31.35
UT-1002	12-Bit 25K Ladder	152.87	127.39	106.16
UD-4037	5-Bit Buffer	77.19	64.32	53.60
UD-4036	5-Bit Ladder Switch	89.59	74.66	62.22
UT-1001	5-Bit 25K Ladder	57.24	47.70	39.75
UT-1001A	5-Bit 25K Ladder	62.76	52.30	43.65
UD-4146	I Summing Ladder Switch	32.41	27.01	22.51
UD-4156	I Summing Ladder Switch	39.88	33.23	27.69
UT-1051	Scaling Network	19.44	16.20	13.50
UT-1057	Weighted Ladder	77.16	64.30	53.60
UD-1062	Weighted Ladder	69.47	57.89	48.24
UD-4131	Lamp Driver	25.78	21.84	10.80

HERMETIC DEVICE KITS

Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
UD-4074	Dual Pos. Ref. Buffer Switch	102.96	85.80	68.65	57.20
UD-4080	Dual Pos. Ref. Buffer Switch	102.96	85.80	68.65	57.20
UT-1041	BCD Adapter Network	30.12	25.10	20.10	16.75
UT-1070	4-Bit Ladder for BCD	54.72	45.60	36.45	30.40
UT-1071	4-Bit Ladder for BCD	60.36	50.30	40.25	33.55
UT-1072	4-Bit Ladder for BCD	66.96	55.80	44.60	37.20

NON-HERMETIC DEVICES

Type	Circuit Function	EACH 1-9	10-99	100-Up
UT-1078*	Scaling Network (UT-1051) DIP	22.08	18.40	12.25
UT-1079*	Weighted Ladder (UT-1057) DIP	50.64	42.20	28.10
UT-1080*	Weighted Ladder (UT-1062) DIP	41.70	34.75	23.15
UD-4174*	I Summing Ladder Switch (UD-4146) DIP	27.30	22.75	15.20
UD-4175*	I Summing Ladder Switch (UD-4156) DIP	36.24	30.20	20.10
UD-4181*	Lamp Driver DIP	18.00	15.00	12.50

When Ordering, Be Sure to Specify Mfr's Type No., and Name

Sprague Integrated Circuits

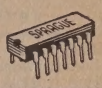
SPRAGUE
THE MARK OF RELIABILITY

SPRAGUE DIODE-CLAMPED INTEGRATED CIRCUITS

The Sprague line of Integrated Circuits includes a wide range of devices to give you a broad selection of digital and linear functions with full levels of efficiency and high speed. Ideal for applications in military, industrial, and commercial equipment that requires high performance characteristics and adherence to specifications.

SERIES 74 AND 74H TTL

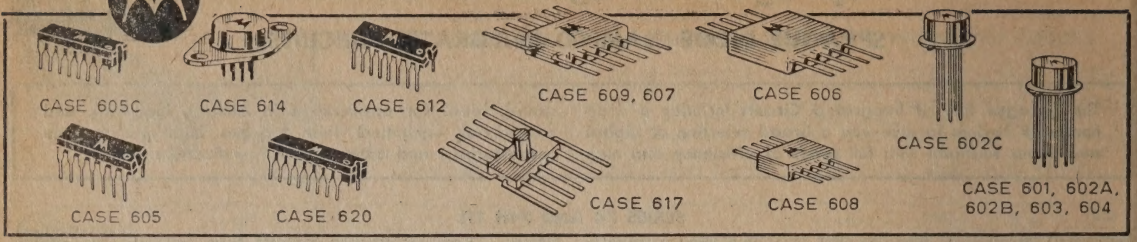
Integrated circuit logic modules offer maximum logic capability in a minimum amount of space, have clamp diode on each input to limit undershoot in typical system applications, prevent "ringing." Complex-function circuits take full advantage of semiconductor structures. *16-lead package. †High-speed devices. Wt., 1 oz.



Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
US7400A	Quad 2-Input NAND Gate	2.23	1.86	1.48	1.26
US7401A	Quad 2-Input NAND Gate—No Collector Load	2.23	1.86	1.48	1.26
US7402A	Quad 2-Input NOR Gate	2.56	2.13	1.70	1.45
US7403A	Quad 2-Input Pos. NAND Gate	2.40	1.86	1.48	1.26
US7404A	Hex Inverter	2.80	2.33	1.85	1.58
US7405A	Hex Inverter—No Collector Load	2.80	2.33	1.85	1.58
US7408A	Quad 2-Input AND Gate	2.80	2.50	2.00	1.70
US7409A	Quad 2-Input Pos. AND Gate Open collector	2.80	2.33	1.85	1.58
US7410A	Triple 3-Input NAND Gate	2.23	1.86	1.48	1.26
US7411A	Triple 3-Input AND Gate	2.33	2.50	2.00	1.70
US7418A	Triple 3-Input Or Gate	2.80	2.33	1.85	1.58
US7420A	Dual 4-Input NAND Gate	1.90	1.58	1.26	1.07
US7427A	Triple 3-Input NOR Gate	2.80	2.33	1.85	1.58
US7429A	Dual 4-Input AND Gate	2.80	2.33	1.85	1.58
US7430A	Single 8-Input NAND Gate	1.90	1.58	1.26	1.07
US7432A	Quad 2-Input Or Gate	2.33	1.94	1.55	1.32
US7438A	Dual 4-Input Or Gate	2.33	1.94	1.55	1.32
US7440A	Dual 4-Input NAND Buffer Gate	3.27	2.13	1.70	1.45
US7441B*	BCD-to-Decimal Decoder/Driver	12.42	15.40	12.25	10.50
US7442A	BCD-to-Decimal Decoder	8.00	6.67	5.31	4.53
US7443A	Excess 3 to Decimal Decoder	11.40	9.50	7.57	6.45
US7444A	Excess 3 Gray to Decimal Decoder	11.40	9.50	7.57	6.45
US7445A	BCD-to-Decimal Decoder/Driver 30 V	14.50	12.10	9.64	8.22
US7446A	BCD-to-7-segment Decoder/Driver 30 V	11.95	9.96	7.93	6.76
US7447A	BCD-to-7-segment Decoder/Driver 15 V	11.02	9.20	7.33	6.25
US7448A	BCD-to-7-segment Decoder/Driver	9.50	7.92	6.31	5.38
US7450A	Dual 2-Wide, 2-Input Expandable And/Or-Invert Gate	2.23	1.86	1.48	1.26
US7451A	Dual 2-Wide, 2-Input And/Or Inverter Gate	2.23	1.86	1.48	1.26
US7453A	4-Wide, 2-Input Expandable And/Or Inverter Gate	2.23	1.86	1.48	1.26
US7454A	4-Wide, 2-Input And/Or Invert Gate	2.23	1.86	1.48	1.26
US7459A	Dual 2-Wide 2-3 Input Or Invert Gate	2.33	1.94	1.55	1.32
US7460A	Dual 4-Input Expander	1.67	1.39	1.10	.94
US7470A	D-C Clocked J-K Flip-Flop	3.36	2.80	2.23	1.90
US7472A	J-K Master Slave Flip-Flop	3.12	2.60	2.07	1.77
US7473A	Dual J-K Master Slave Flip-Flop	5.15	4.29	3.41	2.91
US7474A	Dual D-Type Edge Triggered Flip-Flop	4.46	3.72	2.96	2.52
US7475B*	Quadruple Bistable Latch	7.86	6.56	5.22	4.45
US7476B*	Dual J-K Master Flip-Flop with Sd and Rd	5.40	4.51	3.59	3.06
US7480A	Gated Full Adder	6.03	5.02	3.99	3.40
US7482A	2-Bit Binary Full Adder	8.94	7.45	5.93	5.05
US7483B*	4-Bit Binary Full Adder	14.20	11.82	9.41	8.02

Type	Circuit Function	EACH 1-9	10-24	25-99	100-Up
US7486A	Quad 2-Input Exclusive—Or Gate	3.35	2.79	2.22	1.89
US7490A	Decade Counter	9.20	7.66	6.10	5.20
US7491A	8-Bit Shift Register	12.45	10.38	8.26	7.05
US7492A	Divide by-Twelve Counter	9.20	7.66	6.10	5.20
US7493A	4-Bit Binary Counter	9.20	7.66	6.10	5.20
US7494A	4-Bit Shift Register	9.85	8.21	6.54	5.57
US7495A	4-Bit L/R Shift Register	9.85	8.21	6.54	5.57
US7496A	5-Bit Shift Register	11.80	9.84	7.84	6.68
US74107A	Dual J-K Master Slave Flip-Flop	5.15	4.29	3.41	2.91
US74121A	Mono Staple Multivibrator (one shot)	5.21	4.34	3.46	2.95
US74145A	BCD to Decimal Decorder/Driver 15V	8.40	7.00	5.57	4.75
US74H00A†	Quad 2-Input NAND Gate	2.80	2.33	1.85	1.58
US74H01A†	Quad 2-Input NAND Gate No Collector Load	2.80	2.33	1.85	1.58
US74H04A	Hex Inverter	3.49	2.91	2.32	1.97
US74H05A	Hex Inverter Open Collector	3.49	2.91	2.32	1.97
US74H08A	Quad 2 Input Pos. AND Gate	3.06	2.55	2.03	1.73
US74H10A†	Triple 3-Input AND Gate	2.84	2.33	1.85	1.58
US74H11A†	Triple 3-Input AND Gate	3.06	2.55	2.03	1.73
US74H20A†	Dual 4-Input NAND Gate	2.37	1.97	1.57	1.34
US74H21A	Dual 4-Input Pos. AND Gate	3.06	2.55	2.03	1.73
US74H22A	Dual 4-Input Pos. NAND Gate, open collector	2.36	1.97	1.57	1.34
US74H30A†	Single 8-Input NAND Gate	2.37	1.97	1.57	1.34
US74H40A†	Dual 4-Input NAND Buffer Gate	3.06	2.55	2.03	1.73
US74H50A†	Dual 2-Wide, 2-Input And/Or Invert Gate, Expandable	2.80	2.33	1.85	1.58
US74H51A†	Dual 2-Wide, 2-Input And/Or Invert Gate	2.80	2.33	1.85	1.58
US74H52A†	4-Wide 2-2-2-3 Input Expandable And/Or Gate	2.80	2.33	1.85	1.58
US74H53A†	4-Wide 2-2-2-3 Input Expandable And/Or Inverter Gate	2.80	2.33	1.85	1.58
US74H54A†	4-Wide 2-2-2-3 Input And/Or Inverter Gate	2.80	2.33	1.85	1.58
US74H55A†	2-Wide, 4-Input Expandable And/Or Inverter Gate	2.80	2.33	1.85	1.58
US74H60A†	Dual 4-Input Expander For And/Or Inverter Gates	2.09	1.74	1.39	1.18
US74H61A†	Triple 3-Input Expander For And/Or Gates	2.09	1.74	1.39	1.18
US74H62A†	3-2-2-3 Input And/Or Expander for And/Or Inverter Gates	2.09	1.74	1.39	1.18
US74H71A†	J-K Flip-Flop with And/Or Inputs	4.47	3.72	2.96	2.52
US74H72A†	J-K Master Slave Flip-Flop	4.47	3.72	2.96	2.52
US74H73A	Dual J-K Master Slave Flip-Flop	7.28	6.07	4.83	4.12
US74H74A	Dual D Edge Triggered Flip-Flop	5.64	4.69	3.74	3.18
US74H76A	Dual J-K Master Slave Flip-Flop	7.72	6.43	5.12	4.36
US74H78A	Dual J-K Master Slave Flip-Flop	7.28	6.07	4.83	4.12
US74H571A	50 MHz AND/OK Input J-K Flip-Flop	7.82	6.52	5.21	4.50
US74H572A	50 MHz AND Input J-K Flip-Flop	7.82	6.52	5.21	4.50

Motorola Integrated Circuits



Allied stocks a wide assortment of Motorola integrated circuitry. Selection includes many multi-function types for minimum "can count"; plus "state-of-the-art" linear integrated circuits for a "competitive edge" to your research and development department's new equipment designs; and low-priced multi-function plastic dual in-line types. Cases refer to illustrations above.

MECL II SERIES INTEGRATED CIRCUITS

Second phase of compatible MECL logic designs. Full compatibility with the same systems as MECL series—but 40% faster (typical propagation delay—4 nanoseconds). Noise immunity of 175 mV over entire temperature range. Current drain is constant, regardless of logic state or operating frequency, minimizing noise. Operate with power supply variations of ±20%. Available in military and industrial temperature ranges: ceramic package (case 605C) and 14-lead TO-86 flat package (case 607). *Case 620.

Circuit Function	Range, 0° to +75° C				Range, −55° to +125° C				
	Case 605 Type No.	EACH 1-49	50-999	1000-Up	Case 607 Type No.	EACH 1-9	10-24	25-99	100-Up
Single 6-Input Gate (3 OR/3 NOR-Pulldowns)	MC1001P	2.25	1.50	1.10	MC1201L	2.94	2.45	2.00	1.65
Single 6-Input Gate (3 OR-Pulldowns)	MC1002P	2.25	1.50	1.10	MC1202L	2.94	2.45	2.00	1.65
Single 6-Input Gate (No Pulldowns)	MC1003P	2.25	1.50	1.10	MC1203L	2.94	2.45	2.00	1.65
Dual 4-Input Gate (2 OR/2 NOR-Pulldowns)	MC1004P	2.33	1.55	1.15	MC1204L	3.06	2.55	2.05	1.70
Dual 4-Input Gate (2 OR-Pulldowns)	MC1005P	2.33	1.55	1.15	MC1205L	3.06	2.55	2.05	1.70
Dual 4-Input Gate (No Pulldowns)	MC1006P	2.33	1.55	1.15	MC1206L	3.06	2.55	2.05	1.70
Triple 3-Input Gate (3 NOR-Pulldowns)	MC1007P	2.40	1.60	1.20	MC1207L	3.24	2.70	2.15	1.80
Triple 3-Input Gate (1 NOR-Pulldown)	MC1008P	2.40	1.60	1.20	MC1208L	3.24	2.70	2.15	1.80
Triple 3-Input Gate (No Pulldowns)	MC1009P	2.40	1.60	1.20	MC1209L	3.24	2.70	2.15	1.80
Quad 2-Input Gate (4 NOR-Pulldowns)	MC1010P	2.55	1.70	1.25	MC1210L	3.42	2.85	2.30	1.90
Quad 2-Input Gate (2 NOR-Pulldowns)	MC1011P	2.55	1.70	1.25	MC1211L	3.42	2.85	2.30	1.90
Quad 2-Input Gate (No Pulldowns)	MC1012P	2.55	1.70	1.25	MC1212L	3.42	2.85	2.30	1.90
85 MHz AC Coupled J-K Flip-Flop	MC1013P	4.35	2.90	2.15	MC1213L	5.76	4.80	3.85	3.20
Dual R-S Flip-Flop (Positive Clock)	MC1014P	4.73	3.15	2.35	MC1214L	6.18	5.15	4.15	3.45
Dual R-S Flip-Flop (Negative Clock)	MC1015P	4.73	3.15	2.35	MC1215L	6.18	5.15	4.15	3.45
Dual R-S Flip-Flop (Single Rail)	MC1016P	4.73	3.15	2.35	MC1216L	6.18	5.15	4.15	3.45
Saturated Logic to MECL Level Translator	MC1017P	4.95	3.30	2.45	MC1217L	6.54	5.45	4.40	3.65
MECL to Saturated Logic Level Translator	MC1018P	4.95	3.30	2.45	MC1218L	6.54	5.45	4.40	3.65
Full Adder	MC1019P	6.38	4.25	3.15	MC1219L	8.34	6.95	5.60	4.65
Quad Line Receiver	MC1020P	2.25	1.50	1.10	MC1220L	2.94	2.45	2.00	1.65
Full Subtractor	MC1021P	6.38	4.25	3.15	MC1221L	8.34	6.95	5.60	4.65
Type "D" Flip-Flop	MC1022P	6.75	4.50	3.35	MC1222L	8.88	7.40	5.95	4.95
Dual 4-Input OR/NOR Clock Driver	MC1023P	9.75	6.50	4.80	.....	.....	.....	.....	.....
Dual 2-Input Expandable Gate	MC1024P	2.40	1.60	1.20	MC1224L	3.24	2.70	2.15	1.80
Dual 4 and 5-Input Expander	MC1025P	2.33	1.55	1.15	MC1225L	3.06	2.55	2.05	1.70
Dual 3-4 Input Transmission Line and Clock Driver	MC1026P	9.75	6.50	4.80	MC1226L	12.48	10.40	8.35	6.95
120 MHz AC Coupled J-K Flip-Flop	MC1027P	9.75	6.50	4.80	.....	.....	.....	.....	.....
Dual 4-Channel Data Selector	MC1028P	16.88	11.25	8.35	.....	.....	.....	.....	.....
Data Distributor	MC1029P	4.73	3.15	2.35	MC1229L	6.18	5.15	4.15	3.45
Quad Exclusive OR Gate	MC1030P	7.20	4.80	3.55	MC1230L	9.54	7.95	6.35	5.30
Quad Exclusive NOR Gate	MC1031P	7.20	4.80	3.55	MC1231L	9.54	7.95	6.35	5.30
85 MHz Dual AC J-K FF Shift Register	MC1032P	7.20	4.80	3.55	.....	.....	.....	.....	.....
Dual R-S Flip-Flop (Single Rail Input, Negative Clock)	MC1033P	4.73	3.15	2.35	MC1233L	6.18	5.15	4.15	3.45
Type "D" Flip-Flop	MC1034P	15.53	10.35	7.65	.....	.....	.....	.....	.....
Dual Schmitt Trigger/Triple Differential Amplifier	MC1035P	2.70	1.80	1.35	MC1235L	3.60	3.00	2.40	2.00
16-Bit Coincident Memory	MC1036P	20.25	13.50	10.00	.....	.....	.....	.....	.....
16-Bit Coincident Memory (No Pulldown)	MC1037P	20.25	13.50	10.00	.....	.....	.....	.....	.....
8-Channel Data Selector	MC1038P	16.80	11.20	8.30	MC1238L	22.20	18.50	14.80	12.35
MECL to Saturated Logic Quad Translator	MC1039P*	7.73	5.15	3.30	MC1239L	10.14	8.45	6.80	5.65
Quad Latch	MC1040P	9.75	6.50	4.80	MC1240L	13.86	11.55	9.25	7.70
Dual 2 BDD to 1 of 4 LDD	MC1042P	11.48	7.65	5.65	.....	.....	.....	.....	.....
3-Bit Binary to 1/8 Line Decoder	MC1043P	11.18	7.45	5.50	.....	.....	.....	.....	.....
8-Bit Parity Checker and Gen.	MC1046P	11.48	7.65	5.65	MC1246L	15.12	12.60	10.10	8.40
Quad 2-Input AND Gate	MC1047P	5.85	3.90	2.90	MC1247L	7.80	6.50	5.20	4.35
Quad 2-Input NAND Gate	MC1048P	5.85	3.90	2.90	MC1248L	7.80	6.50	5.20	4.35
Quad Latch Without EF Res.	MC1070P	9.75	6.50	4.80	MC1270L	13.86	11.55	9.25	7.70

MECL III (MC1600 SERIES) INTEGRATED CIRCUITS

Non-saturating logic circuits for very high speeds. Gate circuits capable of sub-nanosecond speeds with local loading, and driving terminated lines with 1.5 nsec rise times and 1.1 nsec propagation delays. Flip-flop toggle frequencies greater than 300 MHz. Unused inputs may be left open. DC output loading factor, 90 (each output). Temperature range, 0° to +75° C.

Circuit Function	Total Diss. mW	Prop. Delay nsec.	High Impedance Type No.	EACH 1-9	10-24	25-99	100-Up	Low Impedance Type No.	EACH 1-9	10-24	25-99	100-Up
A/D Comparator	...	...	MC1650L	39.48	32.90	26.35	21.95	.....	.....	.....	.....	.....
Dual 4-Input OR/NOR Gate	110	1.1	MC1660L	15.30	12.75	10.20	8.50	MC1661L	15.30	12.75	10.20	8.50
Quad 2-Input NOR Gate	220	1.1	MC1662L	16.68	13.90	11.10	9.25	MC1663L	16.68	13.90	11.10	9.25
Quad 2-Input OR Gate	220	1.1	MC1664L	16.68	13.90	11.10	9.25	MC1665L	16.68	13.90	11.10	9.25
Dual 2-Phase R-S Flip-Flop	215	1.8	MC1666L	30.60	25.50	20.40	17.00	MC1667L	30.60	25.50	20.40	17.00
Dual 2-Phase Type D Flip-Flop	215	1.8	MC1668L	38.22	31.85	25.50	21.25	MC1669L	38.22	31.85	25.50	21.25
Single Phase Type D Flip-Flop	190	1.8	MC1670L	27.42	22.85	18.30	15.25	MC1671L	27.42	22.85	18.30	15.25
Triple Excl. OR Gate	...	...	MC1672L	18.90	15.75	12.60	10.50	MC1673L	18.90	15.75	12.60	10.50
Triple Excl. NOR Gate	...	...	MC1674L	18.90	15.75	12.60	10.50	MC1675L	18.90	15.75	12.60	10.50
Quad Line Receiver	...	...	MC1692L	16.68	13.90	11.10	9.25	.....	.....	.....	.....	.....

Motorola Integrated Circuits

See Page 54 for Package Configurations

MTTL (MC7400 SERIES) DUAL IN-LINE INTEGRATED CIRCUITS

Designed for general purpose digital applications. Medium operating speed (15-30 MHz clock rate), good external noise immunity, high fan-out. Capable of driving capacitive loads up to 600 pF. Temperature range, 0° to +70° C. Also available with Flat Package (MC7400F); see Integrated Circuit Directory (Begins on Page 8). *Case 612.

Circuit Function	Dual In-Line Ceramic Package					Dual In-Line Plastic Package				
	Case 605C Type No.	EACH 1-9	10-24	25-99	100-Up	Case 605 Type No.	EACH 1-24	25-99	100-999	1000-Up
Quad 2-Input NAND Gate	MC7400L	3.78	3.15	2.50	2.10	MC7400P	1.94	1.29	1.10	.99
Quad 2-In. NAND Gate (Open Col. Output)	MC7401L	3.78	3.15	2.50	2.10	MC7401P	1.94	1.29	1.10	.99
Quad 2-Input NOR Gate	MC7402L	4.20	3.50	2.80	2.35	MC7402P	2.22	1.48	1.26	1.14
Quad NAND Gate (O.C.)	.....	.....	.....	.....	.....	MC7403P	1.94	1.29	1.10	.99
Hex Inverter	MC7404L	4.86	4.05	3.25	2.70	MC7404P	2.40	1.60	1.36	1.23
Hex Inverter (Open Collector)	MC7405L	4.86	4.05	3.25	2.70	MC7405P	2.40	1.60	1.36	1.23
Triple 3-Input NAND Gate	MC7410L	3.78	3.15	2.50	2.10	MC7410P	1.94	1.29	1.10	.99
Dual 4-Input NAND Gate	MC7420L	3.78	3.15	2.50	2.10	MC7420P	1.94	1.29	1.10	.99
8-Input NAND Gate	MC7430L	3.78	3.15	2.50	2.10	MC7430P	1.94	1.29	1.10	.99
Dual 4-Input NAND Buffer	MC7440L	4.20	3.50	2.80	2.35	MC7440P	2.22	1.48	1.26	1.14
BCD to Dec. Decoder HL Driver	.....	.....	.....	.....	.....	MC7441AP	10.95	7.30	6.20	5.60
BCD to Decimal Decoder	.....	.....	.....	.....	.....	MC7442P	10.13	6.75	5.70	5.20
Excess 3 to Decimal Decoder	.....	.....	.....	.....	.....	MC7443P	10.13	6.75	5.70	5.20
Excess 3 Gray to Decimal Decoder	.....	.....	.....	.....	.....	MC7444P	10.13	6.75	5.70	5.20
Exp. Dual 2-W 2-In. AND-OR-INVERT Gate	MC7450L	4.20	3.50	2.80	2.35	MC7450P	1.94	1.29	1.10	.99
Dual 2-W 2-In. AND-OR-INVERT Gate	MC7451L	3.78	3.15	2.50	2.10	MC7451P	1.94	1.29	1.10	.99
Exp. 4-W 2-In. AND-OR-INVERT Gate	MC7453L	4.20	3.50	2.80	2.35	MC7453P	1.94	1.29	1.10	.99
4-Wide 2-In. AND-OR-INVERT Gate	MC7454L	3.78	3.15	2.50	2.10	MC7454P	1.94	1.29	1.10	.99
Dual 4-In. Exp. for AND-OR-INVERT Gates	MC7460L	2.94	2.45	2.00	1.65	MC7460P	1.52	1.03	.88	.79
J-K Flip-Flop	MC7472L	6.12	5.10	4.10	3.40	MC7472P	2.63	1.75	1.50	1.35
Dual J-K Flip-Flop	MC7473L	9.00	7.50	6.00	5.00	MC7473P	4.50	3.00	2.55	2.30
Quad Latch	MC7475L	20.88	17.40	13.90	11.60	MC7475P*	6.75	4.50	3.85	3.45
Dual J-K Flip-Flop	.....	.....	.....	.....	.....	MC7476P*	4.80	3.20	2.70	2.45
Dual Type D Flip-Flop	MC7479L	8.64	7.20	5.75	4.80	MC7479P	3.83	2.55	2.15	1.95
Gated Full Adder	.....	.....	.....	.....	.....	MC7480P	5.25	3.50	3.00	2.70
4-Bit Adder	.....	.....	.....	.....	.....	MC7483P	11.80	7.87	6.65	6.05
Decade Counter	MC7490L	17.82	14.85	11.90	9.90	MC7490P	7.28	4.85	4.15	3.75
8-Bit Shift Register	.....	.....	.....	.....	.....	MC7491AP	12.45	8.30	7.00	6.35
Divide by 12 Counter	.....	.....	.....	.....	.....	MC7492P	7.28	4.85	4.15	3.75
4-Bit Binary Counter	MC7493L	23.64	19.70	15.80	13.15	MC7493P	7.28	4.85	4.15	3.75
4-Bit Universal Shift Register	.....	.....	.....	.....	.....	MC7495P	8.55	5.70	4.85	4.40

MTTL MC4000L SERIES (CASE 605C) DUAL IN-LINE CERAMIC

Transistor logic circuits for complex functions and digital uses in medium speed to high speed range. Typical clock frequencies of 30-40 MHz; propagation delay time to 5.0-10 nsec per level of gating. V_{cc}=5.0 V; T_A=25° C.

Circuit Function	0 to −75° C Type No.	EACH 1-9	10-24	25-99	100-Up
Dual Data Distributor	MC4002L	15.36	12.80	10.65	8.50
16-Bit Scratch Pad Memory Cell	MC4004L	21.24	17.70	14.15	11.80
16-Bit Scratch Pad Memory Cell	MC4005L	16.26	13.55	10.85	9.05
Binary to One-Of-Eight Line Gated Decoder	MC4006L	13.50	11.25	9.00	7.50
Dual Binary to One-of-Four Lines Gated Decoder	MC4007L	13.92	11.60	9.30	7.75
8-Bit Parity Tree	MC4008L	13.98	11.65	9.15	7.75
Dual 4-Bit Parity Tree	MC4010L	13.98	11.65	9.15	7.75
4-Bit Universal Shift Register	MC4012L	20.64	17.20	13.20	11.50
Universal Counter	MC4023L	11.16	9.30	7.75	6.20
Dual Voltage Controlled Multiplier	MC4024L	4.74	3.95	3.30	2.65
Frequency-Phase Detector	MC4044L	4.74	3.95	3.30	2.65

MHTL (MC660 SERIES) INTEGRATED CIRCUITS

Temperature range, −30° to +75° C. Noise immunity, 5.0 volts minimum for reliability and error-free operation in high noise environments. Output loading factor, 10 (for each output) except *MDTL, 8; MTTL III, 5.5; MRTL, 5.

Circuit Function	Ceramic Package				Plastic Package			
	Case 632 Type No.	EACH 1-49	50-999	1000-Up	Case 605 Type No.	EACH 1-49	50-999	1000-Up
Expandable Dual 4-Input Gate (active pullup)	MC660L	3.36	2.24	1.46	MC660P	2.10	1.40	1.06
Expandable Dual 4-Input Gate (passive pullup)	MC661L	3.24	2.16	1.40	MC661P	1.96	1.33	1.01
Expandable Dual 4-Input Line Driver	MC662L	3.81	2.54	1.65	MC662P	2.28	1.52	1.16
Dual J-K Flip-Flop	MC663L	7.02	4.68	3.04	MC663P	5.03	3.35	2.55
Master-Slave R-S Flip-Flop	MC664L	4.68	3.12	2.03	MC664P	3.23	2.15	1.63
HTL-Sat Triple Level Translator	MC665L*	4.79	3.19	2.07	MC665P*	2.78	1.85	1.40
Sat-HTL Triple Level Translator	MC666L	4.79	3.19	2.07	MC666P	3.08	2.05	1.56
Dual Monostable Multivibrator	MC667L	6.35	4.23	2.75	MC667P	4.73	3.15	2.40
Quad 2-Input Gate (passive pullup)	MC668L	3.24	2.16	1.40	MC668P	1.96	1.33	1.01
Dual 4-Input Expander	MC669L	2.43	1.62	1.05	MC669P	1.76	1.17	.89
Triple 3-Input Gate (passive pullup)	MC670L	3.24	2.16	1.40	MC670P	1.96	1.33	1.01
Triple 3-Input Gate (active pullup)	MC671L	3.36	2.24	1.46	MC671P	2.10	1.40	1.06
Quad 2-Input Gate (active pullup)	MC672L	3.36	2.24	1.46	MC672P	2.10	1.40	1.06
Dual 2-Input AND-OR-INVERT Gate (active)	MC673L	3.60	2.40	1.56	MC673P	2.30	1.53	1.16
Dual 2-Input AND-OR-INVERT Gate (passive)	MC674L	3.53	2.35	1.52	MC674P	2.24	1.49	1.13
2-Pulse Stetch M	MC675L	6.54	4.36	2.83	MC675P	4.82	3.21	2.44
Hex Inverter with Strobe (active)	MC677L	4.50	3.00	1.95	MC677P	2.63	1.75	1.33
Hex Inverter with Strobe (open collector)	MC678L	4.32	2.88	1.87	MC678P	2.52	1.68	1.27
Dual Lamp Driver	MC679L	4.79	3.19	2.36	MC679P	3.54	2.36	1.75
Hex Inverter (open collector)	MC680L	3.45	2.30	1.70	MC680P	2.15	1.43	1.15
Hex Inverter (active pullup)	MC681L	3.65	2.43	1.80	MC681P	2.24	1.49	1.20

Motorola Integrated Circuits

MTTL II SERIES INTEGRATED CIRCUITS

High-speed, high-noise-immunity family of saturating integrated logic circuits. Circuits are characterized by a multiple emitter input translator and two-stage active "pull-up." Maximum logic capability in minimum space, and greatly improved switching during turnoff. Gate propagation delay time is typically 6.0 nanoseconds. Flip-flop clock frequency, 30 MHz maximum. Clamp diodes on each input limit undershoot. MC2000 Series for 0° to +75°C use; MC2100 Series for −55° to 125°C. Case illustrations on p. 54.

MC2000 SERIES (0° to +75°C)

Circuit Description	Type No.	EACH 1-24	25-99	100-999	1000-Up	Type No.	EACH 1-9	10-24	25-99	100-Up
Expandable 2-Wide 4-Input AND-OR-INVERT Gate	MC2000P	3.90	2.60	2.20	2.00	MC2000L	6.48	5.40	4.30	3.60
Quad 2-Input NAND Gate	MC2001P	3.90	2.60	2.20	2.00	MC2001L	5.82	4.85	3.90	3.25
4-Wide 3-2-2-3 Input Expander for AND-OR-INVERT Gates	MC2002P	3.00	2.00	1.70	1.55	MC2002L	3.30	2.75	2.20	1.85
Dual 4-Input NAND Gate	MC2003P	3.90	2.60	2.20	2.00	MC2003L	5.82	4.85	3.90	3.25
Expandable 4-Wide 2-2-2-3 Input AND-OR-INVERT Gate	MC2004P	3.90	2.60	2.20	2.00	MC2004L	6.48	5.40	4.30	3.60
8-Input NAND Gate	MC2005P	3.90	2.60	2.20	2.00	MC2005L	5.82	4.85	3.90	3.25
Dual 4-Input Expander for AND-OR-INVERT Gates	MC2006P	3.00	2.00	1.70	1.55	MC2006L	3.30	2.75	2.20	1.85
Triple 3-Input NAND Gate	MC2007P	3.90	2.60	2.20	2.00	MC2007L	5.82	4.85	3.90	3.25
Hex Inverter	MC2008P	4.28	2.85	2.40	2.20	MC2008L	5.82	4.85	3.90	3.25
AND Input J-K Flip Flop	MC2009P	5.48	3.65	3.10	2.80	MC2009L	9.36	7.80	6.25	5.20
OR Input J-K Flip Flop	MC2010P	5.48	3.65	3.10	2.80	MC2010L	9.36	7.80	6.25	5.20
Expandable 8-Input NAND Gate	MC2011P	3.90	2.60	2.20	2.00	MC2011L	5.64	4.70	3.80	3.15
3-Wide, 3-Input Expandable AND-OR-INVERT Gate	.....	.....	.....	.....	.....	MC2012L	5.64	4.70	3.80	3.15
Dual Expandable 2-Wide 2-Input AND-OR-INVERT Gate	MC2013P	4.28	2.85	2.40	2.20	MC2013L	5.82	5.85	4.70	3.90
Dual J-K Flip Flop Separate Clock	MC2023P	7.72	5.15	4.35	3.95	MC2023L	11.76	9.80	7.85	6.55
Dual J-K Flip Flop Common Clock	MC2024P	7.72	5.15	4.35	3.95	MC2024L	11.76	9.80	7.85	6.55
50 MHz AND Input J-K Flip Flop	MC2025P	5.48	3.65	3.10	2.80	MC2025L	9.36	7.80	6.25	5.20
50 MHz OR Input J-K Flip Flop	MC2026P	5.48	3.65	3.10	2.80	MC2026L	9.36	7.80	6.25	5.20
OR Input J-K Flip Flop	MC2028P	5.48	3.65	3.10	2.80	MC2028L	9.36	7.80	6.25	5.20
Expandable 2-Wide 4-Input AND-OR-INVERT Gate	MC2050P	3.30	2.20	1.85	1.70	MC2050L	5.04	4.20	3.35	2.80
Quad 2-Input NAND Gate	MC2051P	3.30	2.20	1.85	1.70	MC2051L	4.68	3.90	3.10	2.60
4-Wide 3-2-2-3 Input Expander	MC2052P	3.00	2.00	1.70	1.55	MC2052L	3.30	2.75	2.20	1.85
Dual 4-Input NAND Gate	MC2053P	3.30	2.20	1.85	1.70	MC2053L	4.68	3.90	3.10	2.60
Expandable 4-Wide 2-2-2-3 AND-OR-INVERT Gate	MC2054P	3.30	2.20	1.85	1.70	MC2054L	5.04	4.20	3.35	2.80
8-Input NAND Gate	MC2055P	3.30	2.20	1.85	1.70	MC2055L	4.68	3.90	3.10	2.60
Dual 4-Input Expander	MC2056P	3.00	2.00	1.70	1.55	MC2056L	3.30	2.75	2.20	1.85
Triple 3-Input NAND Gate	MC2057P	3.30	2.20	1.85	1.70	MC2057L	4.68	3.90	3.10	2.60
Hex Inverter	MC2058P	3.83	2.55	2.15	1.95	MC2058L	5.10	4.25	3.40	2.85
AND Input J-K Flip Flop	MC2059P	4.35	2.90	2.50	2.25	MC2059L	7.56	6.30	5.05	4.20
OR Input J-K Flip Flop	MC2060P	4.35	2.90	2.50	2.25	MC2060L	7.56	6.30	5.05	4.20
Expandable 8-Input NAND Gate	MC2061P	3.30	2.20	1.85	1.70	MC2061L	4.74	3.95	3.20	2.65
3-Wide, 3-Input Expandable AND-OR-INVERT Gate	.....	.....	.....	.....	.....	MC2062L	4.74	3.95	3.20	2.65
Dual Expandable 2-Wide, 2-Input AND-OR-INVERT Gate	MC2063P	3.60	2.40	2.05	1.85	MC2063L	5.76	4.80	3.85	3.20
Quad Lamp Driver	MC2065P	3.30	2.20	1.85	1.70	MC2065L	5.22	4.35	3.60	2.90
Dual J-K Flip Flop Separate Clock	MC2073P	6.45	4.30	3.60	3.30	MC2073L	9.78	8.15	6.55	5.45
Dual J-K Flip Flop Common Clock	MC2074P	6.45	4.30	3.60	3.30	MC2074L	9.78	8.15	6.55	5.45
50 MHz AND Input J-K Flip Flop	MC2075P	4.35	2.90	2.50	2.25	MC2075L	7.56	6.30	5.05	4.20
50 MHz OR Input J-K Flip Flop	MC2076P	4.35	2.90	2.50	2.25	MC2076L	7.56	6.30	5.05	4.20
OR Input J-K Flip Flop	MC2078P	4.35	2.90	2.50	2.25	MC2078L	7.56	6.30	5.05	4.20

MC2100 SERIES (−55°C to +125°C)

Circuit Description	Type No.	EACH 1-9	10-24	25-99	100-Up
Expandable 2-Wide 4-Input AND-OR-INVERT Gate	MC2100L	8.64	7.20	5.75	4.80
Quad 2-Input NAND Gate	MC2101L	8.64	7.20	5.75	4.80
4-Wide 3-2-2-3 Input Expander for AND-OR-INVERT Gates	MC2102L	5.46	4.55	3.65	3.05
Dual 4-Input NAND Gate	MC2103L	8.64	7.20	5.75	4.80
Expandable 4-Wide 2-2-2-3 Input AND-OR-INVERT Gate	MC2104L	8.64	7.20	5.75	4.80
8-Input NAND Gate	MC2105L	8.64	7.20	5.75	4.80
Dual 4-Input Expander for AND-OR-INVERT Gates	MC2106L	5.46	4.55	3.65	3.05
Triple 3-Input NAND Gate	MC2107L	8.64	7.20	5.75	4.80
AND Input J-K Flip Flop	MC2109L	12.84	10.70	8.60	7.15
AND Input J-K Flip Flop	MC2110L	12.84	10.70	8.60	7.15
Expandable 8-Input NAND Gate	MC2111L	8.64	7.20	5.75	4.80
3-Wide, 3-Input Expandable AND-OR-INVERT Gate	MC2112L	8.64	7.20	5.75	4.80
Dual Expandable 2-Wide 2-Input AND-OR-INVERT Gate	MC2113L	8.64	7.20	5.75	4.80
Dual J-K Flip Flop Separate Clock	MC2123L	17.82	14.85	11.90	9.90
Dual J-K Flip Flop Common Clock	MC2124L	17.82	14.85	11.90	9.90
50 MHz AND Input J-K Flip Flop	MC2125L	14.76	12.30	9.85	8.20
50 MHz OR Input J-K Flip Flop	MC2126L	14.76	12.30	9.85	8.20
OR Input J-K Flip Flop	MC2128L	14.76	12.30	9.85	8.20
Expandable 2-Wide 4-Input AND-OR-INVERT Gate	MC2150L	7.08	5.90	4.75	3.95
Quad 2-Input NAND Gate	MC2151L	7.08	5.90	4.75	3.95
4-Wide 3-2-2-3 Input Expander	MC2152L	5.46	4.55	3.65	3.05
Dual 4-Input NAND Gate	MC2153L	7.08	5.90	4.75	3.95
Expandable 4-Wide 2-2-2-3 AND-OR-INVERT Gate	MC2154L	7.08	5.90	4.75	3.95
8-Input NAND Gate	MC2155L	7.08	5.90	4.75	3.95
Dual 4-Input Expander	MC2156L	5.46	4.55	3.65	3.05
Triple 3-Input NAND Gate	MC2157L	7.08	5.90	4.75	3.95
AND Input J-K Flip Flop	MC2159L	10.80	9.00	7.20	6.00
OR Input J-K Flip Flop	MC2160L	10.80	9.00	7.20	6.00
Expandable 8-Input NAND Gate	MC2161L	7.08	5.90	4.75	3.95
3-Wide, 3-Input Expandable AND-OR-INVERT Gate	MC2162L	7.08	5.90	4.75	3.95
Dual Expandable 2-Wide, 2-Input AND-OR-INVERT Gate	MC2163L	7.08	5.90	4.75	3.95
Quad Lamp Driver	MC2165L	9.54	7.95	6.60	5.30
Dual J-K Flip Flop Separate Clock	MC2173L	14.82	12.35	9.90	8.25
Dual J-K Flip Flop Common Clock	MC2174L	14.82	12.35	9.90	8.25
50 MHz AND Input J-K Flip Flop	MC2175L	12.30	10.25	8.20	6.85
50 MHz OR Input J-K Flip Flop	MC2176L	12.30	10.25	8.20	6.85
OR Input J-K Flip Flop	MC2178L	12.30	10.25	8.20	6.85

Be Sure to Specify Mfr's Type No. and Name When Ordering

Motorola Integrated Circuits

MTTL III SERIES INTEGRATED CIRCUITS

Designed to be the "ultimate" saturated logic line. Feature speeds approaching limits of saturated logic and excellent load driving capability. Switching speeds are less temperature dependent than conventional types. Eliminates distorted voltage transfer characteristics and problems associated with "ringing." Input clamp diodes; high DC noise immunity. *Dual 3-Input, 3-Output. †Positive edge clock. ‡Negative edge clock. §Indicates f=30MHz; #f=40 MHz; ¶f=50 MHz. See page 54 for case illustrations.

Circuit Function 0° to+75°C	Type No. Fan-Out=10 Case 605	EACH 1-24	25-99	100-999	1000-Up	Type No. Fan-Out=10 Case 605C	EACH 1-9	10-24	25-99	1000-Up
Quad 2-Input NAND Gate	MC3000P	2.33	1.55	1.32	1.19	MC3000L	5.22	4.35	3.50	2.90
Quad 2-Input AND Gate	MC3001P	2.33	1.55	1.32	1.19	MC3001L	5.22	4.35	3.50	2.90
Quad 2-Input NOR Gate	MC3002P	2.55	1.70	1.45	1.31	MC3002L	5.76	4.80	3.85	3.20
Quad 2-Input OR Gate	MC3003P	2.55	1.70	1.45	1.31	MC3003L	5.76	4.80	3.85	3.20
Quad 2-Input NAND Gate (o.c.)	MC3004P	2.33	1.55	1.32	1.19	MC3004L	5.22	4.35	3.50	2.90
Triple 3-Input NAND Gate	MC3005P	2.33	1.55	1.32	1.19	MC3005L	5.22	4.35	3.50	2.90
Triple 3-Input AND Gate	MC3006P	2.33	1.55	1.32	1.19	MC3006L	5.22	4.35	3.50	2.90
Triple 3-Input NAND Gate (o.c.)	MC3007P	2.33	1.55	1.32	1.19	MC2007L	5.22	4.35	3.50	2.90
Dual 4-Input NAND Gate	MC3010P	2.33	1.55	1.32	1.19	MC3010L	5.22	4.35	3.50	2.90
Dual 4-Input NAND Gate (o.c.)	MC3012P	2.33	1.55	1.32	1.19	MC3012L	5.22	4.35	3.50	2.90
Single 8-Input NAND Gate	MC3015P	2.33	1.55	1.32	1.19	MC3015L	5.22	4.35	3.50	2.90
Ex. Dual 2-W. 2-I. Gate	MC3030P	2.33	1.55	1.32	1.19	MC3020L	5.76	4.80	3.85	3.20
Dual 4-Input NAND Power Gate	MC3025P	2.55	1.70	1.45	1.31	MC3025L	5.76	4.80	3.85	3.20
Dual 4-Input AND Power Gate	MC3026P	2.55	1.70	1.45	1.31	MC3026L	5.76	4.80	3.85	3.20
AND Terminated Line Drivers*	MC3028P	2.55	1.70	1.45	1.31	MC3028L	5.76	4.80	3.85	3.20
NAND Terminated Line Drivers*	MC3029P	2.55	1.70	1.45	1.31	MC3029L	5.76	4.80	3.85	3.20
Dual 4-Input Expander, AOI Gates	MC3030P	1.41	1.17	1.00	.90	MC3030L	4.20	3.50	2.80	2.35
AND J-K Flip-Flop#	MC3050P	3.68	2.45	2.10	1.90	MC3050L	8.34	6.95	5.60	4.65
AND Input JJ-KK Flip-Flop#	MC3052P	3.68	2.45	2.10	1.90	MC3052L	8.34	6.95	5.60	4.65
Type "D" Dual Type D J-K FF†§	MC3060P	5.93	3.98	3.40	3.05	MC3060L	12.48	10.40	8.35	6.95
Com. Clk. Dual JK FF¶	MC3061P	5.93	3.98	3.40	3.05	MC3061L	12.48	10.40	8.35	6.95
Sep. Clk. Dual JK FF†¶	MC3062P	5.93	3.98	3.40	3.05	MC3062L	12.48	10.40	8.35	6.95

Circuit Function	Type No.	EACH 1-24	25-99	100-999	1000-Up	Circuit Function	Type No.	EACH 1-24	25-99	100-999	1000-Up
Hex Inverter	MC3008P	3.45	2.30	1.95	1.75	Exp 2-2-2-3 AOI Gt	MC3032P	2.33	1.55	1.30	1.19
Dual 4-I AND Gt	MC3011P	2.33	1.55	1.32	1.19	2-2-2-3 AOI Gt	MC3033P	2.33	1.55	1.30	1.19
8 I NAND Gate	MC3016P	2.33	1.55	1.30	1.19	Exp 2-W 4-I AOI Gt	MC3034P	2.33	1.55	1.30	1.19
3-2-2-3 AND/OR Exp	MC3018P	1.77	1.18	.99	.90	AND I JK Flip-Flop	MC3051P	3.68	2.45	2.10	1.90
Triple Exp	MC3019P	1.77	1.18	.99	.90	D Flip Flop	MC3053P	4.20	2.80	2.40	2.15
Quad Exc OR Gt	MC3021P	3.98	2.65	2.25	2.05	JK Master Slave FF	MC3054P	3.75	2.50	2.15	1.95
Dual 4-I Buffer	MC3024P	3.00	2.00	1.70	1.55	JK Master Slave FF	MC3055P	3.75	2.50	2.15	1.95
2-2-2-3 AND OR Gt	MC3031P	2.33	1.55	1.30	1.19						

INDUSTRIAL AND MILITARY MEDIUM-POWER INTEGRATED CIRCUITS

Circuit Function	Case	Industrial Type (0°C to +100°C) Type No.	EACH 1-9	10-24	25-99	100-Up	Military Type (−55°C to +125°C) Type No.	EACH 1-49	50-999	1000-Up
Buffer	601	MC900G	6.00	5.00	4.00	3.35	MC800G	2.13	1.42	1.05
Counter Adapter	601	MC901G	5.46	4.55	3.65	3.05	MC801G	2.51	1.67	1.24
Flip-Flop	601	MC902G	5.94	4.95	3.95	3.30	MC802G	2.13	1.42	1.05
3-Input NOR Gate	601	MC903G	5.46	4.55	3.65	3.05	MC803G	2.13	1.42	1.05
Half-Adder	601	MC904G	6.72	5.60	4.50	3.75	MC804G	2.30	1.53	1.13
Half-Shift Register	601	MC905G	6.84	5.70	4.55	3.80	MC805G	2.51	1.67	1.24
Half-Shift Register (w/o inverter)	601	MC906G	6.84	5.70	4.55	3.80	MC806G	2.51	1.67	1.24
4-Input NOR Gate	601	MC907G	5.46	4.55	3.65	3.05	MC807G	2.13	1.42	1.05
Dual 2-Input NOR Gate	601	MC914G	5.64	4.70	3.80	3.15	MC814G	2.13	1.42	1.05
Dual 3-Input NOR Gate	603	MC915G	5.64	4.70	3.80	3.15	MC815G	2.30	1.53	1.13
J-K Flip-Flop	601	MC916G	7.56	6.30	5.05	4.20	MC816G	3.18	2.12	1.57
J-K Flip-Flop	603	MC926G	7.56	6.30	5.05	4.20	MC826G	3.72	2.48	1.84
Quad Inverter	603	MC927G	5.64	4.70	3.80	3.15	MC827G	2.13	1.42	1.05
5-Input NOR Gate	601	MC929G	5.46	4.55	3.65	3.05	MC829G	2.13	1.42	1.05
J-K Flip-Flop	601	MC974G	7.56	6.30	5.05	4.20	MC874G	3.72	2.48	1.84
Dual Buffer	603	MC999G	10.44	8.70	6.95	5.80	MC899G	2.60	1.73	1.28

INDUSTRIAL/COMMERCIAL MEDIUM-POWER MRTL TYPES

Circuit	Case	Temp. +15° to +55°C Type No.	EACH 1-49	50-999	1000-Up	Circuit	Case	Temp. +15C° to +55°C Type No.	EACH 1-49	50-999	1000-Up
Buffer	601	MC700G	1.86	1.24	.92	Dual 3-Input NOR	603	MC715G	2.07	1.38	1.02
Counter Adapter	601	MC701G	2.25	1.50	1.11						
Flip-Flop	601	MC702G	1.86	1.24	.92	J-K Flip-Flop	601	MC723G	2.84	1.89	1.40
3-Input NOR Gate	601	MC703G	1.86	1.24	.92	J-K Flip-Flop	603	MC726G	3.32	2.21	1.64
Half Adder	601	MC704G	2.07	1.38	1.02	Quad Inverter	603	MC727G	1.86	1.24	.92
Half-Shift Register	601	MC705G	2.25	1.50	1.11	5-Input NOR Gate	601	MC729G	1.24	1.24	.92
Half-Shift Register (w/o inverter)	601	MC706G	2.25	1.50	1.11	J-K Flip-Flop	601	MC774G	3.32	2.21	1.64
4-Input NOR Gate	601	MC707G	1.86	1.24	.92						
Dual 2-Input NOR	601	MC714G	1.86	1.24	.92	Dual Buffer	603	MC799G	2.31	1.54	1.14

Motorola Integrated Circuits

See Page 54 for Package Configuration and Explanations of Column Headings

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Cut costs by making "one order" purchases from Allied Electronics. You pay OEM factory prices, reduce paper work in purchasing and receiving. Fast shipment from our gigantic stock as well.

MRTL integrated logic circuits provide high fan-in and fan-out capabilities for a wide range of military and industrial applications. Feature speeds approaching limits of saturated logic and excellent load driving capability. Printed circuit mounting low-profile unit solves space, assembly problems.

PLASTIC-PACKAGED MRTL INTEGRATED CIRCUITS (Case 605)

Circuit Function	Temp. Range +15° to +55° C				Temp. Range 0° to +75° C			
	Type No.	EACH 1-49	EACH 50-999	EACH 1000-Up	Type No.	EACH 1-49	EACH 50-999	EACH 1000-Up
Dual 3-Input Gate	MC715P	1.50	1.00	.75	MC815P	1.73	1.15	.86
J-K Flip-Flop					MC816P	2.10	1.40	1.05
J-K Flip-Flop	MC723P	1.95	1.30	.95				
Quad 2-Input NOR Gate	MC724P	1.62	1.08	.81	MC824P	1.88	1.25	.93
Dual 4-Input Gate	MC725P	1.62	1.08	.81	MC825P	1.88	1.25	.93
J-K Flip-Flop	MC726P	2.03	1.35	1.00	MC826P	2.33	1.55	1.15
Quad Exclusive OR Gate	MC771P	2.70	1.80	1.35	MC871P	3.15	2.10	1.55
Dual Half-Adder	MC775P	2.03	1.35	1.00	MC875P	2.33	1.55	1.15
Dual Type D Flip-Flop	MC778P	2.85	1.90	1.40	MC878P	3.00	2.00	1.50
J-K Flip-Flop, Expander, 2 Buffers	MC779P	2.85	1.90	1.40	MC879P	3.23	2.15	1.60
Decade Up Counter	MC780P	6.08	4.05	3.00	MC880P	6.90	4.60	3.40
Dual Half-Shift Register	MC783P	2.33	1.55	1.14	MC883P	2.70	1.80	1.34
Dual Half-Shift Register (w/inv.)	MC784P	2.19	1.46	1.08	MC884P	2.55	1.70	1.27
Quad 2-Input Expander	MC785P	1.64	1.09	.81	MC885P	1.88	1.25	.93
Dual 4-Input Expander	MC786P	1.89	1.25	.95	MC886P	2.25	1.50	1.12
J-K Flip-Flop, Inverter, 2 Buffers	MC787P	2.85	1.90	1.40	MC887P	3.23	2.15	1.60
Dual Buffer	MC788P	2.03	1.35	1.00	MC888P	2.33	1.55	1.15
Hex Inverter	MC789P	1.62	1.08	.81	MC889P	1.88	1.25	.93
Dual J-K Flip-Flop	MC790P	3.00	2.00	1.50	MC890P	3.45	2.30	1.72
Dual J-K Flip-Flop	MC791P	3.53	2.35	1.75	MC891P	4.05	2.70	2.00
Triple 3-Input Gate	MC792P	1.80	1.20	.90	MC892P	1.88	1.25	.93
4-Bit S-P Shift Register	MC794P	5.10	3.40	2.50	MC894P	5.48	3.65	2.70
Dual Full Adder	MC796P	7.56	5.05	3.75	MC896P	8.48	5.65	4.20
Dual Full Subtractor	MC797P	7.56	5.05	3.75	MC897P	8.48	5.65	4.20
Dual Buffer	MC799P	1.62	1.08	.81	MC899P	1.88	1.25	.93
Dual 4-Channel Data Selector	MC9701P	3.68	2.45	1.80	MC9801P	3.98	2.65	1.95
4-Bit Parallel Full Adder	MC9704P	5.10	3.40	2.50	MC9804P	5.48	3.65	2.70
Dual 4-Channel Distributor	MC9707P	3.68	2.45	1.80	MC9807P	3.98	2.65	1.95
Quad Schmitt Trigger	MC9709P	3.68	2.45	1.80	MC9809P	3.98	2.65	1.95
Quad 2-Input AND Gate	MC9713P	2.10	1.40	1.05	MC9813P	2.25	1.50	1.13
Quad 2-Input NAND Gate	MC9714P	2.33	1.55	1.15	MC9814P	2.48	1.65	1.24
Quad 2-Input OR Gate	MC9715P	1.95	1.30	.95	MC9815P	2.10	1.40	1.02
Hex Expander	MC9719P	1.64	1.09	.81	MC9819P	1.78	1.17	.87
Decoder Driver	MC9760P	8.33	5.55	4.10	MC9860P	8.93	5.95	4.40

PLASTIC-PACKAGED MW MRTL INTEGRATED CIRCUITS (Case 605, *except 612)

Circuit Function	Temp. Range +15° to +55° C				Temp. Range 0° to +75° C			
	Type No.	EACH 1-49	EACH 50-999	EACH 1000-Up	Type No.	EACH 1-49	EACH 50-999	EACH 1000-Up
Quad 2-Input Gate	MC717P	1.62	1.08	.81	MC817P	1.76	1.17	.87
Dual 3-Input Gate	MC718P	1.50	1.00	.75	MC818P	1.62	1.08	.81
Dual 4-Input Gate	MC719P	1.62	1.08	.81	MC819P	1.76	1.17	.87
J-K Flip-Flop	MC722P	1.95	1.30	.95	MC822P	2.10	1.40	1.02
MwMRTL Binary Up Counter	MC777P	5.10	3.40	2.50	MC877P	5.48	3.65	2.70
Dual Type D Flip-Flop	MC778P	2.85	1.90	1.40	MC864P	2.70	1.80	1.34
Quad 2 Expander mW	MC785AP	1.89	1.26	.93	MC885AP	1.89	1.26	.93
MRTL Hex Inverter	MC789AP	1.89	1.26	.93	MC889AP	1.89	1.26	.93
Triple 3-Input Gate	MC793P	1.64	1.09	.81	MC893P	1.76	1.17	.87
Dual Buffer	MC798P	1.82	1.21	.98	MC898P	1.95	1.30	.97
Dual Exclusive OR/NOR Gate	MC764P	2.55	1.70	1.25	MC867P	5.48	3.65	2.70
Quad Latch	MC767P	5.10	3.40	2.50	MC870P*	3.98	2.65	1.95
BCD to Decimal Decoder	MC770P*	3.68	2.45	1.80	MC876P	3.23	2.15	1.60
Dual J-K Flip-Flop	MC776P	3.00	2.00	1.50	MC878P	3.00	2.00	1.50
Hex Inverter	MC9718P	1.64	1.09	.81	MC9818P	1.78	1.17	.87
MRTL Hex Expander	MC9719AP	1.89	1.26	.93	MC9819AP	1.89	1.26	.93
Hex Expander	MC9720P	1.64	1.09	.81	MC9820P	1.78	1.17	.87
Quad 2-Input Expander	MC9721P	1.64	1.09	.81	MC9821P	1.78	1.17	.87
Dual J-K Flip-Flop	MC9722P	3.38	2.25	1.65	MC9822P	3.53	2.35	1.75

MW MRTL TYPE INTEGRATED CIRCUITS

Circuit Function	Case	+15° C to +55° C Type No.	EACH 1-49	EACH 50-999	EACH 1000-Up	Circuit Function	Case	+15° C to +55°C Type No.	EACH 1-49	EACH 50-999	EACH 1000-Up
Adder	601	MC708G	2.25	1.50	1.11	J-K Flip-Flop	601	MC720G	2.84	1.89	1.40
Buffer	601	MC709G	1.86	1.24	.92	Expander	601	MC721G	1.86	1.24	.92
Dual 2-Input NOR	601	MC710G	1.86	1.24	.92	J-K Flip-Flop	603	MC722G	3.32	2.21	1.64
4-Input OR Gate	601	MC711G	1.86	1.24	.92	5-Input NOR Gate	603	MC728G	1.86	1.24	.92
Half-Adder	601	MC712G	2.25	1.50	1.11	Dual Buffer	601	MC781G	2.31	1.54	1.14
Type D Flip-Flop	601	MC713G	2.84	1.89	1.40	J-K Flip Flop	601	MC782G	3.32	2.21	1.64
Dual 3-Input NOR	603	MC718G	2.07	1.38	1.02						

Motorola Integrated Circuits

MTTL I DUAL IN-LINE INTEGRATED CIRCUITS (T^2L)

Quality saturating logic circuits for general-purpose digital use. High noise immunity, high fan-out, capacitance drive up to 600 pF. High speed—operate at 20 MHz. Low power dissipation—15 mW per gate. Gate propagation delay time is typically 10 nanoseconds. Flip-flop clock frequency, 20 MHz maximum. Noise immunity is +900 mV at 25° C and worst-case fan-out. 0° to +75°C temperature range, plastic or ceramic package.

See Page 54 for Package Configurations and Explanation of Column Headings

MC400L SERIES (0° to +75°C) (Ceramic Case)

Circuit Function	Output Loading Factor=12					Output Loading Factor=6				
	Case 620 Type No.	EACH 1-9	10-24	25-99	100-Up	Case 620 Type No.	EACH 1-9	10-24	25-99	100-Up
Dual 4-Input NAND Gate	MC400L	4.86	4.05	3.25	2.70	MC450L	3.84	3.20	2.60	2.15
Expandable 4-Wide 2-2-2-3-Input AND-OR-INVERT Gate	MC401L	5.28	4.40	3.55	2.95	MC451L	4.32	3.60	2.90	2.40
8-Input NAND Gate	MC402L	4.86	4.05	3.25	2.70	MC452L	3.84	3.20	2.60	2.15
2-Wide 3-Input AND-OR-INVERT Gate with Gated Complement	MC403L	4.86	4.05	3.25	2.70	MC453L	3.84	3.20	2.60	2.15
Expandable 3-Wide 3-Input AND-OR-INVERT Gate	MC404L	5.28	4.40	3.55	2.95	MC454L	4.32	3.60	2.90	2.40
Expandable 2-Wide 4-Input AND-OR-INVERT Gate	MC405L	5.28	4.40	3.55	2.95	MC455L	4.32	3.60	2.90	2.40
Expandable 8-Input NAND Gate	MC406L	5.28	4.40	3.55	2.95	MC456L	4.32	3.60	2.90	2.40
Line Driver	MC407L	5.28	4.40	3.55	2.95	MC457L	4.32	3.60	2.90	2.40
Quad 2-Input NAND Gate	MC408L	4.86	4.05	3.25	2.70	MC458L	3.84	3.20	2.60	2.15
4-Wide 3-2-2-3-Input Expander for AND-OR-INVERT Gate	MC409L	3.30	2.75	2.20	2.20	MC459L	3.30	2.75	2.20	1.85
Dual 4-Input Expander for AND-OR-INVERT Gates	MC410L	3.30	2.75	2.20	1.85	MC460L	3.30	2.75	2.20	1.85
Dual 4-Input Expander for NAND Gates	MC411L	3.30	2.75	2.20	1.85	MC461L	3.30	2.75	2.20	1.85
Triple 3-Input NAND Gate	MC412L	4.86	4.05	3.25	2.70	MC462L	3.84	3.20	2.60	2.15
R-S Flip-Flop	MC413L	5.28	4.40	3.55	2.95	MC463L	4.32	3.60	2.90	2.40
Gated R-S Flip-Flop	MC414L	5.28	4.40	3.55	2.95	MC464L	4.32	3.60	2.90	2.40
AND J-K Flip-Flop	MC415L	7.74	6.45	5.15	4.30	MC465L	6.18	5.15	4.15	3.45
OR J-K Flip-Flop	MC416L	7.74	6.45	5.15	4.30	MC466L	6.18	5.15	4.15	3.45
AND Input J-K Flip-Flop	MC417L	7.74	6.45	5.15	4.30	MC467L	6.18	5.15	4.15	3.45
Type D Flip-Flop	MC418L	7.74	6.45	5.15	4.30	MC468L	6.18	5.15	4.15	3.45
Triple Buss Driver	MC419L	5.82	4.85	3.90	3.25	MC469L	4.92	4.10	3.30	2.75
Expandable Dual 2-Wide 2-Input AND-OR-INVERT Gate	MC420L	5.94	4.95	3.95	3.30	MC470L	4.68	3.90	3.10	2.60
AC Coupled R-S Flip-Flop	MC421L	6.36	5.30	4.25	3.55	MC471L	5.10	4.25	3.40	2.85
Dual Type D Flip-Flop	MC422L	10.50	8.75	7.00	5.85	MC472L	8.82	7.35	5.90	4.90
JK Flip-Flop Separate Clock	MC423L	10.50	8.75	7.00	5.85	MC473L	8.82	7.35	5.90	4.90
Dual JK Flip-Flop Common Clock	MC424L	10.50	8.75	7.00	5.85	MC474L	8.82	7.35	5.90	4.90
Hex Inverter	MC425L	5.28	4.40	3.55	2.95	MC475L	4.32	3.60	2.90	2.40
Dual Shaper Delay AND Gate	MC426L	5.82	4.85	3.90	2.35	MC476L	4.92	4.10	3.30	2.75
Expandable Dual AND Gate	MC427L	5.10	4.25	3.40	2.35	MC477L	4.20	3.50	2.80	2.35
2-Wide 2-3 Input AND/OR Adapt.	MC428L	5.10	4.25	3.55	2.35	MC478L	4.68	3.90	3.25	2.60

MC400P SERIES (0° to +75°C) (Plastic Case)

Circuit Function	Output Loading Factor=12					Output Loading Factor=6				
	Case 605C Type No.	EACH 1-9	10-99	100-999	1000-Up	Case 605C Type No.	EACH 1-9	10-99	100-999	1000-Up
Dual 4-Input NAND Gate	MC400P	2.70	2.25	1.90	1.75	MC450P	2.16	1.80	1.55	1.40
Exp. Quad 2-I AOI Gate	MC401P	2.70	2.25	1.90	1.75	MC451P	2.40	2.00	1.70	1.55
Single 8-I NAND/NOR Gate	MC402P	2.70	2.25	1.90	1.75	MC452P	2.16	1.80	1.55	1.40
Dual 3-I AOI Gate with Comp	MC403P	2.70	2.25	1.90	1.75	MC453P	2.16	1.80	1.55	1.40
Exp. Triple 3-I AOI Gate	MC404P	2.70	2.25	1.90	1.75	MC454P	2.16	1.80	1.55	1.40
Exp. Dual 4-I Gate AOI	MC405P	2.70	2.25	1.90	1.75	MC455P	2.16	1.80	1.55	1.40
Exp. 8-I NAND/NOR Gate	MC406P	2.70	2.25	1.90	1.75	MC456P	2.16	1.80	1.55	1.40
Dual 4-I Line Driver	MC407P	2.94	2.45	2.10	1.90	MC457P	2.16	1.80	1.55	1.40
Quad 2-I NAND/NOR Gate	MC408P	2.70	2.25	1.90	1.75	MC458P	2.16	1.80	1.55	1.40
Quad 2-I AND/OR Expander	MC409P	1.92	1.60	1.37	1.25	MC459P	1.92	1.60	1.37	1.25
Dual 4-I AND/OR Expander	MC410P	1.92	1.60	1.37	1.25	MC460P	1.92	1.60	1.37	1.25
Dual 4-I AND Expander	MC411P	1.92	1.60	1.37	1.25	MC461P	1.92	1.60	1.37	1.25
Triple 3-I NAND/NOR Gate	MC412P	2.70	2.25	1.90	1.75	MC462P	2.16	1.80	1.55	1.40
R-S Flip-Flop	MC413P	2.94	2.45	2.10	1.90	MC463P	2.40	2.00	1.70	1.55
2 Phase RS Clocked FF	MC414P	2.94	2.45	2.10	1.90	MC464P	2.40	2.00	1.70	1.55
AND J-K Flip-Flop	MC415P	3.84	3.20	2.70	2.45	MC465P	3.12	2.60	2.20	2.00
OR J-K Flip-Flop	MC416P	3.84	3.20	2.70	2.45	MC466P	3.12	2.60	2.20	2.00
Edge Triggered JK FF	MC417P	3.84	3.20	2.70	2.45	MC467P	3.12	2.60	2.20	2.00
Type D Flip-Flop	MC418P	3.84	3.20	2.70	2.45	MC468P	3.12	2.60	2.20	2.00
Triple Buss Driver	MC419P	2.94	2.45	2.10	1.90	MC469P	2.40	2.00	1.70	1.55
Dual Exp. 2-W, 2-I AOI Gate	MC420P	2.94	2.45	2.10	1.90	MC470P	2.40	2.00	1.70	1.55
Single Phase SRT Flip-Flop	MC421P	3.48	2.90	2.45	2.25	MC471P	2.88	2.40	2.05	1.85
Dual Type D Flip-Flop	MC422P	5.28	4.40	3.75	3.40	MC472P	4.38	3.65	3.10	2.80
JK Flip-Flop Sep. Clock	MC423P	5.28	4.40	3.75	3.40	MC473P	4.38	3.65	3.10	2.80
Dual JK FF Common Clock	MC424P	5.28	4.40	3.75	3.40	MC474P	4.38	3.65	3.10	2.80
Hex Inverter	MC425P	3.30	2.75	2.30	2.10	MC475P	2.64	2.20	1.85	1.70
Dual Shaper/Delay AND Gate	MC426P	3.30	2.75	2.30	2.10	MC476P	2.64	2.20	1.85	1.70
Exp. Dual AND Gate	MC427P	3.30	2.25	1.90	1.75	MC477P	2.16	1.80	1.55	1.40
2-W 2-3 I AND/OR Exp.	MC428P	2.04	1.70	1.44	1.30	MC478P	2.04	1.70	1.44	1.30

Motorola MDTL Integrated Circuits

SEE PAGE 54 FOR PACKAGE CONFIGURATION ILLUSTRATIONS

Vcc=5.0 VDC, T_A=25° C. †2K Pullup Resistor.

Circuit Function	Case	−55° to +125°C Type No.	EACH 1-9	10-24	25-99	100-Up	0° to +125°C Type No.	EACH 1-9	10-24	25-99	100-Up	0° to +75°C Type No.	EACH 1-24	25-999	1000-Up
Expandable Dual 4-Input NAND Gate	632	MC930L	7.80	6.50	5.20	4.53	MC830L	4.32	3.60	2.90	2.40	MC830P	1.73	1.15	.85
Expandable Dual 3-2 Input NAND Gate	603	MC930G	7.80	6.50	5.20	4.35	MC830G	4.32	3.60	2.90	2.40	.....	.....	.....	.....
Clocked Flip-Flop	632	MC931L	10.80	9.00	7.20	6.00	MC831L	6.30	5.25	4.20	3.50	MC831P	4.50	3.00	2.25
Clocked Flip-Flop	603	MC931G	10.80	9.00	7.20	6.00	MC831G	6.30	5.25	4.20	3.50	.....	.....	.....	.....
Expandable Dual 4-Input Buffer	632	MC932L	8.52	7.10	5.70	4.75	MC832L	4.86	4.05	3.25	2.70	MC832P	2.48	1.65	1.25
Expandable Dual 3-2 Input Buffer	603	MC932G	8.52	7.10	5.70	4.75	MC832G	4.86	4.05	3.25	2.70	.....	.....	.....	.....
Dual 4-Input Expander	632	MC933L	6.54	5.45	4.40	3.65	MC833L	5.64	4.70	3.80	3.15	MC833P	1.55	1.03	.76
Dual 4-3 Input Expander	603	MC933G	6.54	5.45	4.40	3.65	MC833G	5.64	4.70	3.80	3.15	.....	.....	.....	.....
Hex Inverter	632	MC934L	9.36	7.80	6.25	5.20	MC834L	5.22	4.35	3.50	2.90	MC834P	3.00	2.00	1.50
Hex Inverter (without output resistors)	632	MC935L	9.36	7.80	6.25	5.20	MC835L	5.22	4.35	3.50	2.90	MC835P	3.00	2.00	1.50
Hex Inverter	632	MC936L	9.36	7.80	6.25	5.20	MC836L	5.22	4.35	3.50	2.90	MC836P	1.91	1.27	.94
Hex Inverter	632	MC937L	9.36	7.80	6.25	5.20	MC837L	5.22	4.35	3.50	2.90	MC837P	3.00	2.00	1.50
Decade Counter	632	MC938L	32.40	27.00	21.60	18.00	MC838L	18.00	15.00	12.00	10.00	MC838P	11.63	7.55	6.70
Divide-by-Sixteen Counter	632	MC939L	32.40	27.00	21.60	18.00	MC839L	18.00	15.00	12.00	10.00	MC839P	11.62	7.55	6.70
Hex Inverter (without input diodes)	632	MC940L	9.36	7.80	6.25	5.20	MC840L	5.22	4.35	3.50	2.90	MC840P	3.00	2.00	1.50
Hex Inverter (wo output resistors & input diodes)	632	MC941L	9.36	7.80	6.25	5.20	MC841L	5.22	4.35	3.50	2.90	MC841P	3.00	2.00	1.50
4-Input AND Driver with NOR Strobe	603	MC943G	27.00	22.50	18.00	15.00	MC843G	16.02	13.35	10.70	8.90	.....	.....	.....	.....
Expandable Dual 4-Input Power Gate	632	MC944L	8.52	7.10	5.40	4.75	MC844L	4.86	4.05	3.25	2.70	MC844P	1.73	1.15	.85
Expandable Dual 3-2 Input Power Gate	603	MC944G	8.52	7.10	5.70	4.75	MC844G	4.86	4.05	3.25	2.70	.....	.....	.....	.....
Clocked Flip-Flop	632	MC945L	10.80	9.00	7.20	6.00	MC845L	6.30	5.25	4.20	3.50	MC845P	2.43	1.62	1.20
Clocked Flip-Flop	603	MC945G	10.80	9.00	7.20	6.00	MC845G	6.30	5.25	4.20	3.50	.....	.....	.....	.....
Quad 2-Input NAND Gate	632	MC946L	7.80	6.50	5.20	4.35	MC846L	4.32	3.60	2.90	2.40	MC846P	1.73	1.15	.85
Quad Inverter	603	MC946G	7.80	6.50	5.20	4.35	MC846G	4.32	3.60	2.90	2.40	.....	.....	.....	.....
Quad 2-Input Gate Expander	632	MC947L	6.54	5.45	4.40	3.65	.....	.....	.....	.....	.....	MC847P	2.03	1.35	1.00
Clocked Flip-Flop	632	MC948L	10.80	9.00	7.20	6.00	MC848L	6.30	5.25	4.20	3.50	MC848P	2.43	1.62	1.20
Clocked Flip-Flop	603	MC948G	10.80	9.00	7.30	6.00	MC848G	6.30	5.25	4.20	3.50	.....	.....	.....	.....
Quad 2-Input NAND Gate†	632	MC949L	7.80	6.50	5.20	4.35	MC849L	4.32	3.60	2.90	2.40	MC849P	2.48	1.65	1.25
Quad Inverter†	603	MC949G	7.80	6.50	5.20	4.35	MC849G	4.32	3.60	2.90	2.40	.....	.....	.....	.....
Pulse Triggered Binary	632	MC950L	14.88	12.40	10.00	8.30	MC850L	11.37	9.90	7.90	6.60	MC850P	6.75	4.50	3.35
Pulse Triggered Binary	603	MC950G	14.88	12.40	10.00	8.30	MC850G	11.37	9.90	7.90	6.60	.....	.....	.....	.....
Monostable Vibrator	532	MC951L	24.30	20.25	16.20	13.50	MC851L	13.92	11.60	9.30	7.75	MC851P	6.75	4.50	3.35
Monostable Vibrator	604	MC951G	24.30	20.25	16.20	13.50	MC851G	13.92	11.60	9.30	7.75	.....	.....	.....	.....
Dual J-K Flip-Flop	632	MC952L	17.28	14.40	11.50	9.60	MC852L	10.08	8.40	6.70	5.60	MC852P	3.15	2.10	1.55
Dual J-K Flip-Flop	632	MC953L	17.28	14.40	11.50	9.60	MC853L	10.08	8.40	6.70	5.60	MC853P	3.15	2.10	1.55
Dual J-K Common Clock	632	MC955L	17.28	14.40	11.50	9.60	MC855L	10.08	8.40	6.70	5.60	MC855P	3.15	2.10	1.55
Flip-Flop Separate Clock	632	MC956L	17.28	14.40	11.50	9.60	MC856L	10.08	8.40	6.70	5.60	MC856P	3.15	2.10	1.55
Quad 2-Input Buffer	632	MC957L	13.68	11.40	9.10	7.60	MC857L	7.74	6.45	5.15	4.30	MC875P	4.05	2.70	2.00
Quad 2-Input NAND Power Gate	632	MC958L	13.68	11.40	9.10	7.60	MC858L	7.74	6.45	5.15	4.30	MC858P	4.05	2.70	2.00
Dual Pulse Triggered Binary	632	MC960L	19.68	16.40	13.10	10.90	MC860L	15.12	12.60	10.05	8.40	MC860P	9.15	6.10	4.50
Expandable Dual 4-Input NAND Gate†	632	MC961L	7.80	6.50	5.20	4.35	MC861L	4.32	3.60	2.90	2.40	MC861P	2.48	1.65	1.25
Expandable Dual 3-2 Input NAND Gate†	603	MC961G	7.80	6.50	5.20	4.35	MC861G	4.32	3.60	2.90	2.40	.....	.....	.....	.....
Triple 3-Input NAND Gate	632	MC962L	7.80	6.50	5.20	4.35	MC862L	4.32	3.60	2.90	2.40	MC862P	1.73	1.15	.85
Dual 2-Input NAND Gate plus Inverter	603	MC962G	7.80	6.50	5.20	4.35	MC862G	4.32	3.60	2.90	2.40	.....	.....	.....	.....
Triple 3-Input NAND Gate†	632	MC963L	7.80	6.50	5.20	4.35	MC863L	4.32	3.60	2.90	2.40	MC863P	2.48	1.65	1.25
Dual 2-Input NAND Gate plus Inverter†	603	MC963G	7.80	6.50	5.20	4.35	MC863G	4.32	3.60	2.90	2.40	.....	.....	.....	.....
Dual Exclusive OR/NOR Gate Quad Latch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	MC864P	2.70	1.80	1.34
Dual 6-Input NAND Gate	632	MC1900L	7.80	6.50	5.20	4.35	.....	.....	.....	.....	.....	MC1800P	2.70	1.80	1.34
Dual 5-Input NAND Gate†	632	MC1901L	7.80	6.50	5.20	4.35	MC1801L	4.32	3.60	2.90	2.40	MC1801P	2.33	1.55	1.15
Expandable 8-Input NAND Gate	632	MC1902L	7.80	6.50	5.20	4.35	MC1802L	3.60	3.60	2.90	2.40	MC1802P	2.33	1.55	1.15
Expandable 8-Input NAND Gate†	632	MC1903L	7.80	6.50	5.20	4.35	MC1803L	4.32	3.60	2.90	2.40	MC1803P	2.33	1.55	1.15
10-Input NAND Gate	632	MC1904L	7.80	6.50	5.20	4.35	MC1804L	4.32	3.60	2.90	2.40	MC1804P	2.33	1.55	1.15
10-Input NAND Gate†	632	MC1905L	7.80	6.50	5.20	4.35	MC1805L	4.32	3.60	2.90	2.40	MC1805P	2.33	1.55	1.15
Quad 2-Input AND Gate	632	MC1906L	9.06	7.55	6.05	5.05	MC1806L	5.04	4.20	3.35	2.80	MC1806P	2.85	1.90	1.44
Quad 2-Input AND Gate†	632	MC1907L	9.06	7.55	6.05	5.05	MC1807L	5.04	4.20	3.35	2.80	MC1807P	2.85	1.90	1.44
Quad 2-Input OR Gate	532	MC1908L	9.06	7.55	6.05	5.05	MC1808L	5.04	4.20	3.35	2.80	MC1808P	2.85	1.90	1.44
Quad 2-Input OR Gate†	632	MC1909L	9.06	7.55	6.05	5.05	MC1809L	5.04	4.20	3.35	2.80	MC1809P	2.85	1.90	1.44
Quad 2-Input NOR Gate	632	MC1901L	9.06	7.55	6.05	5.05	MC1801L	5.04	4.20	3.35	2.80	MC1810P	2.85	1.90	1.44
Quad 2-Input NOR Gate†	632	MC1911L	9.06	7.55	6.05	5.05	MC1811L	5.04	4.20	3.35	2.80	MC1811P	2.85	1.90	1.44
Quad 2-Input Exclusive OR Gate	632	MC1912L	13.68	11.40	9.10	7.60	MC1812L	7.74	6.45	5.15	4.30	MC1812P	4.05	2.70	2.00
Quad Latch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	MC1813P	11.93	7.95	7.05
Quad Latch	632	MC1914L	32.40	27.00	21.60	18.00	MC1814L	18.00	15.00	12.00	10.00	MC1814P	11.33	7.55	7.05
Parallel Gated Clocked Flip-Flop	632	MC1915L	10.80	9.00	7.20	6.00	MC1815L	6.30	5.25	4.20	3.50	.....	.....	.....	.....
	632	MC1916L	10.80	9.00	7.20	6.00	MC1816L	6.30	5.25	4.20	3.50	.....	.....	.....	.....
Quad 2-Input Gate	632	MC1918L	7.80	6.50	5.20	4.35	MC1818L	4.32	3.60	2.90	2.40	.....	.....	.....	.....

Allied Electronics Stocks the Complete Line of Motorola IC's

Motorola Linear Integrated Circuits

See Page 54 for Package Configurations and Explanations of Column Headings

OPERATIONAL AMPLIFIERS

Operating Temperature Range: MC1500 Series and MC1700 Series −55° to +125° C; MC1400 Series and MC1700C Series 0° to +75° C. MC1430 and MC1530 operating characteristics are dependent on external feedback components. MC1431 and MC1531 use Darlington input configuration which greatly increases input impedance. MC1520 differential output monolithic operational amplifier designed for use in general purpose or wide band differential amplifier applications, especially those requiring differential outputs. MC1433 and MC1533 voltage-gain and input offset voltage are adjustable while operating characteristics are dependent on external feedback components. MC1435, 7 and MC1535, 7 offer two complete operational amplifiers on a single chip resulting in excellent matching characteristics, plus space-saving size. Ideal for chopper stabilized applications where extremely high gain is required with excellent stability. MC1439 and MC1539 feature output short-circuit protection and input over-voltage protection. MCH1439 and MCH1539 internally compensated hybrid operational amplifiers with Slew Rate 4.2 V/μs typical. MC1709C and MC1709 operational amplifiers are identical circuits specified over different temperature ranges. MC1712C and MC1712 devices are designed for use as wideband DC operational amplifiers. Characteristics are a function of the external feedback components. *Dual. †Hybrid.

Type No.	Case	Open Loop Volt. Gain (A_{VOL}) V/V	Output Voltage Swing (V_{out} V_p)	EACH 1-9	10-24	25-99	100-Up
MC1430G	602B	5,000	±5.0	6.30	5.25	4.35	3.50
MC1430P	605	5,000	±5.0	6.30	5.25	4.35	3.50
MC1431G	602B	3,500	±5.0	6.30	5.25	4.35	3.50
MC1431P	605	3,500	±5.0	6.30	5.25	4.35	3.50
MC1433G	602B	.....	.....	4.68	3.90	2.65	1.95
MC1433L	605C	.....	.....	9.90	8.25	6.85	5.50
MC1435G*	602B	.....	.....	8.10	6.75	5.60	4.50
MC1435L*	605C	.....	.....	8.10	6.75	5.60	4.50
MC1437L*	605C	45,000	±14	7.80	6.50	4.40	3.25
MC1439G	601	100,000	±14	4.32	3.60	2.45	1.80
MC1439L	605C	100,000	±13	3.24	2.70	2.25	1.80
MCH1439G†	619	100,000	±13	21.60	18.00	15.00	12.00
MC1520G	602A	1,500	±4.0	11.70	9.75	8.10	6.50
MC1530G	606	5,000	±5.0	15.30	12.75	10.60	8.50
MC1531G	602B	3,500	±5.0	15.30	12.75	10.60	8.50
MC1533G	602B	60,000	±12	15.30	12.75	10.60	8.50
MC1533L	605C	60,000	±12	15.30	12.75	10.60	8.50
MC1535G*	602B	7,000	±3.6	15.30	12.75	10.60	8.50
MC1537L*	605C	45,000	±14	21.60	18.00	15.00	12.00
MC1539G	601	120,000	±14	13.50	11.25	9.35	7.50
MC1539L	605C	100,000	±14	13.50	11.25	9.35	7.50
MCH1539G†	619	120,000	±13	27.00	22.50	18.75	15.00
MC1709F	606	45,000	±14	11.10	9.25	7.40	6.15
MC1709G	601	.....	.....	6.84	5.70	4.55	3.80
MC1709L	605C	.....	.....	6.84	5.70	4.55	3.80
MC1709CF	606	45,000	±14	4.50	3.75	3.00	2.50
MC1709CG	601	.....	.....	3.36	2.80	2.20	1.85
MC1709CL	605C	.....	.....	3.36	2.80	2.20	1.85
MC1712F	606	3,600	±5.3	10.26	8.55	6.85	5.70
MC1712G	601	.....	.....	9.48	7.90	6.30	5.25
MC1712L	605C	.....	.....	9.48	7.90	6.30	5.25
MC1712CF	606	3,600	±5.3	9.00	7.50	6.25	5.00
MC1712CG	601	.....	.....	5.82	4.85	4.05	3.25
MC1712CL	605C	.....	.....	5.82	4.85	4.05	3.25
MC1741CF	606	100,000	±13	9.00	7.50	6.25	5.00
MC1741CG	602B	100,000	±13	5.82	4.85	4.05	3.25
MC1741CL	605C	100,000	±13	5.82	4.85	4.05	3.25
MC1741G	602B	100,000	±13	7.20	6.00	5.00	4.00
MC1741L	60PC	100,000	±13	7.20	6.00	5.00	4.00

HIGH-FREQUENCY AMPLIFIERS

Operating Temperature Range: −55° to +125° C. MC1110 matched transistor pair exhibits excellent AGC characteristics for a wide variety of communications applications. Features Noise Figure of 4.0 dB at 100 MHz. MC1510 is monolithic wideband video amplifier designed for use as a high-frequency amplifier with operating characteristics that provide a flat frequency response from DC to 40 MHz. Features High Gain Characteristics, Av=93; Low Output Distortion, THD, ±1.5%. MC1545 dual-input high frequency amplifier features Differential Inputs and Differential Output; Channel-Select Time of 20 ns typical. Differential Input Signal +5.0 VDC. MC1550 is a versatile, common-emitter, common-base cascade circuit for use in communications applications. Features Constant Input Impedance over entire AGC Range; High Power Gain of 30 dB at 60 MHz, 0.5 MHz BW; NF= 5 dB at 60 MHz; High Voltage-Gain—Bandwidth Product—2 GHz. MC1552 is intended for use as a wideband linear amplifier or as a fast-rise pulse amplifier. A three-stage direct-coupled, common-emitter cascade circuit incorporates series-series feedback. Features High Gain of 34 dB, ±1 dB; Low Distortion—0.2% at 200kHz; Low Temperature Drift of ±0.002 dB/°C. MC1553 similar to MC1552 except high gain (52 dB, ±1 dB) and narrower bandwidth. Noise Figure=5.0 dB at 30 MHz. *Useful transducer power gain.

Type No.	Case	Bandwidth MHz	Description	EACH 1-9	10-24	25-99	100-Up
MC1110G	602C	300*	High stability through low internal feedback for RF applications.	45.00	37.50	31.25	25.00
MC1509F	608	40	Ideal for wideband video applications.	16.74	13.95	11.60	9.30
MC1510F	608	40		16.74	13.95	11.60	9.30
MC1510G	601	40		14.40	12.00	10.00	8.00
MC1545F	607	75	Useful as a gated wideband amplifier, video switch, sense amplifier, multiplexer, modulator, FSK circuit, limiter, AGC circuit or pulse amplifier.	11.70	9.75	8.10	6.50
MC1545G	602A			9.90	8.25	6.85	5.50
MC1545L	605C			9.90	8.25	6.85	5.50
MC1550F	606	200*	Constant input impedance over entire AGC range. RF-IF amplifier for communications equipment.	8.70	7.25	6.05	4.85
MC1550G	602B			1.80	1.50	1.00	.75
MC1552G	602B	40	Three stage direct coupled common emitter cascade circuit with series feedback achieving extremely stable gain.	10.80	9.00	7.50	6.00
MC1553G	602B	35	Same as MC1552G except higher gain.	10.80	9.00	7.50	6.00

POWER AMPLIFIERS

Operating Temperature Range: −55° to +125° C. Power Output = 1.0 watt.

Type No.	Case	Voltage Gain (Av, V/V)	Total Harmonic Distortion	Description	EACH 1-9	10-24	25-99	100-999
MC1524G	602B	38	0.6%	Complementary output, low standby current drain.	84.00	70.00	55.00	40.00
MC1554G	602B	10, 18, 36	0.4%	Capable of single or split supply operation.	17.10	14.25	11.85	9.50

DIFFERENTIAL AMPLIFIERS

Operating Temperature Range: −55° to +125° C except MC1429G, 0° to +75° C.

Type No.	Case	Differential Voltage Gain (A_{dd}, dB)	Output Voltage Swing (V_{out}, V_{p-p})	Description	EACH 1-9	10-24	25-99	100-999
MC1429G	602B	38	6.0	Darlington inputs (high impedance).	4.68	3.90	2.65	1.95
MC1519G	602B	73	14	NPN inputs, PNP outputs, 1 MHz BW.	60.00	50.00	40.00	30.00
MC1525G	602B	43	8.0	Conventional differential inputs, high gain, built-in temperature compensated current source.	14.40	12.00	10.00	8.00
MC1526G	602B	36	8.0	Same as MC1525G except Darlington inputs.	72.00	60.00	48.00	36.00
MC1529G	602B	38	6.0	Same as MC1429G—specified over full temperature range.	13.50	11.25	9.35	7.50

Motorola Integrated Circuits

See Page 54 for Package Configuration and Explanations of Column Headings

SENSE AMPLIFIERS—Cases: Suffix F, 606; G, 602A; L, 605C. *—55° C to +125° C.

Description	Input Threshold (Vth, mVDC)	Voltage Gain (Av, V/V)	−55° to +125° C Type No.	EACH 1-9	10-24	25-99	100-Up	0° to +75° C Type No.	EACH 1-9	10-24	25-99	100-Up
Dual differential comparator for level detection, low level sensing, and memory applications.	21.5/18.5*	1700 A_{VOL}	MC1514L	23.40	19.50	16.25	13.00	MC1414L	11.70	9.75	8.10	6.50
Designed to detect dipolar differential signals derived by a core memory with cycle times as short as 0.5 μs.	17	85	MC1540F	28.80	24.00	20.00	16.00	MC1440F	16.20	13.50	11.25	9.00
			MC1540G	27.00	22.50	18.75	15.00	MC1440G	3.60	3.00	2.00	1.50
			MC1540L	27.00	22.50	18.75	15.00	MC1440L	14.40	12.00	10.00	8.00
Dual-channel gated sense amplifier with separate wideband differential input amplifiers.	17	85	MC1541F	32.40	27.00	22.50	18.00	MC1441F	23.40	19.50	16.25	13.00
			MC1541L	32.40	27.00	22.50	18.00	MC1441L	23.40	19.50	16.25	13.00
MECL dual core-memorysense amplifier; adjustable threshold with excellent threshold stability	20	..	MC1543L	32.40	27.00	22.50	18.00	.....	.....	.....	.....	.....
Differential comparator providing high accuracy and fast response time	0	1700 A_{VOL}	MC1710F	9.72	8.10	6.50	5.40	MC1710CF	6.84	5.70	4.55	3.80
			MC1710G	6.84	5.70	4.55	3.80	MC1710CG	2.36	2.80	2.20	1.85
			MC1710L	6.84	5.70	4.55	3.80	MC1710CL	4.06	3.38	2.70	2.25
Dual differential comparator providing high accuracy and fast response time.	0	1500 A_{VOL}	MC1711F	16.02	13.35	10.70	8.90	MC1711CF	2.36	2.80	2.20	1.85
			MC1711G	6.84	5.70	4.55	3.80	MC1711CG	2.36	2.80	2.20	1.85
			MC1711L	6.84	5.70	4.55	3.80	MC1711CL	4.06	3.38	2.70	2.25

STEREO AMPLIFIER AND STEREO PREAMPLIFIER—Case 605C. (Temp. Ranges: 0° to 75° C.)

Description	Open Loop Voltage Gain	Input Offset V	Output Swing	Channel Separation	Type No.	EACH 1-9	10-24	25-99	100-Up
Low noise stereo amplifier	10,000 V_{OL}	3.0 mV	5.5 V_{rms}	70 dB.	MC1302L	6.30	5.25	4.35	3.50
Two amplifiers on single monolithic chip	10,000 V_{OL}	1.5 mV	5.5 V_{rms}	70 dB	MC1303L	2.64	2.20	1.75	1.60

STEREO DEMODULATORS—Case 605. (Temp. Range: 0° to 75° C.)

Description	Power Supply	THD	Pd	Type No.	1-9, EA.	10-24 EA.	25-99, EA.	100-Up, EA.
FM multiplex stereo demodulator derives left and right channel audio information from the detected composite signal	8.0-14 VDC	0.5%	0.5 mW	MC1304P	4.86	4.05	3.25	2.90
				MC1305P	4.86	4.05	3.25	2.90
				MC1307P	2.46	2.05	1.65	1.47

VOLTAGE REGULATORS—Cases: Suffix G, 602A; R, 614

Temperature Range: MC1500 Series —55° to +125° C; MC1400 Series, 0° to +75° C. *Case 605C.

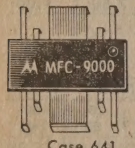
Max. Input V	Lead Current Range G Pkg.	Lead Current Range R Pkg.	Power Dissipation G Pkg.	Power Dissipation R Pkg.	Input Voltage	Type No.	EACH 1-9	10-24	25-99	100-Up	Type No.	EACH 1-9	10-24	25-99	100-Up
20	250 mADC	600 mADC	1.8 W	10 W	35 VDC	MC1560G	27.00	22.50	18.75	15.00	MC1460G	6.30	5.25	4.35	3.50
						MC1560R	36.00	30.00	25.00	20.00	MC1460R	8.10	6.75	5.60	4.50
35	250 mADC	600 mADC	1.8 W	17.5 W	35 VDC	MC1561G	36.00	30.00	25.00	20.00	MC1461G	8.10	6.75	5.60	4.50
						MC1561R	45.00	37.50	31.25	25.00	MC1461R	9.90	8.25	6.85	5.50
40			750 mW		30 VDC	.....	.....	.....	.....	.....	MC1466L*	15.30	12.75	10.60	8.50
25			6.0 mW/°C		35 VDC	MC1566L*	44.10	36.75	30.60	24.50	.....	.....	.....	.....	.....
40	200 mADC	500 mADC	1.8 W	9 W	40 VDC	MC1563R	30.48	25.40	21.20	16.95	MC1463R	12.48	10.40	8.70	6.95
35	200 mADC	500 mADC	1.8 W	17.5 W	35 VDC	MC1569R	13.92	11.60	9.70	7.75	MC1469R	8.10	6.75	5.60	4.50

MULTIPLIERS—Case 605C

Description	Linearity Error	Input	Type No.	1-9, EA.	10-24, EA.	25-99, EA.	100-Up, EA.
Applications include multiply, divide, square root, mean square, phase detector, frequency doubler, balanced modulator/demodulator, electronic gain control. Temperature Range: —55° C to +125° C.	X Input=1% max. Y Input=2% max.	±10 volts	MC1595L	21.60	18.00	15.00	12.00
Limited temperature version of above, with relaxed specifications for less critical uses. Temperature Range: 0° C to 70° C.	X Input=2% max. Y Input=4% max.	±10 volts	MC1495L	14.40	12.00	10.00	8.00

MOS—Case 605C. (Temperature Range, 0° to +75° C)

Description	Type No.	EACH 1-9	10-99	100-999	1000-Up
Low cost MOS IC is designed specifically for electronic organ applications. Operating frequency, DC to greater than 1.0 MHz. Noise immunity, 1.0 V or greater. Function: Quad Type T Flip-Flop.	MC1124L	7.14	5.95	4.75	3.95



Case 641

Case 644

Case 643

Case 206

FUNCTIONAL CIRCUITS FOR USE IN CONSUMER APPLICATIONS

Low cost, high-quality functional circuits for high volume consumer integrated circuit products. Feature in-line copper lead frames, die-coating for high reliability, molded in plastic. Tested under rigid factory specifications for flawless performance.

AUDIO OUTPUTS

Type No.	Description	Case	Max. Supply Volt.	EACH 1-9	10-24	25-99	100-Up
MFC4000	.25 W Out Audio	206	12	1.35	1.12	.94	.75
MFC6000	.25 W Out Audio W/Preamp	643	12	1.53	1.27	1.06	.85
MFC8010	1.0 W Out Audio W/Preamp	644	22	2.94	2.45	2.05	1.65
MFC9000	4.0 W Out Audio W/Preamp	641	26	4.57	3.81	3.81	2.93
MFC9010	2.0 W Out Audio W/Preamp	641	24	3.53	2.94	2.94	2.26

GENERAL PURPOSE AMPLIFIERS

MFC6010	FM IF Diff. Amp	643	20	1.08	.90	.75	.60
MFC4010	Wide Band Gain Block	206	18	1.26	1.05	.87	.70
MFC8040	Low Noise Preamp	644	33	2.13	1.77	1.77	1.36
MFC6040	Electronic Attenuator	643	21	1.98	1.65	1.65	1.27

AUDIO DRIVERS

Type No.	Description	Case	Max. Supply Volt.	EACH 1-9	10-24	25-99	100-Up
MFC4050	Class A Driver	206	18	1.26	1.05	1.05	.81
MFC8020	Class B Driver	644	35	2.38	1.98	1.98	1.52

DIGITAL

MFC4040	Single Toggle Flip-Flop	206	19	1.35	1.12	.94	.75
MFC6020	Double Toggle Flip-Flop	643	19	2.70	2.25	1.37	1.50
MFC8050	J-K RTL Flip-Flop	.....	.....	1.98	1.65	1.65	1.27

VOLTAGE REGULATORS

MFC4060	8-30 V Reg. 1 W, 200 mA	206	38	1.41	1.17	1.17	.90
MFC6030	8-30 V Reg. 1 W, 200 mA	643	38	2.77	2.31	2.31	1.78

When Ordering, Be Sure to Specify Mfr's Type No. and Name

Integrated Circuits

DTL-TTL-MOS

DTL LIMITED TEMPERATURE CERAMIC DIP

Temperature range, 0° to +75° C. Also available in full-temperature and in DIP and Flat Pack. Write for "Reliability Report."

Type No.	Circuit Function	EACH 1-9	10-99	100-Up
PD9930-59	Dual 4-Input Gate	1.02	.85	.70
PD9931-59	Flip-Flop	1.32	1.10	.95
PD9932-59	Dual Buffer	1.02	.85	.70
PD9933-59	Dual 4-Input Expander	1.02	.85	.70
PD9935-59	Hex Inverter	1.14	.95	.70
PD9936-59	Hex Inverter	1.14	.95	.70
PD9937-59	Hex Inverter	1.14	.95	.70
PD9941-59	Clamped 1-Shot Multivibrator	2.28	1.90	1.45
PD9941A-59	Clamped 1-Shot Multivibrator	2.28	1.90	1.45
PD9944-59	Dual Power Gate	1.02	.85	.70
PD9945-59	Clocked Flip-Flop	1.32	1.10	.90
PD9946-59	Quad Gate	1.20	.85	.70
PD9948-59	Binary	1.32	1.10	.90
PD9949-59	Quad Gate	1.02	.85	.70
PD9950-59	Pulsed Triggered Binary	3.12	2.60	1.54
PD9951-59	One-Shot Multivibrator	3.12	2.60	1.54
PD9951A-59	One-Shot Multivibrator	3.12	2.60	1.54
PD9961-59	Dual 4-Input Gate	1.02	.85	.70
PD9962-59	Triple 3-Input Gate	1.02	.85	.70
PD9963-59	Triple 3-Input Gate	1.02	.85	.70
PD9093-59	Dual Clocked J-K Flip-Flop	1.80	1.50	1.30
PD9094-59	Dual Clocked J-K Flip-Flop	1.80	1.50	1.30
PD9097-59	Dual Clocked J-K Flip-Flop	1.80	1.50	1.30
PD9099-59	Dual Clocked J-K Flip-Flop	1.80	1.50	1.30
PD9180-59	Dual 5-Input NAND Gate	1.08	.90	.70
PD9112-59	Hi-Voltage Hex Inverter	6.24	5.20	4.60
PD9601-59	One-Shot Multivibrator	6.60	5.50	4.65
PH2001-59	Hi-Voltage Hi-Current Driver (TO-5)	9.12	7.60	3.80

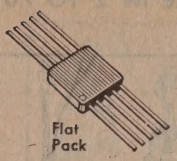
7400 SERIES CERAMIC (0° to +70° C)

Type No.	Circuit Function	EACH 1-9	10-99	100-Up
PD7400	Quad 2-Input Pos. NAND Gate	1.38	1.15	.75
PD7401	Quad 2-Input Pos. NAND Gate with Open Collector Output	1.38	1.15	.75
PD7402	Quad 2-Input Pos. NOR Gate	1.38	1.15	.75
PD7404	Hex Inverter	1.56	1.30	.85
PD7405	Hex Inverter with Open Collector Output	1.56	1.30	.85
PD7410	Triple 3-Input Pos. NAND Gate	1.38	1.15	.75
PD7420	Dual 4-Input Pos. NAND Gate	1.38	1.15	.75
PD7430	8-Input Pos. NAND Gate	1.38	1.15	.75
PD7440	Dual 4-Input Pos. NAND Buffer	1.56	1.30	.85
PD7442	BCD to Decimal Converter	5.22	4.35	2.90
PD7450	Expandable Dual 2-Wide 2-Input AND-OR-INVERT Gate	1.38	1.15	.75
PD7451	Dual 2-Wide 2-Input AND-OR-INVERT Gate	1.38	1.15	.75
PD7453	Expandable 4-Wide 2-Input AND-OR-INVERT Gate	1.38	1.15	.75
PD7454	4-Wide 2-Input AND-OR-INV. Gate	1.38	1.15	.75
PD7460	Dual 4-Input Expander	1.20	1.00	.70
PD7470	J-K Flip-Flop	2.60	1.80	1.20
PD7472	J-K Master-Slave Flip-Flop	1.98	1.65	1.10
PD7473	Dual J-K Master-Slave Flip-Flop	2.88	2.40	1.60
PD7474	Dual D Type Edge Triggered F-F	2.52	2.10	1.40
PD7475	Quad Bistable Latch	4.14	3.45	2.30
PD7476	Dual J-K Master Flip-Flop with Preset and Clear	3.24	2.70	1.75
PD7482	2-Bit Binary Full Adder	4.86	4.05	2.70
PD7483	4-Bit Binary Full Adder	7.56	6.30	4.20
PD7490	Decade Counter	4.86	4.05	2.70
PD7491A	8-Bit Shift Register	5.76	4.80	3.20
PD7493	4-Bit Binary Counter	4.86	4.05	2.70
PD7494	4-Big Shift Register	5.22	4.35	2.90
PD7495	4-Bit L/R Shift Register	5.22	4.35	2.90
PD74107	Dual J-K Master-Slave Flip-Flop	2.88	2.40	1.60
PD74121	Monostable Multivibrator	4.08	3.40	2.90
PD74150	16-Channel Multiplexer	9.75	8.12	6.90
PD74154	1 in 16 Decoder	7.44	6.20	5.30

9300 SERIES MIS CERAMIC DIP (0° to +70°C)

Type No.	Circuit Function	EACH 1-9	10-99	100-Up
PD9300-59	4-Bit Shift Register	6.00	5.00	4.50
PD9301-59	1 of 10 Decoder	7.50	6.25	5.80
PD9304-59	Dual Full Adder	6.90	5.75	2.25
PD9306-59	Up/Down BCD Counter	18.90	15.75	13.20
PD9308-59	Dual 4-Bit Latch	12.00	10.00	8.25
PD9309-59	Dual 4-Bit Multiplexer	4.80	4.00	3.60
PD9311-59	1 in 16 Decoder	11.10	9.25	7.75
PD9312-59	8-Input Multiplexer	4.80	4.00	3.60
PD9328-59	Dual 8-Bit Shift Register	21.90	18.25	15.25

PHILCO Ford



LINEAR INTEGRATED CIRCUITS FOR INDUSTRIAL USE

LIMITED TEMPERATURE RANGE (0° to +70° C)

Type No.	Circuit Function	Pkg.	EACH 1-9	10-99	100 Up
PA7605-39	Wideband Amplifier	TO-5	16.56	13.80	9.20
PA7606-39	Wideband Amplifier	TO-5	16.56	13.80	9.20
PA7702A-39	General Purpose Amplifier	TO-5	2.70	2.25	1.75
PD7702A-39	General Purpose Amplifier	DIP	2.70	2.25	1.75
PA7709-39	Operational Amplifier	TO-5	2.70	2.25	1.75
PD7709-39	Operational Amplifier	DIP	2.70	2.25	1.75
PA7710-39	Differential Comparator	TO-5	2.70	2.25	1.75
PD7710-39	Differential Comparator	DIP	2.70	2.25	1.75
PA7711-39	Dual Differential Comparator	TO-5	2.70	2.25	1.75
PD7711-39	Dual Differential Comparator	DIP	2.70	2.25	1.75
PA7712-39	General Purpose Amplifier	TO-5	2.70	2.25	1.75
PD7712-39	General Purpose Amplifier	DIP	2.70	2.25	1.75
PA7741-39	Operational Amplifier	TO-5	4.74	3.95	3.10
PD7741-39	Operational Amplifier	DIP	5.46	4.55	3.20
PA7751-39	Wideband Amplifier	TO-5	9.60	8.00	6.60

LINEAR INTEGRATED CIRCUITS—FULL MIL TEMPERATURE RANGE (—55° to +125°C)

PA7600-31	Broadband Amplifier	TO-5	9.42	7.85	5.25
PA7601-31	Bandpass Amplifier	TO-5	16.56	13.80	9.20
PA7602-31	Utility Amplifier	TO-5	16.56	13.80	9.20
PA7702A-31	General Purpose Amplifier	TO-5	7.92	6.60	5.00
PD7702A-31	General Purpose Amplifier	DIP	7.92	6.60	5.00
PA7709-31	Operational Amplifier	TO-5	5.52	4.60	3.80
PD7709-31	Operational Amplifier	DIP	5.52	4.60	3.80
PA7709A-31	Operational Amplifier	TO-5	13.20	11.00	8.80
PD7709A-31	Operational Amplifier	DIP	13.20	11.00	8.80
PA7710-31	Differential Comparator	TO-5	5.70	4.75	3.90
PD7710-31	Differential Comparator	DIP	5.70	4.75	3.90
PA7711-31	Dual Differential Comparator	TO-5	5.70	4.75	3.90
PD7711-31	Dual Differential Comparator	DIP	5.70	4.75	3.90
PA7712-31	General Purpose Amplifier	TO-5	7.92	6.60	5.00
PD7712-31	General Purpose Amplifier	DIP	7.92	6.60	5.00
PA7741-31	Operational Amplifier	TO-5	8.58	7.15	5.95
PD7741-31	Operational Amplifier	DIP	11.22	9.35	7.55

All linear integrated circuits available in Flat Pack on request. All DIP packages are Philco ceramic.

RADIATION HARDENED (DISOLICS) CIRCUITS

FULL MIL TEMP FOR NUCLEAR APPLICATIONS—FLAT PACK

PLR930	DTL Dual 4-Input Gate	Flat	36.00	30.00	20.00
PLR932	DTL Dual 4-Input Buffer	Flat	36.00	30.00	20.00
PLR944	DTL Dual 4-Power Gate	Flat	36.00	30.00	20.00
PLR945	DTL R-S/J-K M.S. Clock. F-F	Flat	54.00	45.00	30.00
PLR962	DTL Triple 3-Input Gate	Flat	36.00	30.00	20.00
PLR980	Dual Level Shifter	Flat	54.00	45.00	30.00
PLR709	709-Type Oper. Amplifier	Flat	63.00	52.00	35.00

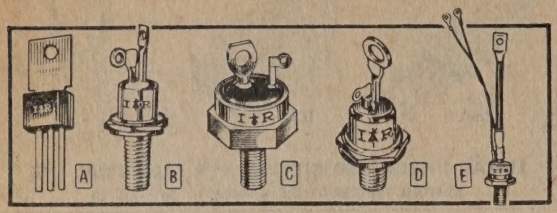
METAL OXIDE SILICON CIRCUITS (MOS)

Temperature, 0° to +70° C. *High or low threshold.

Type No.	Circuit Function	EACH 1-9	10-99	100-Up
PL4A01C	4-Bit Binary BCD Full Adder	11.10	9.25	8.75
PL4C06C	6-Stage Divider	3.42	2.90	2.40
PL4C07C	7-Stage Binary Counter	3.48	2.90	2.40
PL4G10C	Hex 2-Input NOR + 2 Inverters	9.72	8.10	6.75
PL4G11C	Dual 4-Input NOR + Dual 5-Input NOR	9.72	8.10	6.75
PL4S10C	10-Channel Switch	11.28	9.40	8.90
PL4S16C	16-Channel Multiplexer	26.40	22.00	20.50
PL5R32C	Dual 8/16 Bit Shift Register	4.80	4.00	3.75
PL5R96C	Dual 48-Bit Shift Register	5.10	4.25	4.00
PL5R100C	Dual 50-Bit Shift Register	5.10	4.25	4.00
PL5R128C	Dual 64-Bit Shift Register	5.70	4.75	4.45
PL5R198C	Triple 66-Bit Shift Register	7.98	6.65	6.00
PL5R250C	250-Bit Shift Register	12.78	10.65	8.50
PL5R256C	256-Bit Shift Register	12.78	10.65	8.50
PL5R64X4C	2X64—2X60—2X4*	12.78	10.65	8.50
PL5R512C	512X1	17.70	14.75	12.75
PMS16X4C	16X4 RAM	12.00	10.00	8.95
PMS256X1C	256-Bit Read/Write RAM	18.00	15.00	14.75
PM0214C	Dynamic 1024-Bit ROM	18.00	15.00	14.00
PMS1024C	Static 1024-Bit ROM	18.00	15.00	14.00
PMS2048C	2048-Bit ROM	24.00	20.00	16.25
PMS2240C5	2240-Bit Character Generator	21.60	18.00	13.50

Silicon Controlled Rectifiers

AVAILABLE IN 2 TO 70 AMPS AVERAGE RATINGS



EXPLANATION OF COLUMN HEADINGS

V_{RM}—repetitive peak reverse voltage.
$V_{RM(non\text{-}rep.)}$—non-repetitive peak reverse voltage.
$V_{(BO)}$—minimum peak breakover voltage.
V_{RSM}—maximum non-repetitive peak reverse voltage.
V_{GT}—maximum gate voltage to trigger.
V_{FM}—peak forward voltage drop. V_Z—zener voltage.
$I_{T(RMS)}$—maximum RMS on-state current.
I_{TSM}—maximum peak one-cycle non-repetitive surge current.
I^2T—maximum I^2T for fusing.
I_{GT}—maximum gate current to trigger.
I_{OM}—average rectified output current.
I_{FM}—maximum peak one-cycle non-recurrent surge current.
I_{RM}—DC reverse current. I_{ZT}—zener test current.
T_J—junction operating temperature range.
Z_{ZT}—zener impedance.
I_{DRM}—maximum off-state leakage current

A 2 AMPS PLASTIC (4.0 AMPS RMS)

Type No.	V_{RM} (V)	$V_{(BO)}$ (V)	Max. Req'd. Gate Signal at 25° C	EACH 1-9	10-99	100-Up
IR106Y1	30	30	1 V @ 200 μA	1.13	.94	.63
IR106F1	50	50	1 V @ 200 μA	1.32	1.10	.73
IR106A1	100	100	1 V @ 200 μA	1.42	1.18	.79
IR106B1	200	200	1 V @ 200 μA	1.61	1.34	.89
IR106C1	300	300	1 V @ 200 μA	2.04	1.70	1.15

B 3 AMPS AVERAGE (4.7 AMPS RMS)

Type No.	IR No.	Case Type	V_{RRM} and $V_{(BO)}$	Max. Req'd. Gate Signal at 25° C	EACH 1-9	10-99	100-Up
2N1600	3RC5A	TO-64	50 V	3 V @ 10 mA	6.12	5.10	3.40
2N1601	3RC10A	TO-64	100 V	3 V @ 10 mA	6.84	5.70	3.95
2N1602	3RC20A	TO-64	200 V	3 V @ 10 mA	11.34	9.45	6.30
2N1603	4RC30A	TO-64	300 V	3 V @ 10 mA	16.20	13.50	9.00
2N1604	3RC40A	TO-64	400 V	3 V @ 10 mA	20.16	16.80	10.80

C 10 AMPS AVERAGE (16 AMPS RMS)

2N1845	10RC15	TO-48	150 V	2.5 V @ 90 mA	6.78	5.65	3.30
2N1846	10RC20	TO-48	200 V	2.5 V @ 90 mA	6.94	5.78	3.55
2N1848	10RC30	TO-48	300 V	2.5V @ 90 mA	7.29	6.07	4.50
2N1849	10RC40	TO-48	400 V	2.5 V @ 90 mA	8.91	7.42	4.95

B 4.7 AMPS AVERAGE (7.4 AMPS RMS)

Type No.	Case Type	$V_{RRM}/V_{(BO)}$ (V)	V_{RSM} (V)	Max. Req'd. Gate Signal at 25° C	EACH 1-9	10-99	100-Up
2N1770	TO-64	25	35	1.35 @ 15 mA	3.63	3.02	2.43
2N1771	TO-64	50	75	1.35 @ 15 mA	4.17	3.47	2.79
2N1771A	TO-64	50	75	1.35 @ 15 mA	8.37	6.97	4.65
2N1772	TO-64	100	150	1.35 @ 15 mA	6.87	5.72	3.80
2N1772A	TO-64	100	150	1.35 @ 15 mA	10.74	8.95	5.95
2N1773	TO-64	150	225	1.35 @ 15 mA	8.31	6.92	4.60
2N1773A	TO-64	150	225	1.35 @ 15 mA	13.26	11.05	7.35
2N1874	TO-64	200	300	1.35 @ 15 mA	9.75	8.12	5.40
2N1774A	TO-64	200	300	1.35 @ 15 mA	16.14	13.45	8.95
2N1775	TO-64	250	350	1.35 @ 15 mA	11.19	9.32	6.20
2N1775A	TO-64	250	350	1.35 @ 15 mA	18.60	15.50	10.45
2N1776	TO-64	300	400	1.35 @ 15 mA	12.72	10.60	7.05
2N1776A	TO-64	300	400	1.35 @ 15 mA	22.02	18.35	12.20
2N1777	TO-64	400	500	1.35 @ 15 mA	14.88	12.40	8.25
2N1777A	TO-64	400	500	1.35 @ 15 mA	28.32	23.60	15.50
2N1778	TO-64	500	600	1.35 @ 15 mA	21.78	18.15	12.05
2N2619	TO-64	600	720	1.35 @ 15 mA	25.56	21.30	14.20

C 16 AMPS AVERAGE (25 AMPS RMS)

2N681	TO-48	25	35	2.0 @ 40 mA	3.60	3.00	2.00
2N682	TO-48	50	75	2.0 @ 40 mA	4.32	3.60	2.40
2N683	TO-48	100	150	2.0 @ 40 mA	5.66	4.72	3.15
2N684	TO-48	150	225	2.0 @ 40 mA	6.57	5.47	3.65
2N685	TO-48	200	300	2.0 @ 40 mA	7.11	5.92	3.95
2N686	TO-48	250	350	2.0 @ 40 mA	7.56	6.30	4.20
2N687	TO-48	300	400	2.0 @ 40 mA	8.10	6.75	4.50
2N688	TO-48	400	500	2.0 @ 40 mA	9.90	8.25	5.50
2N689	TO-48	500	600	2.0 @ 40 mA	12.15	10.12	6.75
2N690	TO-48	600	720	2.0 @ 40 mA	14.40	12.00	8.00
2N691	TO-48	700	840	2.0 @ 40 mA	23.13	19.27	12.85
2N692	TO-48	800	960	2.0 @ 40 mA	30.00	25.00	18.50

C 22.3 AMPS AVERAGE (35 AMPS RMS)

Type No.	Case Type	V_{RRM} $V_{(BO)}$ (V)	V_{RSM} and (V)	Max. Req'd. Gate Signal at 25° C	EACH 1-9	10-99	100-Up
16RC10A	TO-48	100	150	2 V @ 40 mA	9.60	8.00	5.30
16RC20A	TO-48	200	300	2 V @ 40 mA	13.26	11.05	7.35
16RC40A	TO-48	400	500	2 V @ 40 mA	20.46	17.05	11.35
16RC60A	TO-48	600	720	2 V @ 40 mA	27.84	23.20	15.45
16RC80A	TO-48	800	960	2 V @ 40 mA	43.14	35.95	23.95

D 40 AMPS AVERAGE (63 AMPS RMS)

Low-cost, medium current SCR's for a wide range of precision applications. Fully encapsulated construction provides high dielectric strength; offers reliable performance under all conditions. All are rated 40 amperes average maximum current. Forward Conduction: maximum rms on-state current, 62 amps; maximum peak one-cycle non-recurrent surge current, 800 amps. Firing: maximum peak gate power, 5 watts; maximum average gate power, 0.5 watt; maximum peak positive gate current, 2 amps. Special stud-mount package.

Type No.	$V_{RRM}/V_{(BO)}$ (V)	V_{RSM} (V)	I_{RM}/I_{DM} (mA)	EACH 1-9	10-99	100-Up
40RCS05	50	75	3.5	15.48	12.90	9.15
40RCS10	100	150	3.5	16.80	14.00	9.90
40RCS20	200	300	3.0	19.68	16.40	11.75
40RCS30	300	400	2.5	22.92	19.10	13.35
40RCS40	400	500	2.0	26.40	22.00	15.20
40RCS50	500	600	1.5	31.08	25.90	17.50
40RCS70	700	840	1.5	29.10	24.25	16.20
40RCS80	800	960	1.5	36.42	30.25	20.30
40RCS90	900	1080	1.5	45.60	38.00	25.50
40RCS100	1000	1200	1.25	54.90	45.75	30.50
40RCS110	1100	1320	1.25	63.60	53.00	35.50
40RCS120	1200	1440	1.25	71.10	59.25	40.00

50 AMPS AVERAGE

51RCG10	100	150	15	27.96	23.30	18.00
51RCG20	200	300	15	36.96	30.80	23.70
51RCG30	300	400	15	49.20	41.00	31.50
51RCG40	400	500	15	63.60	53.00	40.80
51RCG50	500	600	15	79.20	66.00	51.00
51RCG60	600	720	15	99.60	83.00	64.00

E 60-AMP POWER LOGIC-TRIACS

Offer unique characteristics and circuit design applications. With an AC supply, the Logic-Triac (properly gated) will control AC power to the load, requiring only one gate connection and one firing circuit connection. Because of the epitaxial process, it can be turned on in either direction by overvoltage or high dv/dt without causing damage to the device. Applications include: AC line voltage control, induction motor speed control, motor drives with inherent braking or reversing, etc. $I_{T(RMS)}$, 60 amps @ 85° C; I_{TSM}, 1000 amps; I^2t, 4000 amps; I_{GT} @ 25° C, 500 mA. V_{GT} @ 25° C, 2.5 volts. T_J, −40° C to +125° C.

Type No.	V_{DRM} (V)	$V_{(BO)}$ (V)	I_{DRM} (mA) at 125° C	EACH 1-9	10-24	25-Up
60AC40	400	500	10	72.60	42.00	30.00
60AC60	600	700	10	157.20	50.00	34.00
60AC80	800	900	10	220.80	72.00	50.00
60AC100	1000	1100	10	267.60	110.00	75.00
100AC40	400	500	10	135.00	112.50	72.00
100AC60	600	700	10	196.80	164.00	115.00
100AC80	800	900	10	276.00	230.00	140.00
100AC100	1000	1100	10	333.60	278.00	185.00

Allied Electronics Offers Best Percentage of Order-Filling in the Country

Silicon Rectifiers and SCR's

INCLUDING HOCKEY-PUK 470-AMP TYPES

IOR

EXPLANATION OF COLUMN HEADS

$I_{T(RMS)}$—max. rms on-state current. I^2T—max. for fusing. V_{RRM}—repetitive peak reverse voltage. $V_{(BO)}$—max. peak breakover voltage. I_{OM}—average rectified output current. I_{FM}—max. peak 1-cycle surge current. V_{FM}—peak forward voltage drop.

70 AMPS AVERAGE (110 AMPS RMS)

EPITAXIAL TYPES (ALLOY DIFFUSED)

*150° C types.

Type No.	IR No.	Fig.	Case Type	V_{RRM} (V)	Max. Req'd. Gate Sig./25°C	EACH 1-9	10-24	25-Up
2N1792	.....	A	TO-83	60	2.5 V @ 70 mA	28.80	24.00	18.50
2N1793	.....	A	TO-83	120	2.5 V @ 70 mA	33.60	28.00	21.50
2N1794	.....	A	TO-83	180	2.5 V @ 70 mA	39.60	33.00	25.40
2N1795	.....	A	TO-83	240	2.5 V @ 70 mA	45.60	38.00	29.20
2N1798	.....	A	TO-83	480	2.5 V @ 70 mA	79.20	66.00	51.00
2N1913	.....	B	TO-49	200	2.5 V @ 70 mA	37.80	31.50	24.20
2N1916	.....	B	TO-49	400	2.5 V @ 70 mA	63.60	53.00	38.50
2N2025	71RC10B*	B	TO-94	100	2.0 V @ 70 mA	34.20	28.50	21.70
2N2027	71RC20B*	B	TO-94	200	2.0 V @ 70 mA	44.40	37.00	27.40
2N2028	71RC25B*	B	TO-94	250	2.0 V @ 70 mA	52.20	43.50	30.70

150 AMPS AVERAGE (235 AMP RMS)

Type No.	Fig.	Case	V_{RRM}—Max.	$V_{(BO)}$—Min.	$V_{(BR)R}$ Min.	I_{RM} & I_{DM}	EACH 1-9	10-24	25-Up
2N3091	B	TO-94	600*	600*	700*	5*	104.40	87.00	67.00
2N3092	B	TO-94	700*	700*	800*	5*	129.60	108.00	83.00
2N3093	B	TO-94	800*	800*	900*	5*	156.00	130.00	100.00
2N3094	B	TO-94	900*	900*	1000*	5*	189.60	158.00	122.00
2N3095	B	TO-94	1000*	1000*	1100*	5*	224.40	187.00	144.00
2N3096	B	TO-94	1100*	1100*	1200*	5*	271.20	226.00	174.00
2N3097	B	TO-94	1200*	1200*	1300*	5*	316.80	264.00	203.00
2N3098	B	TO-94	1300*	1300*	1400*	5*	362.40	302.00	233.00

170 AMP AVERAGE (110 AMP RMS)

Type No.	Fig.	Case	V_{RRM}—Max.	V_{RSM}—Max.	$V_{(BO)}$—Min.	I_{RM} & I_{DM}	EACH 1-9	10-24	25-Up
151RA50	B	TO-93	500	600	500	20	189.60	158.00	111.00
151RA60	B	TO-93	600	720	600	20	222.00	185.00	129.00
151RA80	B	TO-93	800	960	800	960	315.60	263.00	180.00
151RA100	B	TO-93	1000	1200	1000	15	393.60	328.00	225.00
151RA100	B	TO-93	1100	1320	1100	14	436.80	364.00	250.00
151RA120	B	TO-93	1200	1440	1200	13	486.00	405.00	278.00
151RA130	B	TO-93	1300	1560	1300	11	576.00	480.00	325.00

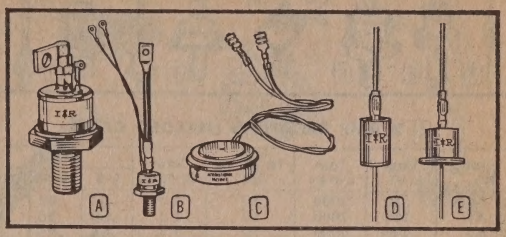
250-300 AMP AVERAGE (400-470 AMP RMS)

Type No.	Fig.	Case	V_{RRM}—Max.	V_{RSM}—Max.	$V_{(BO)}$—Min.	I_{RM} & I_{DM}	EACH 1-9	10-24	25-Up
250RA50	B	TO-118	500	600	500	25	211.20	176.00	132.00
250RA60	B	TO-118	600	720	600	25	252.00	210.00	157.00
250RA80	B	TO-118	800	960	800	24	325.20	271.00	203.00
250RA100	B	TO-188	1000	1200	1000	20	417.60	348.00	261.00
250RA110	B	TO-118	1100	1320	1100	18	472.80	394.00	295.00
250RA120	B	TO-118	1200	1440	1200	17	535.20	446.00	334.00
300RA50	B	TO-118	500	600	500	25	244.80	204.00	172.00
300RA70	B	TO-118	600	720	600	25	298.80	249.00	211.00
300RA80	B	TO-118	800	960	800	23	388.80	324.00	273.00
300RA100	B	TO-118	1000	1200	1000	20	506.40	422.00	356.00
300RA110	B	TO-118	1100	1320	1100	18	578.40	482.00	407.00
300RA120	B	TO-118	1200	1440	1200	17	661.20	551.00	466.00

C RATED UP TO 470 AMPS

Medium current Hockey-Puk rectifiers. Rated up to 470 amperes at voltages from 1200V to 2000V. Maximum average forward current (1 phase operation) @ T_C—105°C is 470A. Maximum peak one cycle, non-recurrent surge current (60 Hz sine wave, 1 phase operation) @ maximum rated load conditions is 6,250A. Maximum I^2t rating (non-repetitive for 5 to 8.3 msec) is 150,000 A^2 sec.

Type No.	V_{RM}—Max.	$V_{RM(rep)}$—Max.	$V_{(RMS)}$—Max.	V_R—Max.	EACH 1-9	10-Up
471PD120	1440	1200	840	1200	84.00	59.00
471PD140	1650	1400	910	1400	97.00	69.00
471PD160	1900	1600	1120	1600	115.00	81.00
471PD180	2100	1800	1260	1800	133.00	94.00
471PD200	2300	2000	1400	2000	150.00	106.00



C HOCKEY-PUK EPITAXIAL SILICON CONTROLLED RECTIFIERS

International Rectifier Hockey-Puk silicon controlled rectifiers are designed to achieve high current handling capability, up to 390 amperes $I_{T(RMS)}$. Hockey-Puk is a pressure assembled device, designed to maximize the benefits of double-side cooling using air-cooled or liquid-cooled heat exchangers. Double-side cooling is accomplished by unique construction, with large area contacts for the anode and cathode connections, providing good heat transfer to the heat exchangers. The greater thermal efficiency achieved by this construction provides up to 60% more continuous current handling capability over comparable stud-mounted devices.

The pressure assembled construction eliminates all internal solder joints, preventing the thermal fatigue problem sometimes found in large area semiconductor devices. Hermetically sealed for industrial use. Max. Gate Signal at 25°C is 2.5 volts at 150 mA.

Type No.	$I_{T(RMS)}$ (A)	I^2T (A^2 sec.)	V_{RRM} / $V_{(BO)}$ (V)	EACH 1-9	10-24	25-Up
115PA50	170	10,500	500	108.00	90.00	66.00
115PA80	170	10,500	800	187.20	156.00	120.00
115PA100	170	10,500	1000	265.20	221.00	171.00
115PA120	170	10,500	1200	348.00	290.00	236.00
175PA50	275	37,500	500	146.40	122.00	110.00
175PA80	275	37,500	800	247.20	206.00	175.00
175PA100	275	37,500	1000	309.60	258.00	233.00
175PA120	275	37,500	1200	390.00	325.00	275.00
250PA50	390	75,000	500	182.40	152.00	137.00
250PA80	390	75,000	800	309.60	258.00	220.00
250PA100	390	75,000	1000	390.00	325.00	280.00
250PA120	390	75,000	1200	490.00	409.00	345.00

D 0.75-1.3 AMP FLANGELESS SILICON RECTIFIERS

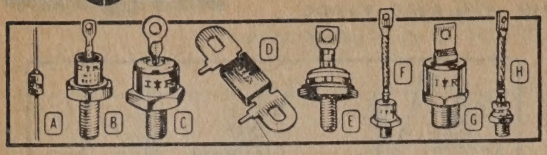
*Anode to case; all others cathode to case. Size: .220" dia. x .345" long; wire leads.

Type No.	IR No.	Max. PRV (V)	I_{OM} (A)	I_{FM} (A)	EACH 1-9	10-99	100-Up
.....	10C1	100	1.3	40	.39	.32	.29
.....	10C2	200	1.3	40	.42	.35	.32
.....	10C3	300	1.3	40	.46	.38	.35
.....	10C4	400	1.3	40	.51	.42	.38
.....	10C6	600	1.3	40	.63	.52	.46
.....	10C8	800	1.3	40	.90	.75	.65
.....	10C10	1000	1.3	40	2.04	1.70	1.20
1N3639	.....	200*	0.75	40	.66	.55	.36
1N3641	.....	600*	0.75	40	1.20	1.00	.65

E STANDARD TOP-HATS TO 1800 mA

Type No.	V_{RM} (V)	I_{OM} (mA) @ 50° C	I_{OM} (mA) @ 100° C	I_{FM} (A)	EACH 1-9	10-99	100-Up
10B1	100	1800	.....	40	.60	.50	.37
10B2	200	1800	.....	40	.66	.55	.40
10B3	300	1800	.....	40	.78	.65	.51
10B4	400	1800	.....	40	.96	.80	.64
10B5	500	1800	.....	40	1.14	.95	.75
10B6	600	1800	.....	40	1.32	1.10	.88
10B8	800	1800	.....	40	1.92	1.60	1.28
10B10	1000	1800	.....	40	2.46	2.05	1.64
SD-91	100	550	300	10	.64	.53	.35
SD-91A	100	750	500	15	.71	.59	.39
SD-92	200	550	300	10	.76	.63	.42
SD-92A	200	750	500	15	.82	.68	.46
SD-93	300	550	300	10	.88	.73	.52
SD-93A	300	750	500	15	1.03	.86	.57
SD-94	400	550	300	10	1.07	.89	.60
SD-94A	400	750	500	15	1.15	.96	.64
SD-95	500	550	300	10	1.19	.99	.67
SD-95A	500	750	500	15	1.27	1.06	.71

IOR Medium & High Power Silicon Rectifiers



A 2 AMP RECTIFIERS (MOLDED CASE)

Type No.	V_{RM} (V)	I_{OM} (mA)	I_R @ V_R (μA)	V_{FM} @ 25°C	EACH 1-9	10-99	100Up
20A05	50	2000	10	1.3	.54	.45	.32
20A1	100	2000	10	1.3	.60	.50	.35
20A2	200	2000	10	1.3	.66	.55	.39
20A3	300	2000	10	1.3	.72	.60	.43
20A4	400	2000	10	1.3	.84	.70	.50
20A5	500	2000	10	1.3	.84	.80	.56
20A6	600	2000	10	1.3	1.08	.90	.63
20A8	800	2000	10	1.3	1.56	1.30	.91
20A10	1000	2000	10	1.3	1.92	1.60	1.10

A 3-AMP SILICONS (MOLDED CASE)

30S1	100	3000	5	1.0	.66	.55	.32
30S2	200	3000	5	1.0	.72	.60	.40
30S3	300	3000	5	1.0	.84	.70	.48
30S4	400	3000	5	1.0	1.03	.86	.58
30S5	500	3000	5	1.0	1.14	.95	.65
30S6	600	3000	5	1.0	1.40	1.17	.78
30S8	800	3000	5	1.0	3.67	3.06	2.16
30S10	1000	3000	5	1.0	5.46	4.55	3.05

B 5 AMP RECTIFIERS (DO-4) I_{OM}, 5 A @ 150° C.

Type No.	V_{RM} (V)	V_{RM} non-repet.	I_{FM} Max. Peak, 1 Cycle Surge	EACH 1-9	10-99	100-Up
1N1612	50	100	150 A	1.20	1.00	.71
1N1613	100	200	150 A	1.38	1.15	.81
1N1614	200	350	150 A	2.28	1.90	1.65
1N1615	400	600	150 A	4.50	3.75	3.05
1N1616	600	800	150 A	6.56	5.55	4.35

B 6 AMP RECTIFIERS (DO-4) I_{OM}, 6 A @ 150° C.

1N1341A	50	.....	150 A	1.14	.95	.75
1N1342A	100	.....	150 A	1.44	1.20	.85
1N1343A	150	.....	150 A	1.86	1.55	1.00
1N1344A	200	.....	150 A	2.46	2.05	1.40
1N1345A	300	.....	150 A	3.42	2.85	2.00
1N1346A	400	.....	150 A	4.50	3.75	2.60
1N1347A	500	.....	150 A	5.52	4.60	3.10
1N1348A	600	.....	150 A	6.48	5.40	3.65
1N3987	700	.....	150 A	8.70	7.25	5.00
1N3988	800	.....	150 A	9.90	8.25	5.60
1N3989	900	.....	150 A	10.80	9.00	6.00
1N3990	1000	.....	150 A	11.40	9.50	6.25

C 12 AMP RECTIFIERS (DO-4) I_{OM}, 12 A @ 150° C.

1N1199A	50	100	240 A	1.44	1.20	.80
1N1200A	100	200	240 A	1.65	1.35	.94
1N1201A	150	300	240 A	2.10	1.75	1.20
1N1202A	200	350	240 A	2.94	2.45	1.65
1N1203A	300	450	240 A	4.14	3.45	2.30
1N1204A	400	600	240 A	5.28	4.40	2.95
1N1205A	500	700	240 A	6.30	5.25	3.50
1N1206A	600	800	240 A	7.32	6.10	4.10
1N3670A	700	900	240 A	9.36	7.80	5.25
1N3671A	800	1000	240 A	10.45	8.70	5.85
1N3672A	900	1100	240 A	11.28	9.40	6.30
1N3673A	1000	1200	240 A	11.75	9.80	6.60

C 15 AMP RECTIFIERS (DO-5) I_{OM}, 15 A @ 150° C.

Type No.	V_{RM} (V)	V_{RM} non-repet.	I_{FM} (Amps)	EACH 1-9	10-99	100-Up
1N3209	100	100	250 A	1.50	1.25	.85
1N3209R	100	100	250 A	1.50	1.25	.85
1N3210	200	200	250 A	2.05	1.70	1.20
1N3211	300	300	250 A	2.46	2.05	1.55
1N3212	400	400	250 A	3.42	2.85	1.90
1N3213	500	500	250 A	7.98	6.65	4.40
1N3214	600	600	250 A	8.75	7.30	4.80

D 20 AMP PLASTIC RECTIFIERS

*20A @ 20° C when mounted on 3x3x1/16" aluminum heat sink on each tab in vertical plane.

20-AMP RECTIFIERS (Cont'd)

Type No.	V_{RM} (V)	V_{RM} non-repet.	I_{OM} @ T °C	I_{FM} (Amps)	EACH 1-9	10-99	100-Up
21PT5	50	...	10A @ 50° C*	360 A	1.32	1.10	.82
21PT10	100	...	10A @ 50° C*	360 A	1.44	1.20	.90
21PT20	200	...	10A @ 50° C*	360 A	1.56	1.30	.98
21PT40	400	...	10A @ 50° C*	360 A	2.04	1.70	1.29
21PT60	600	...	10A @ 50° C*	360 A	2.70	2.25	1.70

H 25 AMP RECTIFIERS (DO-9)

1N2154	50	100	25A @ 110° C	400 A	4.24	3.53	3.53
1N2155	100	200	25A @ 110° C	400 A	5.60	4.65	4.65
1N2156	200	350	25A @ 110° C	400 A	8.00	6.68	6.00
1N2157	300	450	25A @ 110° C	400 A	10.80	9.00	9.00
1N2158	400	600	25A @ 110° C	400 A	12.78	10.65	10.65
1N2159	500	700	25A @ 110° C	400 A	17.80	14.84	14.85
1N2160	600	800	25A @ 110° C	400 A	23.50	19.58	19.58

C 35 AMP RECTIFIERS (DO-5)

Type No.	V_{RM} (V)	I^2t, A^2 sec.	I_{OM} (Amps) @ T °C	I_{FM} A	EACH 1-9	10-99	100-Up
1N1183	50	1000	35A @ 140° C	500	2.34	1.95	1.30
1N1184	100	1000	35A @ 140° C	500	2.88	2.40	1.60
1N1185	150	1000	35A @ 140° C	500	3.48	2.90	1.96
1N1186	200	1000	35A @ 140° C	500	4.76	3.40	2.25
1N1187	300	1000	35A @ 140° C	500	5.64	4.70	3.10
1N1188	400	1000	35A @ 140° C	500	6.96	5.80	3.80
1N1189	500	1000	35A @ 140° C	500	7.68	6.40	4.20
1N1190	600	1000	35A @ 140° C	500	8.16	6.80	4.50
1N3765	700	1000	35A @ 140° C	500	10.25	8.55	5.70
1N3766	800	1000	35A @ 140° C	500	11.70	9.75	6.50
1N3768	1000	1000	35A @ 140° C	500	13.95	11.62	7.75

C 40 AMP RECTIFIERS (DO-5)

40HF5	50	1000	40A @ 40° C	500	1.38	1.15	.80
40HF20	200	1000	40A @ 40° C	500	2.40	2.00	1.40
40HF30	300	1000	40A @ 40° C	500	3.06	2.55	1.85
40HF40	400	1000	40A @ 40° C	500	3.66	3.05	2.20
40HF50	500	1000	40A @ 40° C	500	4.62	3.85	2.80
40HF60	600	1000	40A @ 40° C	500	5.46	4.55	3.30
40HF70	700	1000	40A @ 40° C	500	6.90	5.75	4.10
40HF80	800	1000	40A @ 40° C	500	8.45	7.05	5.05
40HF100	1000	1000	40A @ 40° C	500	11.86	9.90	7.20

C 70 AMP RECTIFIERS (DO-5)

Type No.	IR No.	V_{RM} (V)	I_{OM} (Amps) @ T °C	I_{FM} A	EACH 1-9	10-99	100-Up
1N2128A	70H5A	50	70A @ 125° C	1200	4.03	3.35	2.56
1N2129A	70H10A	100	70A @ 125° C	1200	4.03	3.35	2.56
1N2130A	70H15A	150	70A @ 125° C	1200	4.94	4.12	3.07
1N2131A	70H20A	200	70A @ 125° C	1200	5.76	4.80	3.51
1N2132A	70H25A	250	70A @ 125° C	1200	6.49	5.40	3.88
1N2133A	70H30A	300	70A @ 125° C	1200	7.20	6.00	4.20
1N2134A	70H35A	350	70A @ 125° C	1200	7.20	6.00	4.20
1N2135A	70H40A	400	70A @ 125° C	1200	8.34	6.95	4.85
1N2136A	70H45A	450	70A @ 125° C	1200	8.34	6.95	4.85
1N2137A	70H50A	500	70A @ 125° C	1200	9.40	7.85	5.40
1N2138A	70H60A	600	70A @ 125° C	1200	10.05	8.70	5.85

F 100 AMP RECTIFIERS (DO-8)

Type No.	V_{RM} (V)	V_{RM} non-repet.	Max. I_{OM} Stud Single Phase Av.	I_{FM} A	EACH 1-9	10-24	25-Up
1N3289	200	300	100A @ 130° C	1000	19.40	16.15	16.15
1N3290	300	400	100A @ 130° C	1600	23.85	19.85	19.85
1N3291	400	500	100A @ 130° C	1600	27.35	22.80	22.80
1N3292	500	600	100A @ 130° C	1600	30.60	25.50	25.50
1N3293	600	700	100A @ 130° C	1600	33.40	27.80	27.80
1N3294	800	1050	100A @ 130° C	1600	45.40	37.80	37.80
1N3295	1000	1300	100A @ 130° C	1600	68.40	57.50	57.50
1N3296	1200	1500	100A @ 130° C	1600	76.80	64.00	64.00

H 250 AMP RECTIFIERS (DO-9)

Type No.	V_{RM} (V)	V_{RM} non-repet.	Max. I_{OM} Stud Single Phase Av.	I_{FM} A	EACH 1-9	10-99	100-Up
1N3738	400	525	250A @ 130° C	4500	31.95	26.60	22.60
1N3740	600	800	250A @ 130° C	4500	48.00	40.00	34.00
1N3741	800	1050	250A @ 130° C	4500	66.00	55.00	46.70
1N3742	1000	1300	250A @ 130° C	4500	79.20	66.00	56.00

Silicon Molded and Selenium Rectifiers

KLIP-SELS TRANSIENT VOLTAGE SUPPRESSORS (Not Illus.)

KSL series polarized. KZ and KSA series non-polarized for AC or DC circuits. Protect rectifiers at *0-16, †16-60, ‡to 250 A.

Type No.	Max. Clamp. (V)	Max. rms (V)	EACH 1-9	10-99	100-Up
KZ1DPF*	70	26	.78	.66	.49
KZ2DPF*	140	52	.97	.77	.57
KZ3DPF*	210	78	1.06	.88	.65
KZ4DPF*	280	104	1.19	.99	.73
KZ5DPF*	350	130	1.32	1.10	.81
KZ6DPF*	420	156	1.45	1.21	.89
KZ9DPF*	630	234	1.85	1.54	1.13
KZ10DPF*	700	260	1.98	1.65	1.21
KSA1DAF†	70	26	1.62	1.35	1.01
KSA2DAF†	140	52	1.86	1.55	1.16
KSA3DAF†	210	78	2.10	1.75	1.31
KSA4DAF†	280	104	2.34	1.95	1.46
KSA5DAF†	350	130	2.58	2.15	1.61
KSA6DBF†	420	156	2.82	2.35	1.76
KSA9DBF†	630	234	3.54	2.95	2.21
KSA10DBF†	700	260	3.78	3.15	2.36
KSA11DBF†	770	286	4.02	3.35	2.51
KSA14DBF†	980	364	4.74	3.95	2.96
KSA16DBF†	1120	416	5.22	4.35	3.26
KSL2DAF‡	140	52	4.32	3.60	2.71
KSL5DAF‡	350	130	8.27	6.90	5.20
KSL10DBF‡	700	160	14.90	12.40	9.35

HIGH-VOLTAGE MOLDED RECTIFIERS

Series-connected, avalanche rated diodes; encapsulated. Forward current, 0.25 amp.

Type No.	IR No. 67D-	Fig.	Max. PRV	EACH 1-9	10-Up
1N1135	018H55FNN	G	1800	4.50	3.75
.....	020H53PNN	H	2000	6.60	5.50
1N1137	024H55FNN	G	2400	6.00	5.00
.....	030H53PNN	H	3000	7.20	6.00
1N1140	036H55FNN	G	3600	6.78	5.65
1N1142	048H55FNN	F	4800	10.00	8.35
.....	050H04TNN	F	5000	6.00	5.00
.....	050H55FNN	G	5000	10.43	8.70
.....	075H04TNN	F	7500	9.00	7.50
.....	100H04TNN	F	10000	12.00	10.00
.....	120H04TNN	F	12000	14.40	12.00
.....	150H04TNN	F	15000	18.60	15.50
.....	300H04TNN	F	30000	36.00	30.00

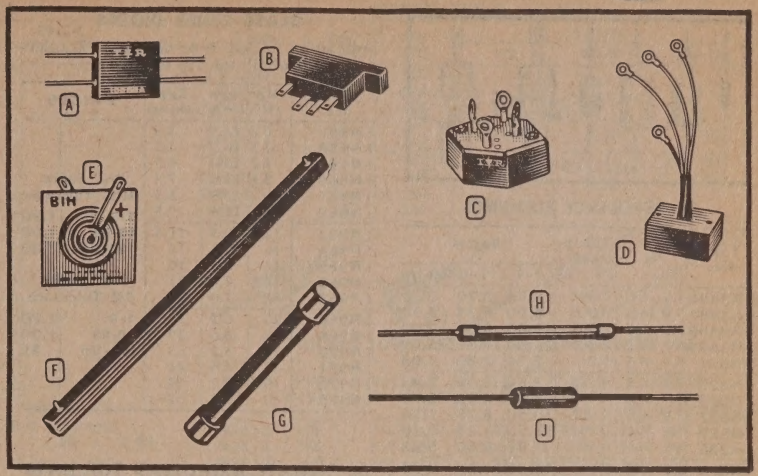
K HIGH-VOLTAGE SELENIUMS

Low current; 2 mA forward current.

IR No. US-	PRV (V)	Lgth.	EACH 1-9	10-99	100-999
16HFP	1000	1"	.82	.52	.48
24HFP	1500	1"	.92	.59	.54
48HFP	3000	1"	1.14	.73	.66
79HFP	5000	1½"	1.45	.94	.85
126HFP	8000	2¼"	1.78	1.14	1.05
158HFP	10000	2¾"	1.88	1.21	1.12
237HFP	15000	4⅛"	2.32	1.49	1.35
315HFP	20000	5⅜"	2.86	1.83	1.68
473HFP	30000	7⅞"	4.14	2.65	2.44

SILICON TUBE-REPLACING TYPES

Type No.	IR No.	Replaces Tube Types	EACH 1-9	10-Up
1N2630	ST-1	6X4, 12X4	7.55	6.29
1N2631	ST-2	5AW4, 5AX4, 5AZ4, 5Y3, 5U4, 5T4, 6004	6.60	5.50
1N2633	ST-3	6AX5, 6W5, 6X5, 6ZY5, 0Z4, 5839, 5852, 5X4	6.60	5.50
1N2637	ST-7A	866, 866A, 3B28, 249B	10.16	9.65
.....	ST-14C	5U4, 5T4, 5V4, 5W4, 5Y3, 5Z4, 5AV4, 5AW4, 6004, 5AX4	5.05	4.20



G LOW-VOLTAGE STACKS

Miniature seleniums. All rated at 36 volts rms maximum, except Q4B, which is rated at 130 volts rms maximum. H in type number indicates single-plate half-wave; B indicates full-wave bridge rectifier.

Type No.	Max. DC mA	Size	EACH 1-9	10-99	100-Up
A1H	100	1x1x7/16"	.52	.43	.30
B1H	150	1 13/64x1 13/64x7/16"	.48	.40	.28
C1H	250	1½x1½x7/16"	.51	.42	.29
M1H	500	2x2x7/16"	.67	.56	.34
Q1B	100	4 3/64x4 3/64x7/16"	.49	.41	.33
Q4B	100	4 3/64x4 3/64x1 5/16"	1.87	1.56	.94
A1B	180	1x1x¾"	1.46	1.22	.82
B1B	300	1 13/64x1 13/64x¾"	1.54	1.28	.86
C1B	600	1½x1 ½x¾"	1.75	1.46	1.00
M1B	1200	2x2¾"	2.07	1.72	1.03

SELENIUM STACKS—POWER RECTIFIERS AND BATTERY-CHARGING TYPES

(Not Illus.)

Designed for widest possible industrial use. All are bridge-connected, except Types J14C1, J14C5, J14C8—have center-tapped common cathode; JD-4346B—center-tapped common anode. All battery-charger types are single plate for trickle chargers, except JD-4346B—a universal fast-charger replacement. *Rated 100 amps when fan-cooled at 800 cubic feet/minute. †Maximum. Battery charger-types: DC output V. 0-13. AC input V: 16.5/33 V.

HIGH-DENSITY POWER RECTIFIERS

Type No.	†AC Input Volts	DC V	DC A	EACH 1-9	10-24	25-Up
J14C1	36	14	1.5	1.80	1.50	1.25
J14C5	36	14	4.8	4.68	3.90	3.30
J14C8	36	14	8.4	6.36	5.30	4.50
J29B04	36	29	0.4	2.04	1.70	1.40
J29B1	36	29	1.5	2.98	2.40	2.10
J29B5	36	29	4.8	8.40	7.00	5.90
J29B8	36	29	8.4	12.30	10.25	8.25
J58B1	72	58	1.5	5.88	4.90	4.15
J58B5	72	58	4.8	16.70	13.90	11.80
J58B8	72	58	8.4	23.20	19.30	16.40
J116B04	144	116	0.4	7.20	6.00	5.15
J116B1	144	116	1.5	10.70	8.90	7.50
J116B5	144	116	4.8	31.70	26.40	22.40
J116B8	144	116	8.4	44.50	37.10	31.40
J135B04	180	135	0.4	9.25	7.70	6.20
J135B1	180	135	1.5	12.95	10.80	9.10
J135B5	180	135	4.8	39.25	32.70	27.50
J135B8	180	135	10	55.08	45.90	45.90
J135B17	180	135	20	86.64	72.20	72.20

SELENIUM RECTIFIER STACKS BATTERY-CHARGING TYPES

(Not Illus.)

Type No.	DC Amps	Wt., Lbs.	EACH 1-9	10-24	25-Up
JD-116K	2	2	2.10	1.75	1.49
JD-117K	2.7	2	2.81	2.34	2.00
JD-241K	6.0	2	4.02	3.35	3.04

Type No.	DC Amps.	Wt., Lbs.	EACH 1-9	10-99	100-Up
BCF60	60	10	8.22	6.85	4.00
BCF100	100	12	10.72	8.95	5.30
BCR60	60	10	8.22	6.85	4.00
BCR100	100	12	10.72	8.95	5.30
BC101	100	12	18.00	15.00	13.50

MINIATURIZED ENCAPSULATED BRIDGE RECTIFIERS TO 1.8 AMPS

Single phase types. Max. rating listed. Apply safety factor when specifying.

A 1.8-AMP CENTER TAPS

Type No.	Max. PRV (V)	Typ. rms (V)	EACH 1-9	10-99	100-Up
18DB2A	200	142	2.86	2.38	2.14
18DB6A	600	424	3.48	2.90	2.75
18DB10A	1000	707	6.15	5.12	4.95

B 5-AMP BRIDGES

Type No.	Max. PRV (V)	Typ. rms (V)	EACH 1-9	10-99	100-Up
50FB1L	100	70	3.30	2.75	2.05
50FB2L	200	140	3.84	3.20	2.46
50FB3L	300	210	4.32	3.60	2.70

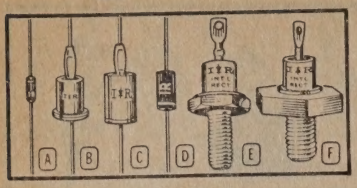
C 6-AMP BRIDGES

Type No.	Max. PRV (V)	Typ. rms (V)	EACH 1-9	10-99	100-Up
60FB5L	50	35	3.84	3.20	2.45
60FB1L	100	70	4.14	3.45	2.65
60FB2L	200	140	5.10	4.25	3.20
60FB3L	300	210	5.65	4.70	3.50
60FB4L	400	280	6.84	5.70	4.25
60FB6L	600	420	8.40	7.00	5.25

D 10-AMP BRIDGES

Type No.	Max. PRV (V)	Typ. rms (V)	EACH 1-9	10-99	100-Up
100PB5P	50	35	4.85	4.05	3.25
100PB1P	100	70	5.15	4.30	3.35
100PB2P	200	140	6.20	5.15	4.15
100PB3P	300	210	6.65	5.55	4.50
100PB4P	400	280	7.62	6.35	5.15
100PB6P	600	420	11.92	9.95	8.00

IOR Silicon Zeners and Reference Elements



[A] REFERENCE ELEMENTS

Type No.	V_Z	Temp. Coeff. (%/°C)	EACH 1-9	10-99	100-Up
1N3496	5.9 -6.5	0.005	4.44	3.70	2.50
1N3497	5.9 -6.5	0.002	6.90	5.75	4.50
1N3498	5.9 -6.5	0.001	10.80	9.00	7.00
1N3499	5.9 -6.5	0.0005	22.80	19.00	15.50
1N821	5.9 -6.5	0.01	2.76	2.30	1.85
1N823	5.9 -6.5	0.005	3.66	3.05	2.45
1N825	5.9 -6.5	0.002	5.52	4.60	3.70
1N827	5.9 -6.5	0.001	10.50	8.75	7.50
1N829	5.9 -6.5	0.0005	13.50	11.25	10.10
1N826	6.2 -6.9	0.002	7.92	6.60	5.25
1N828	6.2 -6.9	0.001	13.28	11.04	9.00
1N3779	6.3 -6.7	0.015	5.40	4.50	3.75
1N3780	6.3 -6.7	0.01	9.90	8.25	6.90
1N3781	6.3 -6.7	0.005	13.10	10.90	9.10
1N3782	6.3 -6.7	0.002	12.15	16.80	14.10
1N3783	6.3 -6.7	0.001	29.40	24.50	20.50
1N3154	8.0 -8.8	0.01	2.64	2.20	1.75
1N3155	8.0 -8.8	0.005	3.55	2.95	2.35
1N3156	8.0 -8.8	0.002	6.24	5.20	4.15
1N3157	8.0 -8.8	0.001	7.30	6.50	5.20
1N935	8.55-9.45	0.01	1.92	1.60	1.45
1N936	8.55-9.45	0.005	2.28	1.90	1.70
1N937	8.55-9.45	0.002	4.43	3.70	3.30
1N938	8.55-9.45	0.001	5.75	4.80	4.30
1N939	8.55-9.45	0.0005	14.90	12.40	11.15

[A] 250-mW GLASS ZENER DIODES

Add suffix "A" to indicate 5% tolerance. No suffix indicates 10% tolerance.

Type No.	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (ohms)	PRICES
1N702	2.6	5	60	No Suffix, 10% Tolerance
1N703	3.4	5	55	Quantity / EA.
1N704	4.1	5	45	1-9 / 1.20
1N705	4.8	5	35	10-99 / 1.00
1N706	5.8	5	20	100-Up / .80
1N707	8.0	5	10	
1N708	5.6	25	3.6	
1N709	6.2	25	4.1	
1N710	6.8	25	4.7	
1N711	7.5	25	5.3	
1N712	8.2	25	6	"A" Suffix, 5% Tolerance
1N713	9.1	12	7	Quantity / EA.
1N714	10.0	12	8	1-9 / 1.20
1N715	11.0	12	9	10-99 / 1.00
1N718	15.0	12	13	100-Up / .85
1N721	20.0	4	20	
1N722	22.0	4	24	
1N723	24.0	4	28	

[A] 400-mW GLASS ZENER DIODES

Add suffix to Type to indicate tolerance. "A" Suffix, 5%. No Suffix, 10%.

Type No.	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (ohms)	PRICES
1N746	3.3	20	28	No Suffix, 10% Tolerance
1N747	3.6	20	24	Quantity / EA.
1N748	3.9	20	23	1-9 / 1.20
1N749	4.3	20	22	10-99 / 1.00
1N750	4.7	20	19	100-Up / .85
1N751	5.1	20	17	
1N752	5.6	20	11	
1N753	6.2	20	7	
1N754	6.8	20	5	"A" Suffix, 5% Tolerance
1N755	7.5	20	6	Quantity / EA.
1N756	8.2	20	8	1-9 / 1.20
1N757	9.1	20	10	10-99 / 1.00
1N758	10.0	20	17	100-Up / .85
1N759	12.0	20	30	

400-mW GLASS ZENER DIODES

Type No.	V_Z @ I_{ZT}	I_{ZT} (mA)	Z_{ZT}@ I_{ZT}	PRICE Quantity	EA.
1N4370	2.4	20	30	1-9	1.20
1N4371	2.7	20	30	10-99	1.00
1N4372	3.0	20	29	100-Up	.80

GLASS ZENER DIODES

Add suffix "A" to type no. for 10% tolerance; suffix "B" for 5% tolerance.

Type No.	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (ohms)	PRICES
1N957	6.8	18.5	4.5	
1N958	7.5	16.5	5.5	
1N959	8.2	15.0	6.5	
1N960	9.1	14.0	7.5	"A" Suffix, 10% Tolerance
1N961	10	12.5	8.5	1-9 / 1.20
1N962	11	11.5	9.5	10-99 / 1.00
1N963	12	10.5	11.5	100-Up / .80
1N964	13	9.5	13	
1N965	15	8.5	16	
1N966	16	7.8	17	"B" Suffix, 5% Tolerance
1N967	18	7.0	21	1-9 / 1.20
1N968	20	6.2	25	10-99 / 1.00
1N969	22	5.6	29	100-Up / .85
1N970	24	5.2	33	
1N971	27	4.6	41	
1N972	30	4.2	49	
1N973	33	3.8	58	

[B] ¾-WATT AXIAL-LEAD TOP HATS

Type No.	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (ohms)	PRICES
1N1507	3.9	35	15	
1N1508	4.7	30	13	
1N1509	5.6	26	11	No Suffix, 10% Tolerance
1N1510	6.8	22	3	1-9 / 3.30
1N1511	8.2	18	3	10-99 / 2.75
1N1512	10	15	3.2	100-Up / 2.10
1N1513	12	12	12	
1N1514	15	10	10.5	
1N1515	18	8	16	
1N1516	22	6	40	
1N1517	27	5	82	

[B] 1-WATT AXIAL-LEAD TOP HATS

Type No.	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (ohms)	PRICES
1N1518	3.9	50	10	
1N1519	4.7	40	8.5	
1N1520	5.6	35	5.5	
1N1521	6.8	30	1.6	
1N1522	8.2	25	1.1	1-9 / 3.24
1N1523	10	20	1.5	10-99 / 2.70
1N1524	12	15	2.4	100-Up / 2.20
1N1525	15	13	5.4	
1N1526	18	10	11	
1N1527	22	9	18	
1N1528	27	7	28	

[C] 1-WATT AXIAL-LEAD FLANGELESS

Type No.	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (ohms)	PRICES
1N3016	6.8	37	3.5	
1N3017	7.5	34	4.0	
1N3018	8.2	31	4.5	
1N3019	9.1	28	5.0	
1N3020	10	25	7	"A" Suffix, 10% Tolerance
1N3022	12	21	9	1-9 / 3.32
1N3023	13	19	10	10-99 / 2.76
1N3024	15	17	14	100-Up / 2.15
1N3026	18	14	20	
1N3027	20	12.5	22	
1N3028	22	11.5	23	
1N3029	24	10.5	25	
1N3030	27	9.5	35	
1N3031	30	8.5	40	
1N3032	33	7.5	45	"B" Suffix, 5% Tolerance
1N3035	43	6.0	70	1-9 / 3.84
1N3036	47	5.5	80	10-99 / 3.20
1N3037	51	5.0	95	100-Up / 2.25
1N3040	68	3.7	150	
1N3041	75	3.3	175	
1N3044	100	2.5	350	
1N3045	110	2.3	450	
1N3047	130	1.9	700	
1N3051	200	1.2	1500	

[D] 1-WATT EPOXY ZENER DIODES

Type No.	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (ohms)	PRICES
1N4728	3.3	76	10	
1N4729	3.6	69	10	
1N4730	3.9	64	9	
1N4731	4.3	58	9	
1N4732	4.7	53	8	
1N4733	5.1	49	7	
1N4734	5.6	45	5	
1N4735	6.2	41	2	
1N4736	6.8	37	3.5	
1N4737	7.5	34	4.0	
1N4738	8.2	31	4.5	
1N4739	9.1	28	5.0	
1N4740	10	25	7	No Suffix 10% Tolerance
1N4741	11	23	8	Quantity / EA.
1N4742	12	21	9	1-9 / 1.50
1N4743	13	19	10	10-99 / 1.25
1N4744	15	17	14	100-Up / .93
1N4745	16	15.5	16	
1N4746	18	14	20	"A" Suffix 5% Tolerance
1N4747	20	12.5	22	Quantity / EA.
1N4748	22	11.5	23	1-9 / 2.28
1N4749	24	10.5	25	10-99 / 1.90
1N4750	27	9.4	35	100-Up / 1.40
1N4751	30	8.5	40	
1N4752	33	7.5	45	
1N4753	36	7.0	50	
1N4754	39	6.5	60	
1N4755	43	6.0	70	
1N4756	47	5.5	80	
1N4757	51	5.0	95	
1N4758	56	4.5	110	
1N4759	62	4.0	125	
1N4760	68	3.7	150	
1N4761	75	3.3	175	
1N4762	82	3.0	200	
1N4763	91	2.8	250	
1N4764	100	2.5	350	

[C] 1-WATT AXIAL LEAD FLANGELESS

Type No.	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (ohms)	PRICES
1N1765	5.6	100	1.2	
1N1766	6.2	100	1.5	
1N1767	6.8	100	1.7	
1N1768	7.5	100	2.1	Quantity / EA.
1N1769	8.2	100	2.4	1-9 / 3.56
1N1770	9.1	50	3.0	10-99 / 2.55
1N1771	10	50	3.5	100-Up / 2.05
1N1772	11	50	4.2	
1N1773	12	50	5.0	No suffix 10% Tolerance
1N1774	13	50	5.8	1-9 / 2.40
1N1775	15	50	7.6	10-99 / 2.00
1N1776	16	50	8.6	100-Up / 1.60
1N3821	3.3	76	400	
1N3822	3.6	69	400	"A" Suffix 5% Tolerance
1N3823	3.9	64	400	1-9 / 3.00
1N3824	4.3	58	400	10-99 / 2.50
1N3825	4.7	53	500	100-Up / 2.00
1N3826	5.1	49	550	
1N3827	5.6	45	600	
1N3828	6.2	41	700	
1N3829	6.8	37	500	

[E] 10-WATT STUD-MOUNTED

Type No.	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (ohms)	PRICES
1N1599	3.9	500	1.5	No Suffix, 10% Tolerance
1N1600	4.7	400	0.9	1-9 / 7.15
1N1601	5.6	350	0.6	10-99 / 5.95
1N1602	6.8	300	0.4	100-Up / 4.75
1N1604	10	200	1.0	"A" Suffix, 5% Tolerance
1N1605	12	170	2.0	1-9 / 9.60
1N1606	15	140	2.9	10-99 / 8.00
1N1608	22	90	6	100-Up / 6.40
1N1609	27	70	10	

[F] 50-WATT STUD-MOUNTED

All listed have 10% tolerance. *PRV. See semiconductor directory for additional 500 watt series zener.

1N3305	6.8*	1850	0.2		
1N3309	10*	1200	0.6		
1N3311	12*	1000	1		
1N3313	14*	890	1.2	1-9	5.70
1N3314	15*	830	1.4	10-99	4.75
1N3321	24*	520	2.6	100-Up	4.15
1N3323	27*	460	2.8		
1N3324	30*	420	3.0		
1N3340	120	120	20		

Allied Electronics Offers Best Percentage of Order-Filling in the Country

International Rectifier Axial-Lead Zener Diodes

5-WATT AXIAL-LEAD ZENERS

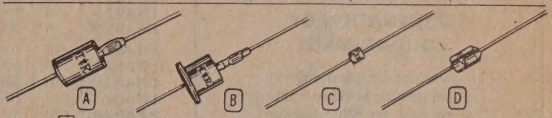
Type No.	Vz (V)	Izt (mA)	Zzt (Ohms)	EACH 1-9	10-99	100-Up
1N5333	3.3	380	3			
1N5334	3.6	350	2.5			
1N5335	3.9	320	2			
1N5336	4.3	290	2			
1N5337	4.7	260	2			
1N5338	5.1	240	1.5			
1N5339	5.6	220	1.0			
1N5340	6.0	200	1.0			
1N5341	6.2	200	1.0			
1N5342	6.8	175	1			
1N5343	7.5	175	1.5			
1N5344	8.2	150	1.5			
1N5345	8.7	150	2			
1N5346	9.1	150	2			
1N5347	10	125	2			
1N5348	11	125	2.5			
1N5349	12	100	2.5			
1N5350	13	100	2.5			
1N5351	14	100	2.5			
1N5352	15	75	2.5			
1N5353	16	75	2.5	"A" Suffix 10% Tolerance		
1N5354	17	70	2.5	2.64	2.20	1.55
1N5355	18	65	2.5			
1N5356	19	65	3.0	"B" Suffix 5% Tolerance		
1N5357	20	65	3.0			
1N5358	22	50	3.5	2.82	2.35	1.75
1N5359	24	50	3.5			
1N5360	25	50	4.0			
1N5361	27	50	5.0			
1N5362	28	50	6.0			
1N5363	30	40	8			
1N5364	33	40	10			
1N5365	36	30	11			
1N5366	39	30	14			
1N5367	43	30	20			
1N5368	47	25	25			
1N5369	51	25	27			
1N5370	56	20	35			
1N5371	60	20	40			
1N5372	62	20	42			
1N5373	68	20	44			
1N5374	75	20	45			
1N5375	82	15	65			
1N5376	87	15	75			
1N5377	91	15	75			
1N5378	100	12	90			

10-WATT AXIAL-LEAD ZENERS

Type No.	Izt (mA)	Vz (V)	EACH 1-9	10-99	100-Up
1N2970	370	6.8			
1N2971	335	7.5			
1N2972	305	8.2			
1N2973	275	9.1			
1N2974	250	10			
1N2975	230	11			
1N2976	210	12			
1N2977	190	13			
1N2978	180	14			
1N2979	170	15			
1N2980	155	16			
1N2981	145	17			
1N2982	140	18			
1N2983	130	19			
1N2984	125	20			
1N2985	115	22		"A" Suffix 10% Tolerance	
1N2986	105	24			
1N2987	100	25	3.60	3.00	2.40
1N2988	95	27			
1N2989	85	30		"B" Suffix 5% Tolerance	
1N2990	75	33	5.10	4.25	3.30
1N2991	70	36			
1N2992	65	39			
1N2993	60	43			
1N2994	55	45			
1N2995	55	47			
1N2996	50	50			
1N2997	50	51			
1N2998	50	52			
1N2999	45	56			
1N3000	40	62			
1N3001	37	68			
1N3002	33	75			
1N3003	30	82			
1N3004	28	91			
1N3005	25	100			
1N3006	25	105			

10-WATT DIODES (Cont'd.)

Type No.	Izt (mA)	Vz (V)	EACH 1-9	10-99	100-Up
1N3007	23	110			
1N3008	20	120			
1N3009	19	130		"A" Suffix 10% Tolerance	
1N3010	18	140			
1N3011	17	150	5.85	4.90	3.90
1N3012	16	160		"B" Suffix 5% Tolerance	
1N3013	14	175			
1N3014	14	180	7.80	6.50	5.40
1N3015	12	200			



A SILICON LOW-CURRENT CELLS (FLANGELESS)

Type No.	PRV (V)	Max. Idc @ 25° C Amb.	Ifm (Amps)	Max. Oper. Temp.	EACH 1-9	10-99	100-Up
1N2610	100	850 mA	30	175° C	.66	.55	.40
1N2611	200	850 mA	30	175° C	.74	.62	.45
1N2612	300	850 mA	30	175° C	.84	.70	.50
1N2613	400	850 mA	30	175° C	.94	.79	.56
1N2614	500	850 mA	30	175° C	1.07	.89	.63
1N2615	600	850 mA	30	175° C	1.20	1.00	.70
1N3189	200	1 A @ 100° C	30	175° C	2.52	2.10	1.80
1N3190	400	1 A @ 100° C	30	175° C	3.60	3.00	2.45
1N3191	600	1 A @ 100° C	30	175° C	5.70	4.75	4.00

B SILICON LOW-CURRENT CELLS (LEAD MOUNTED)

Type No.	PRV (V)	Max. Idc @ T °C Amb.	Ifm (Amps)	Max. Oper. Temp.	EACH 1-9	10-99	100-Up
1N560	800	600 mA @ 30° C	15	150° C	2.16	1.80	1.20
1N1694	300	600 mA @ 50° C	20	115° C	.67	.56	.37
1N444B	500	650 mA @ 50° C	15	150° C	1.26	1.05	.70
1N445B	600	650 mA @ 50° C	15	150° C	1.70	1.42	.95
1N440B	100	750 mA @ 50° C	15	165° C	.79	.66	.44
1N441B	200	750 mA @ 50° C	15	165° C	.83	.69	.46
1N442B	300	750 mA @ 50° C	15	165° C	.95	.79	.53
1N443B	400	750 mA @ 50° C	15	165° C	1.16	.97	.65
1N1487	100	750 mA @ 25° C	15	140° C	.59	.49	.32
1N1488	200	750 mA @ 25° C	15	140° C	.62	.52	.34
1N1489	300	750 mA @ 25° C	15	140° C	.71	.59	.39
1N1490	400	750 mA @ 25° C	15	140° C	.80	.67	.44
1N1491	500	750 mA @ 25° C	15	125° C	.90	.75	.50
1N1492	600	750 mA @ 25° C	15	120° C	1.14	.95	.70
1N536	50	750 mA @ 50° C	15	165° C	.50	.42	.29
1N538	200	750 mA @ 50° C	15	165° C	.62	.52	.34
1N539	300	750 mA @ 50° C	15	165° C	.71	.59	.39
1N540	400	750 mA @ 50° C	15	165° C	.80	.67	.43
1N1095	500	675 mA @ 50° C	15	150° C	.91	.76	.51
1N1096	600	640 mA @ 50° C	15	150° C	1.15	.96	.64
1N547	600	750 mA @ 50 °C	15	165° C	1.14	.95	.60

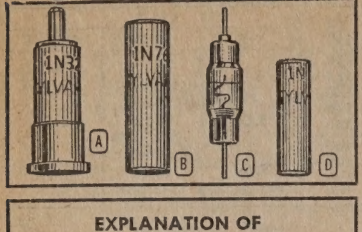
C LOW-CURRENT SILICON RECTIFIERS

Type No.	PRV (V)	Iom @ T °C	Max. Oper. Temp.	EACH 1-9	10-99	100-Up
1N1115	100	1.5 A @ 85° C case	170° C	1.25	1.04	.69
1N1116	200	1.5 A @ 85° C case	170° C	1.32	1.10	.75
1N1117	300	1.5 A @ 85° C case	170° C	1.68	1.40	.95
1N1118	400	1.5 A @ 85° C case	170° C	2.04	1.70	1.15
1N1119	500	1.3 A @ 85° C case	155° C	2.16	1.80	1.20
1N1120	600	1.3 A @ 85° C case	155° C	2.88	2.40	1.74
1N1124A	200	3.3 A @ 50° C amb.	150° C	2.64	2.20	1.45
1N1125	300	3.0 A @ 50° C amb.	150° C	3.30	2.75	1.82
1N1126A	400	3.3 A @ 50° C amb.	150° C	4.62	3.85	2.58

GENERAL-PURPOSE 1-AMP MOLDED SILICON RECTIFIERS

Type No.	IR No.	Fig.	Vrm (V)	Iom (mA)	Vfm (V) 25° C	EACH 1-9	10-99	100-Up
1N2069	10D2	C	200	1000	.95	.38	.32	.28
.....	10D3	C	300	1000	.95	.44	.37	.32
1N2070	10D4	C	400	1000	.95	.49	.41	.35
.....	10D5	C	500	1000	.95	.54	.45	.38
1N2071	10D6	C	600	1000	.95	.60	.50	.44
.....	10D8	C	800	1000	.95	1.02	.85	.75
.....	10D10	C	1000	1000	.95	1.44	1.20	1.02
.....	5A2	D	200	1000	.95	.38	.32	.28
.....	5A4	D	400	1000	.95	.49	.41	.35
.....	5A5	D	500	1000	.95	.54	.45	.38
.....	5A6	D	600	1000	.95	.60	.50	.38
.....	5A8	D	800	1000	.95	1.02	.85	.75
.....	5A10	D	1000	1000	.95	1.44	1.20	1.02

Sylvania Diodes and Rectifiers



EXPLANATION OF COLUMN HEADS

I_O, average forward current.
I_R, maximum reverse current.
V_R, reverse working voltage.
PRV, peak reverse voltage.

MICROWAVE MIXER DIODES

*Asterisk in Figure column indicates MIL approval. †In Noise column indicates comparative dB noise figure where IF amplifier noise equals 1.5 dB. §Frequency Band.

Type No.	Fig.	†Noise (dB)	EACH 1-9	10-24	25-Up
1N21B	A	8.3	.97	.81	.70
1N21C	A	8.3	1.01	.84	.72
1N21D	A	7.3	2.53	2.10	1.80
1N21E	A	7.0	3.79	3.16	2.70
1N21F	A	6.0	7.56	6.30	5.40
1N21WE	A*	7.0	3.79	3.16	2.70
1N23B	A	11.5	.97	.81	.70
1N23C	A	9.5	1.01	.84	.72
1N23D	A	7.8	2.53	2.10	1.80
1N23E	A	7.5	3.79	3.16	2.70
1N23F	A	7.0	7.56	6.30	5.40
1N23G	A	6.5	12.60	10.50	9.00
1N23WE	A*	7.5	3.79	3.16	2.70
1N25	A*	12.6	4.24	3.53	3.03
1N26	B*	13.1	7.80	6.50	5.60
1N26C	B	9.5	37.40	31.15	27.80
1N53	D*	13.1	27.84	23.20	19.80
1N78A	B	9.8	5.40	4.50	3.85
1N78B	B*	8.8	6.00	5.00	4.30
1N415G	A	6.5	12.60	10.50	9.00
1N416G	A	5.5	12.60	10.50	9.00
1N831	C	8.3	8.22	6.85	5.85

(Fig. A)

SILICON UHF DIODE

Type No.	V_R (V)	I_O (mA)	EACH 1-9	10-99	100-Up
1N82A	3	10-25	1.09	.91	.71

MICROWAVE VIDEO DETECTOR DIODES

(Fig. A, *B)

Type No.	Frequency Band	EACH 1-9	10-24	25-Up
1N358A	L-X	18.00	15.00	12.85
1N830A	1000 MHz	4.62	3.85	3.30
1N3143	X	6.72	5.60	4.80

GENERAL-PURPOSE AND FAST-SWITCH SILICON JUNCTION DIODES

In .265x.105" dia. case (DO-7) with two tinned axial leads 1" long (min.). Ratings at 25°C. *Meets MIL specs. I_R, .025, †.5 μA.

Type No.	V_R (V)	I_O (mA)	EACH 1-9	10-99	100-Up
1N456	25	90	.50	.42	.28
1N456A	25	200	.50	.42	.28
1N457	60*	75	.54	.45	.30
1N457A	60	200	.54	.45	.30
1N458	125*	55	.58	.48	.32
1N458A	125	200	.58	.48	.32
1N459	175*	40	.61	.51	.34
1N459A	175	200	.61	.51	.34
1N461†	25	60	.50	.42	.28
1N461A†	25	200	.50	.42	.28
1N462†	60	50	.53	.44	.29
1N462A†	60	200	.53	.44	.29
1N463†	175	30	.65	.54	.36
1N463A†	175	200	.65	.54	.36

GENERAL-PURPOSE AND FAST-SWITCHING SILICON JUNCTION DIODES (Cont'd)

See description below left.

Type No.	V_R (V)	I_O (mA)	I_R (μA)	EACH 1-9	10-99	100-Up
1N464	125	40	.5	.64	.53	.35
1N464A	125	200	.5	.64	.53	.35
1N482	36	100	.25	.79	.66	.40
1N482A	36	200	.025	.83	.69	.46
1N482B	36	200	.025	.83	.69	.46
1N483	70	100	.25	.84	.70	.47
1N483A	70	200	.025	.84	.70	.47
1N483B	70	200	.025	.84	.70	.47
1N484	130	100	.25	.84	.70	.47
1N484A	130	200	.025	.84	.70	.47
1N484B	130	200	.025	.84	.70	.47
1N485	180	100	.25	1.08	.90	.60
1N485A	180	200	.025	1.08	.90	.60
1N485B	180	200	.025	1.08	.90	.60
1N486A	225	200	.05	1.08	.90	.60
1N486B	225	200	.025	1.08	.90	.60
1N487A	300	200	.1	1.69	1.41	.94
1N488	380	100	.25	1.40	1.17	.78
1N488A	380	200	.1	2.14	1.78	1.19
1N625	30	20	1.0	.52	.43	.29
1N626	50	20	1.0	.54	.45	.30
1N627	100	20	1.0	.72	.60	.39
1N628	150	20	1.0	.86	.72	.47
1N629	200	20	1.0	.97	.81	.54
1N643A	175	40	1.0	1.80	1.50	1.00
1N659	50	100	5.0	.70	.58	.39
1N662	50*	40	20.0	1.10	.92	.44
1N663	75*	40	5	1.44	1.20	.80
1N816	5.0	150	.1	.62	.52	.35

GERMANIUM POINT-CONTACT DIODES

DO-7. For use at audio, IF, RF and VHF frequencies. *Type 1N35 supplied as a matched pair.

Type No.	V_R (V)	I_O (mA)	EACH 1-9	10-99	100-Up
1N34A	60	50	.36	.30	.23
1N35	50*	23	1.90	1.58	1.21
1N38A	100	50	.59	.49	.38
1N38B	100	50	.59	.49	.38
1N48	70	50	.36	.30	.20
1N54A	50	50	.50	.42	.32
1N55A	150	50	.48	.40	.31
1N58A	100	50	.67	.55	.41
1N60	25	50	.36	.30	.23
1N63	100	50	.43	.36	.28
1N64	25	50	.36	.30	.23
1N67A	80	30	.34	.28	.21
1N68A	100	40	.34	.28	.21
1N69A	60	40	.36	.30	.23
1N81A	40	30	.58	.48	.36
1N90	60	30	.40	.33	.22
1N116	60	45	.59	.49	.36
1N128	40	30	.38	.32	.25
1N191	90	30	.42	.35	.28
1N192	60	30	.41	.34	.26
1N198	80	30	.42	.35	.28
1N198B	80	30	1.24	1.03	.78
1N294	60	60	.41	.34	.26
1N295	40	35	.42	.35	.27

SILICON "BULLET" EPOXY RECTIFIERS

Offer reliable performance at low cost. For use in a wide variety of industrial and commercial applications. DO-7 case size. All types include 1" wire leads.

Type No.	V_R (V)	I_O (mA)	EACH 1-9	10-99	100-Up
1N2069	200	750	.72	.60	.40
1N2069A	200	750	.78	.65	.43
1N2070	400	750	.80	.67	.45
1N2070A	400	750	.82	.72	.49
1N2071	600	750	.91	.75	.50
1N2071A	600	750	.96	.80	.54
1N2482	200	750	.78	.65	.43
1N2483	400	750	.82	.72	.49
1N2484	600	750	.96	.80	.54

HIGH-SPEED SILICON EPITAXIAL PLANAR DIODES

(Not illus.) Recovery time 4 nsec except: 1N251 and 1N252, 150 nsec; 1N3605, 4 nsec; 1N3731, 3-nsec.

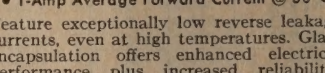
Type No.	V_R (V)	I_O (mA)	EACH 1-9	10-99	100-Up
1N251	30	75	.78	.65	.43
1N252	20	100	.78	.65	.43
1N905A	20	50	1.08	1.55	1.09
1N914	75	75	.54	.45	.30
1N914A	75	75	.60	.50	.33
1N914B	75	75	1.62	1.35	.90
1N916	75	75	.90	.75	.50
1N916A	75	75	.90	.75	.50
1N3605	30	75	.87	.72	.48
1N3731	80	175	1.02	.85	.68

GERMANIUM BONDED DIODES

Engineered for general-purpose as well as computer applications. DO-7 case.

Type No.	V_R (V)	I_O (mA)	EACH 1-9	10-99	100-Up
1N98	80	60	.37	.31	.24
1N99	80	60	.60	.50	.39
1N100	80	60	.38	.32	.27
1N118	75	60	.28	.23	.20
1N270	80	60	.38	.32	.25
1N276	50	40	.37	.31	.24
1N277	100	75	.41	.34	.26
1N279	30	80	.35	.29	.22
1N281	60	75	.37	.31	.24
1N283	20	100	.61	.51	.40
1N497	30	80	.47	.39	.30
1N498	60	80	.53	.44	.35
1N500	60	100	.64	.53	.41
1N634	100	60	.62	.52	.41
1N695	20	100	.36	.30	.24
1N770	20	40	.58	.48	.38
1N995	15	30	.36	.30	.24

SILICON DIFFUSED ALL-GLASS RECTIFIERS



- Hermetically Sealed Case (DO-29)
- Withstand High Reverse Power Transients
- 1-Amp Average Forward Current @ 50°C

Feature exceptionally low reverse leakage currents, even at high temperatures. Glass encapsulation offers enhanced electrical performance plus increased reliability. Double-diffused junctions with 50-amp forward surge capabilities, also withstand high reverse power transients. High conduction power sink lead; oversize heat conducting stud. Temperature range, —65° to +175°C. .350x.150" dia. case. Solder leads.

Type No.	V_R (V)	I_O (mA)	EACH 1-9	10-99	100-Up
1N4383	200	10	.58	.48	.38
1N4384	400	10	.70	.58	.41
1N4385	600	10	.94	.78	.54
1N4585	800	10	1.44	1.20	.80
1N4586	1000	10	3.24	2.70	1.80

MINIATURE SILICON EPOXY RECTIFIERS

In DO-7 package, .265x.105" diameter. 1" wire leads. Rated 1 A at 75°C; max. 1-cycle surge current, 30 amps.

Type No.	PRV (V)	I_O (mA)	EACH 1-9	10-99	100-Up
1N4001	50	750	.54	.45	.30
1N4002	100	750	.59	.49	.33
1N4003	200	750	.72	.60	.40
1N4004	400	750	.80	.67	.45
1N4005	600	750	.90	.75	.50

Call Your Nearest Allied Electronics Office for All Your Needs

Sylvania Avalanche Diode Oscillators

BUYERS NOTE

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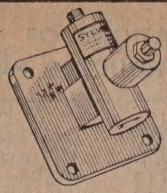
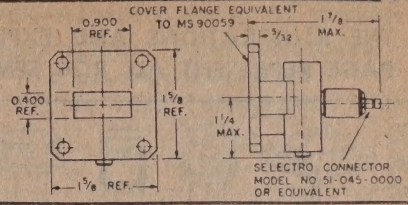
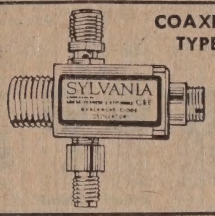
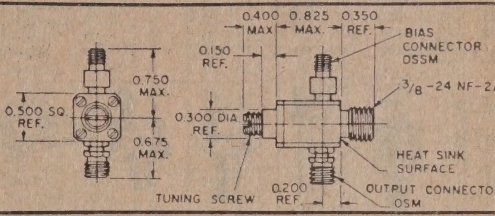
WAVE-GUIDE TYPE





COAXIAL TYPE





TUNABLE WAVEGUIDE AND COAXIAL X-BAND OSCILLATORS

The SYA-3200, SYA-3201, SYA-3205 and SYA-3206 series are tunable waveguide and coaxial X-band oscillators using Sylvania developed avalanche diodes. When biased into the reverse breakdown region these diodes exhibit negative resistance at microwave frequencies, but positive at low frequencies. Therefore, the oscillations are free of spurious low frequency oscillations. These diodes are mounted in a specially designed tunable microwave cavity which produces fundamental oscillations in X-band. The Sylvania SYA-3220 has been designed as an inexpensive solid-state oscillator for zero IF doppler radar transmitters and local oscillators for commercial applications such as police radars, intrusion alarms and other commercial systems operating at 10.525 GHz. These oscillators exhibit a power variation which is typically less than 1 dB over the range of −30°C to +70°C. The DC input is applied through the selector connector and the RF output is available at the waveguide opening. Tuning is accomplished by means of a screw adjustment which provides a minimum of ±250 MHz tuning range about the specified frequency. A single DC power supply providing 70 to 120 volts at 30 to 60 mA is required to bias the diode.

MAXIMUM ELECTRICAL CHARACTERISTICS:

1. Operating Case Temperature Range −30°C to +71°C
2. Storage Temperature −65°C to +125°C
3. Power Output (Load VSWR 1.3) See table below

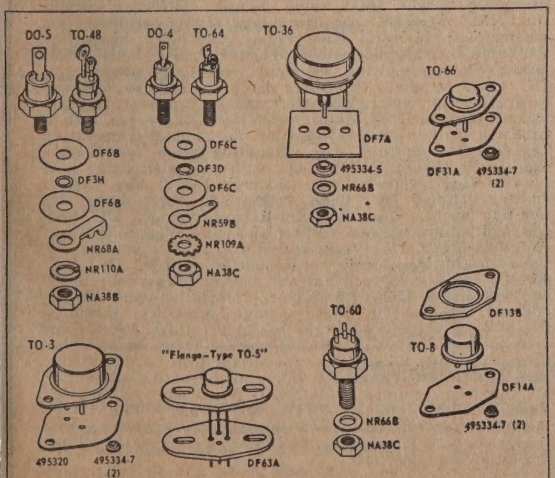
ATTENTION BUYERS

Make Allied your headquarters for all your semiconductor requirements. Allied Electronics offers the best percentage of order handling in the country.

Type No.	Power Output in mW (minimum)	Frequency Range GHz	Package	EACH 1-9
SYA-3200	10	8.2-12.4	Waveguide	210.00
SYA-3200A	25	8.2-12.4	Waveguide	235.00
SYA-3200B	50	8.2-12.4	Waveguide	270.00
SYA-3201	10	8.2-12.4	Coaxial	210.00
SYA-3201A	25	8.2-12.4	Coaxial	235.00
SYA-3201B	50	8.2-12.4	Coaxial	270.00
SYA-3205	100	8.2-12.4	Waveguide	300.00
SYA-3205A	250	8.2-12.4	Waveguide	465.00
SYA-3205B	500	9.0-11.0	Waveguide	575.00
SYA-3206	100	8.2-12.4	Coaxial	270.00
SYA-3206A	250	8.2-12.4	Coaxial	300.00
SYA-3206B	500	9.0-11.0	Coaxial	465.00
SYA-3220	100	10.525	Waveguide	167.00

RCA MOUNTING HARDWARE FOR SEMICONDUCTOR DEVICES

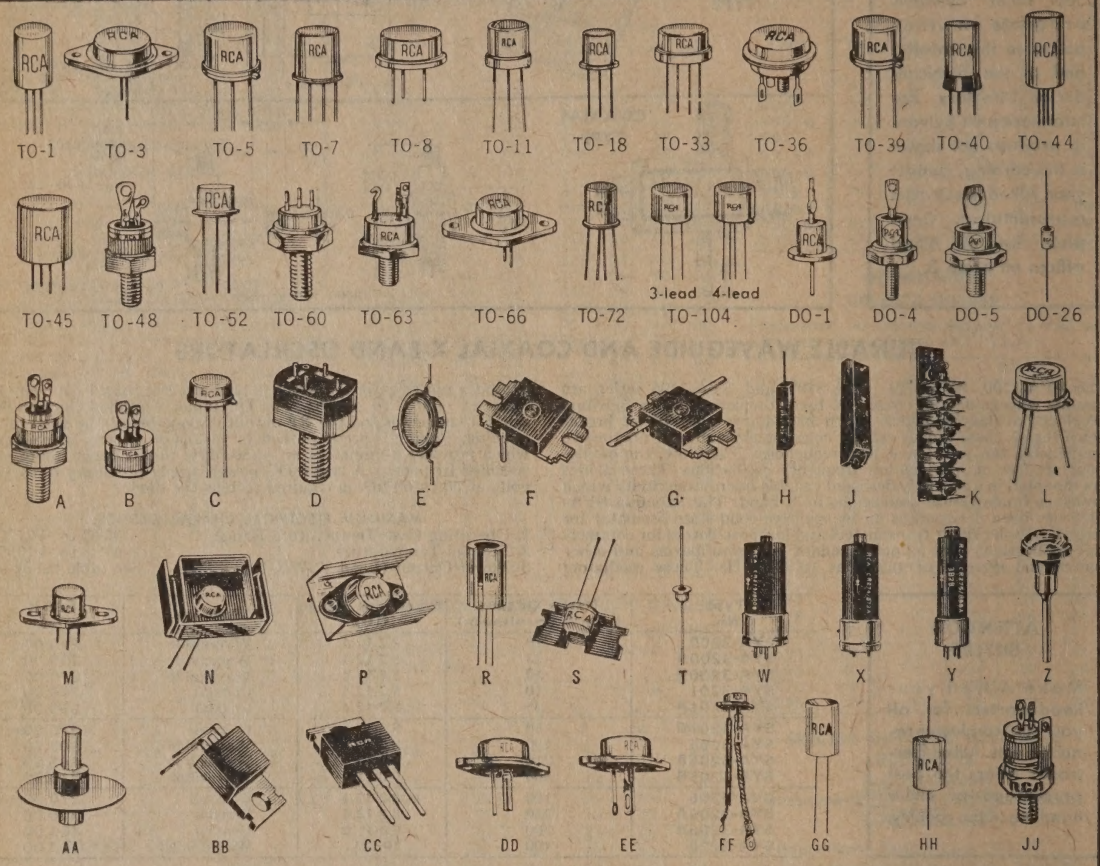
For use as follows: DF63A mounts flange type TO-5. DF31A, two 495334-7 mount TO-66. Two DF6B, DF3H, NR68A, NR110A, NA38B mount DO-5 or TO-48. Two DF6C, DF3D, NR59B, NR109A, NA38C, mount DO-4 and TO-64. DF7A, 495334-5, NR66B. NA38C mount TO-36. NR66B, NA38C mount TO-60, 495320, two 595334-7 mount TO-3. DF138, DF14A, two 495334-7 mount TO-8. SA2100, heat sink clip for TO-1 or TO-18. Provide secure mounting of cases.



Stock No.	Part No.	Description	No. Parts in Std. Pkg.	PER PKG.
47 D 6724	NA38C	Nut	25	.56
47 D 6725	NR109A	Lock Washer	25	.41
47 D 6726	DF6C	Insulator—Mica	50	1.00
47 D 6727	DF3D	Insulator—Teflon	25	1.21
47 D 6728	NR59B	Connector	25	.88
47 D 6729	NA38B	Nut	25	.77
47 D 6749	NR110A	Lock Washer	25	.45
47 D 6730	NR68A	Connector	25	2.15
47 D 6770	DF3H	Insulator—Teflon	25	1.33
47 D 6732	DF6B	Insulator—Mica	50	1.27
47 D 6733	SA2100	Heat Sink Clip	100	1.13
47 D 6734	495320	Insulator—Mica	100	2.40
47 D 6735	495334-7	Washer—Nylon	100	1.65
47 D 6736	DF63A	Insulator—Mica	100	1.70
47 D 6737	DF13B	Mounting Clamp	25	1.63
47 D 6738	DF14A	Insulator—Mica	100	1.95
47 D 6739	NR66B	Washer	25	.37
47 D 6741	495334-5	Bushing—Delrin	25	2.57
47 D 6742	DF7A	Insulator—Mica	25	1.38
47 D 6748	DF31A	Insulator—Mica	100	1.77

ALLIED STOCKS OVER 8000 SEMICONDUCTOR TYPES WITH NEW TYPES CONSTANTLY BEING ADDED

THE ILLUSTRATIONS AND EXPLANATIONS OF COLUMN HEADINGS ON THIS PAGE REPRESENT ALL RCA SEMICONDUCTOR PAGES, FROM 72 THROUGH 80



EXPLANATION OF COLUMN HEADINGS

C, capacitance, includes junction and case capacitance. **C_{iss}**, small-signal short-circuit input capacitance. **C_{obo}**, open circuit output capacitance (common base). **di/dt**, rate of change of forward current. **f_{hfb}**, small-signal short-circuit forward current transfer cutoff frequency (common base). **f_T**, frequency at which small-signal forward current transfer ratio (common emitter) extrapolates to unity. **g_{ts}**, forward transconductance. **G_{pe}**, small-signal average power gain (common emitter). **G_{PE}**, large-signal average power gain (common emitter). **h_{fe}**, small-signal fwd. short-circuit curr. transfer ratio. (common emitter). **h_{FE}**, static fwd. curr. transfer ratio (common emitter). **$I_{FM(surge)}$**, fwd. curr. maximum (peak) total value of surge. **I_C**, collector cutoff current, DC. **I_{CBO}**, collector cutoff current DC (emitter open). **I_D**, drain current. **$I_{F(AV)}$**, forward current, average value. **I_{FM}**, forward current, maximum (peak) total value. **I_{GSS}**, gate leakage current. **I_{GT}**, gate trigger current, DC. **I_P**, peak-point forward current, **I_P/I_V**, peak-point forward current ratio. **$I_{RM(dyn)}$**, reverse current, dynamic maximum (peak) total value. **I_{TRM}**, ON-state current, repetitive maximum (peak) total value. **$I_{T(RMS)}$**, ON-state current, total RMS value. **NF**, noise figure. **P_{GM}**, gate power dissipation, maximum (peak) total value. **$P_{G(AV)}$**, gate power dissipation, DC value, with alternating component. **P_{OE}**, large-signal output power (common emitter). **P_T**, total non-reactive power input, DC, to all terminals (transistor dissipation). **$P_{T(AV)}$**, ON-state dissipation, DC value, with alternating component. **r_{GS}**, gate leakage resistance. **R_{ds}**, drain-to-source resistance, **t_{off}**, turn-off time. **t_{on}**, turn-on time. **t_r**, rise time. **T_A**, ambient temperature. **T_C**, case temperature. **T_{MF}**, mounting-flange temperature. **$V_{(BO)O}$**, Breakover Voltage, DC value, no alternating component. **V_{RM}**, reverse voltage, maximum (peak). **V_{BE}**, base-to-emitter voltage, DC. **V_{CBO}**, collector-to-base voltage, DC (emitter open). **V_{CBV}**, collector-to-base voltage, DC (with specified voltage between emitter and base). **V_{CE}**, collector-to-emitter voltage, DC. **V_{CEO}**, collector-to-emitter voltage, DC (base open). **V_{CER}**, collector-to-emitter voltage, DC (with specified resistor between base and emitter). **V_{CEV}**, collector-to-emitter voltage, DC (with specified voltage between base and emitter). **V_{DROM}**, OFF-state voltage, repetitive, maximum (peak) total value. **V_{DS}**, drain-to-source voltage. **V_F**, forward voltage drop, DC. **V_{pp}**, forward voltage point, greater than the peak voltage. **$V_{F(RMS)}$**, forward voltage drop, total rms value. **V_{GT}**, gate-trigger voltage, DC value, no alternating component, DC (for triacs, gate to anode No. 1). **V_R**, reverse voltage, DC, **$V_{R(RMS)}$**, reverse voltage, total rms value. **V_{RM}**, reverse voltage-maximum (peak) total value. **V_{RSOM}**, reverse voltage, non-repetitive, maximum (peak) total value. **V_T**, ON-state voltage, instantaneous total value.

GENERAL ORDERING INFORMATION

$10.00 minimum order or
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Audio Frequency Transistors

RCA

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SMALL-SIGNAL TYPES, CLASS A LINEAR

SILICON NPN TYPES—P_T to 5 Watts

*V_{CER}; †at 20 MHz; ‡$V_{CER(sus)}$; §$V_{CEO(sus)}$; **Limited by diss.; ††V_{CEV}; §§Typical.

Type No.	Case	MAXIMUM RATINGS P_T @T_C W	V_{CBO} V	I_C A	CHARACTERISTICS h_{fe} @ I_C min	mA	f_T MHz min.	EACH 1-9	10-99	100-999
40231	TO-104	1	18	0.1	55	2	60§§	.61	.51	.37
40232	TO-104	1	18	0.1	90	2	60§§	.70	.58	.42
40233	TO-104	1	18	0.1	90	2	60§§	.77	.64	.47
40234	TO-104	1	18	0.1	35	2	60§§	.50	.42	.30
2N718A	TO-18	1.8	75	1	35	5	60	1.30	1.08	.78
2N720A	TO-18	1.8	120	1	45	5	50	1.58	1.32	.96
2N2895	TO-18	1.8	120	1	50	5	120	1.69	1.41	1.02
2N2896	TO-18	1.8	140	1	50	5	120	2.47	2.06	1.50
2N2897	TO-18	1.8	60	1	50	5	100	1.39	1.16	.84
40084	TO-18	1.8	60	1	5†	50	100	1.19	.99	.72
2N4074	TO-104	2	40	0.3	75	10	50	.88	.73	.53
2N5183	TO-104	2	18	1	70	10	125	.48	.40	.29
40397	TO-104	2	25	0.2	165	10	50	.85	.71	.52
40398	TO-104	2	25	0.2	75	10	50	.77	.64	.47
40399	TO-104	2	18	0.2	165	10	50	.71	.59	.43
40400	TO-104	2	18	0.2	75	10	50	.60	.50	.36
2N3241A	TO-104	2	30	**	100	10	175§§	.88	.73	.53
2N3242A	TO-104	2	40	**	125	10	175§§	1.01	.83	.60
2N697	TO-5	2	60	0.5	2.5†	50	50	.76	.63	.46
2N699	TO-5	2	120	1	35	1	50	1.39	1.16	.84
40458	TO-104	2	60	1	75	10	150	.94	.78	.57
2N1613	TO-5	3	75	1	30	1	60	.90	.75	.54
2N1711	TO-5	3	75	1	70	5	70	1.13	.94	.69
2N1893	TO-5	3	120	0.5	45	5	50	1.30	1.08	.78
2N2102	TO-5	5	120	1	40	1	120	1.36	1.13	.82
2N2270	TO-5	5	60	1	30	5	60	1.09	.91	.66
2N2405	TO-5	5	120	1	50	5	120	1.89	1.57	1.14
2N3053/ 40053	TO-5	5	60	0.7	5†	50	100	.90	.75	.54

GERMANIUM PNP TYPES—P_T to 165 mW

Type No.	Case	MAX. RATINGS P_T @T_A mW	V_{CBO} V	I_C mA	CHARACTERISTICS h_{fe}@ I_C @1kHz min	mA	f_{hfb} typ MHz	V_{CB} V	EACH 1-9	10-99	100-999
2N591	TO-1	85	-32	-40	40	-2	.....	.....	.75	.62	.45
2N2613	TO-1	120	-30	-50	120	-0.5	10	-4.5	.71	.59	.43
2N2614	TO-1	120	-40	-50	100	-1	10	-12	.65	.54	.39
2N2953	TO-1	120	-30	-150	200	-10	10	-12	.65	.54	.40
40263	TO-1	120	-20	-50	100	-1	10	-6	.67	.56	.41
40395	TO-1	120	-20	-50	170	-1	10	-6	.55	.46	.34
40359	TO-1	120	-20	-50	40	-1	10	-6	.48	.40	.29
40490	TO-1	120	-20	-20	170	-1	10	-6	.55	.46	.34
40329	TO-1	125	-25	-100	75	-10	1.5	-6	.60	.50	.37
2N405	TO-40	150	-20	-15	.....	.....	0.65	-6	.77	.64	.44
2N406	TO-1	150	-28	-35	.....	.....	0.65	-6	.54	.45	.32
2N109	TO-40	165	-35	-150	50	-1	.....	.....	.92	.77	.56
2N217	TO-1	165	-35	150	50	-1	.....	.....	.72	.60	.44

AUDIO-FREQUENCY POWER TYPES

SILICON NPN TYPES—P_T to 1.8W. (Class A-AB-B Linear Operation)

§$V_{CEO(sus)}$. ‡$V_{CER(sus)}$. #Pulsed. ##V_{CER}. ††Min. **Limited by dissipation.

Type No.	Case	MAX. RATINGS P_T T_C or T_{MF} W	V_{CEO} V	I_C A	CHARACTERISTICS h_{FE} @ I_C min	mA	f_T typ MHz	EACH 1-9	10-99	100-999
40354	TO-104	0.5 T_A	150	0.05	55	10	100	1.42	1.18	.86
40355	R	1 T_A	150	0.05	typ	10	100	1.49	1.24	.90
40407	TO-5	1 T_A	50§	0.7	40	1	100	.97	.81	.59
40408	TO-5	1 T_A	90§	0.7	40	10	100	1.30	1.08	.78
2N2895	TO-18	1.8	65§	1	40	150#	120††	1.69	1.41	1.02
2N2896	TO-18	1.8	90§	1	60	150#	120††	2.47	2.06	1.50
2N2897	TO-18	1.8	45§	1	50	150#	100††	1.27	1.16	.84
40084	TO-18	1.8	40	1	50	150#	100††	1.19	.99	.72

AUDIO-FREQUENCY POWER TYPES (Cont'd)

SILICON NPN TYPES—P_T to 20 W

Type No.	Case	MAX. RATINGS P_T T_C or T_{MF} W	V_{CEO} V	I_C A	CHARACTERISTICS h_{FE}@I_C min	mA	f_T typ MHz	EACH 1-9	10-99	100-999
2N3241A	TO-104	2	25	**	100	10	175	.88	.73	.53
2N3242A	TO-104	2	40	**	125	10	175	1.01	.83	.60
2N697	TO-5	2	40##	0.5	40	150#	50††	.76	.63	.46
2N699	TO-5	2	80‡	1	40	150#	50††	1.39	1.16	.84
2N4074	TO-104	2	40	0.3	50	100	80	.88	.73	.53
40397	TO-104	2	25	0.2	100	100	80	.95	.71	.52
40398	TO-104	2	25	0.2	50	100	80	.77	.64	.47
40399	TO-104	2	18	0.2	100	100	80	.71	.59	.43
40400	TO-104	2	18	0.2	50	100	80	.65	.54	.40
2N1613	TO-5	3	50‡	1	40	150#	60††	.90	.75	.54
2N1711	TO-5	3	50‡	1	100	150#	70††	1.13	.94	.69
2N1893	TO-5	3	80§	0.5	40	150#	50††	1.30	1.08	.78
2N1479	TO-5	5	40§	1.5	20	200	1.3	1.98	1.65	1.20
2N1480	TO-5	5	55§	1.5	20	200	1.3	2.18	1.82	1.32
2N1481	TO-5	5	40#	1.5	35	200	1.3	2.38	1.98	1.44
2N1482	TO-5	5	55§*	1.5	35	200	1.3	3.37	2.81	2.04
2N1700	TO-5	5	40§	1	20	100	1.3	2.28	1.90	1.38
2N2102	TO-5	5	65§	1	40	150#	120††	1.36	1.13	.82
2N2270	TO-5	5	45§	1	50	150#	60††	1.09	.91	.66
2N2405	TO-5	5	90§	1	60	150#	120††	1.89	1.57	1.14
2N3053/ 40053	TO-5	5	40§	0.7	50	150#	100††	.90	.75	.54
40309	TO-5	5	18§	0.7	70	50	100	.84	.70	.51
40311	TO-5	5	30§	0.7	70	50	100	.88	.73	.53
40314	TO-5	5	40§	0.7	70	50	100	.94	.78	.57
40315	TO-5	5	35§	0.7	70	50	100	.90	.75	.54
40317	TO-5	5	40§	0.7	40	10	.....	.94	.78	.57
40320	TO-5	5	40§	0.7	40	10	.....	.94	.78	.57
40321	TO-5	5	300	1	25	20	.....	1.59	1.24	.90
40323	TO-5	5	18§	0.7	70	50	100	.84	.70	.51

Type No.	Case	MAX. RATINGS P_T T_C or T_{MF} W	V_{CEO} V	I_C A	CHARACTERISTICS h_{FE}@I_C min	mA	f_T typ MHz	EACH 1-9	10-99	100-999
40326	TO-5	5	40§	0.7	40	10	.....	.94	.78	.57
40327	TO-5	5	300‡	1	40	20	.....	1.59	1.24	.90
40360	TO-5	5	70§	0.7	40	10	100	1.09	.91	.66
40361	TO 5	5	70‡	0.7	70	50	100	1.24	1.03	.75
40366	TO-5	5	65§	1	40	150#	.....	9.40	7.84	5.70
40367	TO-5	5	55§	1.5	35	200	.....	9.40	7.84	5.70
40539	TO-5	5	55‡	0.7	15	500#	100	.79	.66	.48
40611	TO-5	5	25§	0.7	70	50	.....	.85	.71	.52
40616	TO-5	5	32§	0.7	70	50	.....	.88	.73	.53
40635	TO-5	5	75‡	0.7	50	150	.....	.89	.74	.54
40625	N	3.5T_A	45§	1	100	150	.....	1.07	.89	.65
40628	N	3.5T_A	55§	.....	100	150	.....	1.13	.94	.68
40409	N	3 T_A	90‡	0.7	50	150	100	1.37	1.14	.83
40389	N	3.5 T_A	40§	0.7	50	150#	100††	1.09	.91	.66
40390	N	3.5 T_A	250§	1	40	20	15††	2.58	2.15	1.56
40392	M	7	40§	0.7	50	150#	100††	1.09	.91	.66
40544	M	7	50‡	0.7	35	50	100	.90	.75	.54
40347	TO-5	8.75	40	1.5	20	450	1.1	.90	.75	.54
40348	TO-5	8.75	65	1.5	30	300	1.1	1.27	1.06	.77
40349	TO-5	8.75	140	1.5	25	150	1.1	1.87	1.56	1.13
40347V1	N	4.4 T_A	40	1.5	20	450	1.1	1.09	.91	.66
40348V1	N	4.4 T_A	65	1.5	30	300	1.1	1.37	1.14	.83
40349V1	N	4.4 T_A	140	1.5	25	150	1.1	1.97	1.64	1.19
2N3439	TO-5	10	350§	1	40	20	15††	4.47	3.71	2.70
2N3440	TO-5	10	250§	1	40	20	15††	2.18	1.82	1.32
2N4063	M	10	350§	1	40	20	15††	4.56	3.80	2.76
2N4064	M	10	250§	1	40	20	15††	2.28	1.90	1.38
2N5320	TO-5	10	75§	2	30	500	50††	1.98	1.65	1.20
2N5321	TO-5	10	50§	2	40	500	50††	1.39	1.16	.84
40594	TO-5	10	95‡	2	70	300	.....	2.88	2.23	1.62
40346	TO-5	10	175‡‡	1	25	10	10††	1.37	1.14	.83
40412	TO-5	10	250‡	1	40	30	10††	1.27	1.06	.77
40347V2	M	11.7	40	1.5	20	450	1.1	1.09	.91	.66
40348V2	M	11.7	65	1.5	30	30	1.1	1.37	1.14	.83

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EXPLANATION OF COLUMN HEADINGS

See Page 72 for Illustrations of Cases and Information on Column Headings and Symbols Used on These Pages

AUDIO FREQUENCY POWER TYPES (Cont'd)

SILICON NPN TYPES—P_T to 117W (Class A-AB-B Linear Operation)

§$V_{CEO(sus)}$. ‡$V_{CER(sus)}$. #Pulsed. ††Minimum.

Type No.	Case	MAX. RATINGS P_T T_C or T_{MF} W	V_{CEO} V	I_C A	CHARACTERISTICS h_{FE} @ I_C min	Amps	f_T typ MHz	EACH 1-9	10-99	100-999
40250VI	P	5.8 T_A	40§	4	25	1.5	1.2	1.49	1.24	.90
40372	P	5.8 T_A	55§	4	25	0.5	1.2	1.49	1.24	.90
40373	P	5.8 T_A	140§	3	20	0.5	1.2	3.20	2.56	1.86
40374	P	5.8 T_A	175§	2	10	1	15††	3.20	2.56	1.86
40375	P	5.8 T_A	50§	7	50	500 mA	60††	6.05	5.03	3.66
2N1483	TO-8	25	40§	3	20	750 mA	1.2	3.47	2.89	2.10
2N1484	TO-8	25	55§	3	20	750 mA	1.2	4.36	3.63	2.64
2N1485	TO-8	25	40§	3	35	750 mA	1.2	5.35	4.46	3.24
2N1486	TO-8	25	55§	3	35	750 mA	1.2	8.13	6.77	4.92
2N1701	TO-8	25	40§	2.5	20	300 mA	1.2	2.77	2.31	1.68
2N3441	TO-66	25	140§	3	20	500 mA	1.2	3.98	2.48	1.80
2N3054	TO-66	29	55§	4	25	500 mA#	1.2	1.39	1.16	.84
40250	TO-66	29	40§	4	25	1.5	1.2	1.39	1.16	.84
40310	TO-66	29	35§	4	20	1	1.2	1.18	.99	.72
40312	TO-66	29	60‡	4	20	1	1.2	1.24	1.03	.75
40316	TO-66	29	40‡	4	20	1	1.2	1.18	.99	.72
40324	TO-66	29	35§	4	20	1	1.2	1.18	.99	.72
2N3583	TO-66	35	175§	2	10	1	15††	2.98	2.48	1.80
2N3584	TO-66	35	250§	2	25	1	15††	4.96	4.13	3.00
2N3585	TO-66	35	300§	2	25	1	15††	7.91	6.60	4.80
2N3878	TO-66	35	50§	7	50	0.5	60††	3.76	3.13	2.28
2N3879	TO-66	35	75§	7	40	0.5	60††	5.74	4.78	3.48
2N4240	TO-66	35	300§	2	30	0.75	15††	3.47	2.89	2.10
40313	TO-66	35	300‡	2	40	0.1	.....	2.68	2.23	1.62
40318	TO-66	35	300‡	2	50	0.5	.....	2.52	2.10	1.52
40322	TO-66	35	300‡	2	75	0.5	.....	2.28	2.15	1.56
40328	TO-66	35	300‡	2	20	1	.....	2.63	2.19	1.60
40364	TO-66	35	60‡	7	35	0.5	15	5.75	4.79	3.48
2N5293	BB	36	80	4	30	0.5	0.8††	1.09	.91	.66
2N5294	CC	36	80	4	30	0.5	0.8††	1.09	.91	.66
2N5295	BB	36	60	4	30	1	0.8††	1.09	.91	.66
2N5296	CC	36	60	4	30	1	0.8††	1.09	.91	.66
2N5297	BB	36	80	4	20	1.5	0.8††	1.25	1.04	.76
2N5298	CC	36	80	4	20	1.5	0.8††	1.25	1.04	.76
40613	BB	36	25§	4	20	1	.....	.88	.73	.53
40618	BB	36	30§	4	20	1	.....	.89	.74	.54
40621	BB	36	32§	4	25	1.5	.....	1.03	.86	.62
40622	BB	36	40§	4	25	1.5	.....	1.06	.88	.64
40629	BB	36	35‡	4	20	1	.....	.89	.74	.54
40630	BB	36	40‡	4	20	1.5	.....	1.03	.86	.62
40631	BB	36	45‡	4	20	2	.....	1.11	.97	.71
2N5490	CC	50	60	7	20	2	0.8††	1.29	1.07	.78
2N5491	BB	50	60	7	20	2	0.8††	1.29	1.07	.78
2N5492	CC	50	75	7	20	2.5	0.8††	1.43	1.19	.86
2N5493	BB	50	75	7	20	2.5	0.8††	1.43	1.19	.86
2N5494	CC	50	60	7	20	3	0.8††	1.43	1.19	.86
2N5495	BB	50	60	7	20	3	0.8††	1.43	1.19	.86
2N5496	CC	50	90	7	20	3.5	0.8††	1.55	1.29	.94
2N5497	BB	50	90	7	20	3.5	0.8††	1.55	1.29	.94
40624	BB	50	45‡	6	20	2.5	.....	1.37	1.14	.83
40627	BB	50	55§	6	20	2.5	.....	1.44	1.20	.83
40632	BB	50	60‡	6	20	3	.....	1.49	1.24	.90
2N1487	TO-3	75	40§	6	15	1.5	1	5.46	4.54	3.30
2N1488	TO-3	75	55§	6	15	1.5	1	5.95	4.95	3.60
2N1489	TO-3	75	40§	6	25	1.5	1	8.92	7.43	5.40
2N1490	TO-3	75	55§	6	25	1.5	1	10.00	8.25	6.00
2N1702	TO-3	75	40§	5	15	0.8	1	5.46	4.54	3.30
40369	TO-3	75	55§	6	25	1.5	1	15.65	13.05	10.80
2N5034	F	83	40§	6	20	2.5#	0.8††	1.61	1.34	.98
2N5036	F	83	50§	8	20	3#	0.8††	1.70	1.42	1.04
40514	F	83	45‡	6	20	2.5#	0.8††	1.51	1.26	.92
2N5035	G	83	40§	6	20	2.5#	0.8††	1.58	1.32	.96
2N5037	G	83	50§	8	20	2.5#	0.8††	1.69	1.41	1.02
40513	G	83	45‡	6	20	3#	0.8††	1.48	1.24	.90
40542	F	83	50‡	6	20	2.5#	0.8††	1.57	1.31	.95
40543	F	83	60‡	8	20	3#	0.8††	1.65	1.37	1.00
40633	F	83	75‡	8	20	4	.....	1.52	1.27	.92
2N5239	TO-3	100	330	5	20	2#	5††	6.92	5.77	4.20
2N5240	TO-3	100	375	5	20	2#	5††	8.91	7.42	5.40
2N4347	TO-3	100	140	5	20	2	0.8	3.57	2.97	2.16
2N3055	TO-3	115	100	15	20	4	0.8††	2.19	1.82	1.32
40363	TO-3	115	70‡	15	20	4	0.7	2.19	1.82	1.32
40636	TO-3	115	95‡	15	20	4	.....	2.77	2.31	1.68
2N3442	TO-3	117	160	10	20	3	0.8	5.45	4.54	3.30

AUDIO FREQUENCY POWER TYPES (Cont'd)

SILICON NPN—P_T to 150W (Class A-AB-B Linear Operation)

Type No.	Case	MAX. RATINGS P_T T_C or T_{MF} W	V_{CBO} V	I_C A	CHARACTERISTICS h_{FE} @ I_C min	A	f_T typ MHz	EACH 1-9	10-99	100-999
40251	TO-3	117	50	15	15	8	1	2.28	1.90	1.3
40325	TO-3	117	35	15	12	8	1	2.28	1.90	1.3
2N4348	TO-3	120	140	10	15	5	0.7	4.96	4.13	3.0
2N3265	TO-63	125	150	25	25	15#	20††	73.00	60.90	50.4
2N3266	TO-63	125	120	25	20	15#	20††	52.20	43.50	36.0
2N2015	TO-36	150	100	10	15	5	1	10.89	9.08	6.6
2N2016	TO-36	150	130	10	15	5	1	11.87	9.90	7.2
2N2338	TO-36	150	60	7.5	15	3	1	7.92	6.60	4.8
2N3771	TO-3	150	50	15	15	15#	0.8††	4.96	4.13	3.0
2N3772	TO-3	150	100	10	15	10#	0.8††	4.96	4.13	3.0
2N3773	TO-3	150	160	16	15	8#	0.7	8.92	7.43	5.4
40411	TO-3	150	.....	30	35	4	0.8	5.15	4.29	3.1

SILICON PNP TYPES—P_T to 10W

40319	TO-5	5	−40§	−0.7	35	−50 mA	100	1.39	1.16	.8
40362	TO-5	5	−70‡	−0.7	35	−50 mA	100	1.49	1.24	.9
40537	TO-5	5	−55‡	−0.7	50	−50 mA	100	1.49	1.24	.9
40538	TO-5	5	−55‡	−0.7	15	−500 mA#	100	1.63	1.36	.9
40406	TO-5	1T_A	−50§	−0.7	30	−0.1mA	100	1.43	1.19	.8
40410	N	3 T_A	−90‡	−0.7	50	−150 mA#	100	1.58	1.32	.9
40391	N	3.5 T_A	−60	−1	50	−150 mA#	60††	1.49	1.24	.9
2N4037	TO-5	7	−60	−1	50	−150 mA#	60††	1.39	1.16	.8
2N4314	TO-5	7	−90	−1	50	−150 mA#	60††	1.49	1.24	.9
40394	M	7	−60	−1	50	−150 mA#	60††	1.49	1.24	.9
40634	TO-5	7	−75‡	−0.7	50	−150 mA	.....	1.55	1.29	.9
2N5322	TO-5	10	−100	−2	30	−500 mA#	50††	2.28	1.90	1.3
2N5323	TO-5	10	−75	−2	40	−500 mA#	50††	1.69	1.41	1.0
2N5415	TO-5	10	−350	−1	30	−50 mA	15††	3.97	3.30	2.4
2N5416	TO-5	10	−200§	−1	30	−50 mA	15††	5.94	4.95	3.6
40595	TO-5	10	−95‡	−2	70	−300 mA	.....	2.68	2.23	1.6

GERMANIUM NPN TYPES—P_T (T_A) to 100 mW

(Class A-AB-B Linear; TO-1 Case)

Type No.	MAX. RATINGS P_T T_A mW	V_{CBO} V	I_C mA	CHARACTERISTICS h_{FE} @ I_C min.	mA	G_{PE} typ dB	I_{CBO} max. μA	EACH 1-9	10-99	100 99
2N647	100	25	100	50	50	54	14	1.39	1.16	.8
2N649	100	20	100	50	50	54	14	1.10	.92	.6

GERMANIUM PNP-NPN TYPE—P_T (T_C) to 300 mW

(Complementary Symmetry Power Type; TO-1 Case)

Type No.	MAX. RATINGS P_T T_C mW	V_{CBO} V	I_C A	CHARACTERISTICS $V_{CE(sat)}$ max. V	I_C mA	h_{FE} @ I_C min.	mA	EACH 1-9	10-99	100 99
40396	300	−18	−0.5	−0.5	−250	30	−250	1.09	.91	.6

GERMANIUM PNP POWER TYPES

(Class A-AB-B Linear Operation)

P_T(T_C) to 12.5 W. §§Typ. ##V_{CER}.

Type No.	Case	MAX. RATINGS P_T T_{MF} or T_C	V_{CBO} V	V_{CEO} V	I_C A	CHARACTERISTICS h_{FE} @ I_C min	A	EACH 1-9	10-99	100 99
2N407	TO-40	0.15T_A	−20	−18	−0.7	65	−0.05	.81	.67	.4
2N408	TO-1	0.15T_A	−20	−18	−0.7	65	−0.05	.60	.50	.3
2N1183	TO-8	7.5	−45	−20	−3	20	−0.4	2.19	1.82	1.3
2N1183A	TO-8	7.5	−60	−30	−3	20	−0.4	2.77	2.31	1.6
2N1183B	TO-8	7.5	−80	−40	−3	20	−0.4	3.47	2.89	2.1
2N1184	TO-8	7.5	−45	−20	−3	40	−0.4	2.98	2.48	1.8
2N1184A	TO-8	7.5	−60	−30	−3	40	−0.4	3.38	2.81	2.0
2N1184B	TO-8	7.5	−80	−40	−3	40	−0.4	4.96	4.13	3.0
2N176	TO-3	10	−40	.....	−3	63	−0.5	1.57	1.31	.9
2N351	TO-3	10	−40	.....	−3	65	−0.7	2.08	1.73	1.2
2N376	TO-3	10	−40	.....	−3	78	−0.7	2.26	1.88	1.3
2N2147	TO-3	12.5	−75	−50	−5	100	−1	1.89	1.57	1.1
2N2148	TO-3	12.5	−60	−40	−5	60	−1	1.30	1.08	.7
40022	TO-3	12.5	−32	−32##	−5	38	−1	1.00	.83	.6

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GERMANIUM PNP POWER TYPES (Cont'd)

(Class A-AB-B Linear Operation)

$P_T(T_C)$ to 30 W. ##V_{CER}. H_{FE} @ I_C is −1A.

Type No.	Case	Max. Ratings				Characteristics		EACH		
		P_T T_{MF} or T_C	V_{CBO} V	V_{CEO} V	I_C A	h_{FE} min	f_T typ MHz	1-9	10-99	100-Up
40050	TO-3	12.5	−40	−40	−5	50	0.5	1.19	.99	.72
40051	TO-3	12.5	−50	−50	−5	50	0.5	1.45	1.21	.88
40254	TO-3	12.5	−32	−32##	−5	30	0.3	.94	.78	.57
40421	TO-3	12.5	−75	−50	−5	62	4	1.54	1.28	.93
40462	TO-3	12.5	−40	−40	−5	50	0.6	1.39	1.16	.84
40612	TO-3	12.5	.....	−25##	−5	30	.....	.85	.71	.52
40623	TO-3	12.5	.....	−45##	−5	50	.....	1.03	.86	.62
40626	TO-3	12.5	.....	−55##	−5	50	.....	1.07	.89	.65
2N2869/ 2N301	TO-3	30	−60	−50	−10	50	0.45	1.82	1.52	1.11
2N2870/ 2N301A	TO-3	30	−80	−50	−10	50	0.45	3.78	3.15	2.29
2N1905	TO-3	30	−100	−50	−6	50	4	4.96	4.13	3.00
2N1906	TO-3	30	−130	−60	−6	75	5	7.92	6.60	4.80

AUDIO FREQUENCY HIGH-VOLTAGE TYPES

GERMANIUM PNP TYPES—V_{CBO}(peak) to −320 Volts

T_A ($_{OPR}$) max. 85°C.

Type No.	Case	Max. Ratings			Characteristics		EACH		
		V_{CBO} (peak) V	P_T (T_{MF} @ 55° C) W	I_C A	$V_{CE(sat)}$ max V	I_C A	1-9	10-99	100-Up
2N3732	TO-3	−100	3	−3	−2	−0.7	1.29	1.07	.78
2N3730	TO-3	−200	10	−3	−2	−0.7	1.49	1.24	.90
40440	TO-3	−200	5	−10	−0.75	−6	1.58	1.32	.96
2N3731	TO-3	−320	5	−10	−1.5	−6	1.95	1.62	1.18
2N4346	TO-3	−320	5	−10	−0.75	−6	2.77	2.31	1.68
40439	TO-3	−320	5	−10	−1.5	−6	2.38	1.98	1.44

SILICON NPN TYPES—V_{CBO} to 375 V ($^xV_{CEO}$)

#Pulsed. **Limited by dissipation. §§Typical.

Type No.	Case	Max. Ratings			Characteristics			EACH		
		V_{CBO} V	P_T T_C or T_{MF} W	I_C A	h_{FE} @ I_C min	mA	f_T min. MHz	1-9	10-99	100-Up
2N2102	TO-5	120	5	1	10	0.01	120	1.36	1.13	.82
2N2405	TO-5	120	5	1	35	10	120	1.88	1.57	1.14
2N3264	E	120	84	25	20	15A#	20	55.20	40.60	23.60
2N3266	TO-63	120	125	25	20	15A#	20	50.22	43.50	36.00
2N3878	TO-66	120	35	7	50	500	60	3.76	3.13	2.25
2N3879	TO-66	120	35	7	40	500	60	5.74	4.78	3.48
2N4390	TO-104	120^x	0.5 T_A	**	20	20	50	.90	.75	.54
2N5184	TO-104	120^x	0.5 T_A	0.05	10	50	50	.58	.48	.35
2N5185	R	120^x	1 T_A	0.05	10	50	50	.67	.56	.41
40375	P	120	5.8 T_A	7	50	500	60	4.66	3.88	2.46
2N2016	TO-36	130	150	10	15	5A	1§§	11.19	9.90	7.20
2N4347	TO-3	140	100	5	20	2A	0.8§§	3.56	2.97	2.16
2N4348	TO-3	140	120	10	15	5A	0.7§§	4.96	4.13	3.00
2N3263	E	150	84	25	25	15A#	20	69.60	58.00	48.00
2N3265	TO-63	150	125	25	25	15A#	20	73.10	60.90	50.40
2N4068	TO-104	150	0.5 T_A	0.2	30	30	50	1.61	1.34	.97
2N4069	R	150	1 T_A	0.2	30	30	50	1.68	1.40	1.02
40354	TO-104	150^x	0.5 T_A	0.05	55§§	10	50	1.42	1.18	.86
40355	R	150^x	1 T_A	0.05	55§§	10	50	1.49	1.24	.90
2N3441	TO-66	160	29	3	20	500	1.2§§	2.98	2.48	1.80
2N3442	TO-3	160	117	10	20	3A	0.8§§	5.46	4.54	3.30
2N3773	TO-3	160	150	16	15	8A#	0.7§§	8.92	7.43	5.40
40349	TO-5	160	5	1.5	25	150	1§§	1.82	1.56	1.13
40373	P	160	29	3	20	500	1.2§§	3.07	2.56	1.86
40349V1	N	160	4.4 T_A	1.5	25	150	1§§	1.92	1.64	1.19
40349V2	M	160	11.7	1.5	25	150	1§§	1.92	1.64	1.19
40346	TO-5	175	10	1	25	10	10	1.37	1.14	.83
2N3583	TO-66	250	35	2	40	100	15	2.98	2.48	1.80
40374	P	250	35	2	40	100	15	3.08	2.56	1.86
2N3440	TO-5	300	10	1	40	20	15	2.19	1.82	1.32
2N4064	M	300	10	1	40	20	15	2.28	1.90	1.38
40390	N	300	3.5 T_A	1	40	20	15	2.58	2.15	1.56
2N5239	TO-3	330	100	5	20	2A#	5	6.59	5.77	4.20
2N3584	TO-66	375	35	2	25	1A	15	4.95	4.13	3.00
2N5240	TO-3	375	100	5	20	2A#	15	8.90	7.42	5.40

SILICON NPN TYPES (Cont'd)—V_{CEO} to 500 V ($^xV_{CEO}$)

Type No.	Case	Max. Ratings			Characteristics			EACH		
		V_{CBO} V	P_T T_C or T_{MF} W	I_C A	h_{FE} @ I_C min	mA	f_T min. MHz	1-9	10-99	100-Up
2N3439	TO-5	450	10	1	40	20	15	4.45	3.71	2.70
2N4063	M	450	10	1	40	20	15	4.56	3.80	2.76
40385	TO-5	450	10	1	40	20	.....	11.40	9.50	6.90
2N3585	TO-66	500	35	2	40	100	15	7.92	6.60	4.80
2N4240	TO-66	500	35	2	30	750	15	3.47	2.89	2.10

RADIO FREQUENCY TRANSISTORS

MOS(FET) SILICON TYPES

+Single insulated gate. ++Dual insulated gate. °Mixer Conversion gain. #Pulsed. ††Minimum. •Conversion transconductance. ◇Maximum. TO-72 Case.

Type No.	Use	Characteristics			Max. Ratings			EACH		
		G_{ps} typ dB	g_{fs} typ µmho	C_{rss} typ pF	V_{DS} V	I_D mA #	P_T mW	1-9	10-99	100-Up
3N128+	RF Amp.	16	5K††	0.13	20	50	400	1.74	1.45	1.06
3N138+	Chop./Mult.	.....	6K	0.25	35	50	400	3.96	3.30	2.40
3N139+	RF Amp.	18	3K††	0.2	35	50	400	3.47	2.89	2.10
3N140++	RF Amp.	18°	10K	.03◇	20	50	150	1.95	1.62	1.18
3N141++	Mixer	24	10K	.03◇	20	50	150	1.86	1.55	1.13
3N142+	RF Amp	13.5°	4K††	0.12	20	50	400	1.30	1.08	.78
3N143+	Mixer	20	5K††	0.12	20	50	100	1.67	1.39	1.01
3N152+	RF Amp	20	5K††	0.12	20	50	400	2.14	1.78	1.30
3N153+	Chop./Mult.	.....	10K	0.34	20	50	400	1.90	1.58	1.15
3N154+	RF Amp	20	5K††	0.12	20	50	400	1.95	1.62	1.18
3N159++	RF Amp	16	7K	.03◇	20	30	400	2.67	2.18	1.58
40467A+	RF Amp	16	7.5K††	0.12	20	50	400	1.49	1.24	.90
40468A+	RF Amp	17	7.5K††	0.12	20	25	375	.90	.75	.54
40559A+	Mixer	21°	2.8K•††	0.15	20	25	375	.84	.70	.51
40600++	RF Amp	20	10K††	.03◇	20	50	400	1.49	1.24	.90
40601++	Mixer	14°	2.7K††	.03◇	20	50	400	1.39	1.16	.84
40602++	IF Amp	28	10K††	.03◇	20	50	400	1.00	.83	.60
40603++	RF Amp	.....	10K††	.03◇	20	50	400	1.25	1.04	.76
40604++	Mixer	23°	10K•††	.03◇	20	50	400	1.13	.98	.71

SMALL-SIGNAL RADIO-FREQUENCY TYPES

SILICON NPN—f_T(min) to 750 MHz. (Class A-B-C Linear Operation)

§§Typical. ††Min. **Limited by dissipation.

Type No.	Case	Characteristics			Typ. Oper.		Max. Ratings		EACH		
		f_T min MHz	NF max dB	NF oper. freq. MHz	G_{PE} @ dB	G_{PE} oper. freq. MHz	V_{CBO} V	I_C mA	1-9	10-99	100-Up
40354	TO-104	50	.....	.....	.....	.....	V_{CEO}=	50	1.42	1.18	.86
40355	R	50	.....	.....	.....	.....	150V	50	1.49	1.24	.90
2N2270	TO-5	60	6	.001	.....	.....	60	1A	1.09	.91	.66
2N2897	TO-18	100	.....	.....	.....	.....	60	1A	1.39	1.16	.84
2N3053 /40053	TO-5	100	.....	.....	.....	.....	60	700	.90	.75	.54
40084	TO-18	100	8	.001	.....	.....	60	1A	1.19	.99	.72
2N2102	TO-5	120	6	.001	.....	.....	120	1A	1.31	1.13	.82
2N2405	TO-5	120	6	.001	.....	.....	120	1A	1.89	1.57	1.14
2N2895	TO-18	120	8	.001	.....	.....	120	1A	1.69	1.41	1.02
2N2896	TO-18	120	.....	.....	.....	.....	140	1A	2.47	2.06	1.50
40637	TO-52	300§§	300	.....	.....	.....	.....	100	1.09	.91	.66
2N5188	TO-39	250	.....	.....	.....	.....	60	**	.79	.66	.48
2N5189	L	250	.....	.....	.....	.....	60	**	.88	.73	.53
40405	TO-52	300	.....	.....	6	240	.....	500	1.98	1.82	1.32
40519	TO-52	300	.....	.....	5.5	240	.....	500	3.95	3.29	2.38
2N918	TO-72	600	6	60	21	200	30	50	3.57	2.97	2.16
2N5180	TO-104	650	4.5	200	12††	200	30	**	.65	.54	.40

TABLE CONTINUED ON PAGE 76

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EXPLANATION OF COLUMN HEADINGS

See previous pages for Illustrations of Cases and Information on Column Headings and Symbols Used on This Page

SMALL-SIGNAL RADIO FREQUENCY TYPES (Cont'd)

SILICON NPN—f_T(min) to 1200 MHz (Class A-B-C Linear Operation)

§§Indicates typical value. ††Indicates minimum value. °Mixer conversion gain as measured RF through IF frequency range. Types 2N3478, 2N4259, 2N3932, 2N3933 and 2N3600 are limited by dissipation. I_C milliamps at maximum value: 50 millamps for types 40238 through 40237 and type 2N5179; 40 milliamps for types 2N2857 and 2N3839; 400 milliamps for type 2N5109.

Type No.	Case	CHARACTERISTICS f_T min MHz	NF max dB	NF oper. freq. MHz	TYP. OPER. G_{PE} @ dB	G_{PE} oper. freq. MHz	MAX. RATINGS V_{CBO} V	EACH 1-9	10-99	100-Up
2N3478	TO-104	750	5§§	470	12	470	30	2.28	1.90	1.38
2N4259	TO-104	750	5	450	11.5	450	40	2.28	1.90	1.38
40238	TO-104	800§§	.....	.....	45.3	45	45	.55	.46	.34
40242	TO-104	.....	2.5§§	100	38.3	100	45	.73	.61	.44
40243	TO-104	.....	.....	100	37.6°	100	45	.60	.50	.36
40244	TO-104	.....	.....	.....	Oscillator		45	.49	.41	.30
40245	TO-104	.....	.....	.....	51.4	10.7	45	.52	.43	.31
40246	TO-104	.....	.....	.....	51.4	10.7	45	.49	.41	.30
40235	TO-104	1000§§	3.3§§	216	29.1	216	45	.73	.61	.44
40236	TO-104	1000§§	.....	.....	19°	216	45	.61	.51	.37
40237	TO-104	1000§§	.....	.....	Oscillator		45	.49	.41	.30
2N3932	TO-104	750	5§§	450	11.5††	200	30	1.68	1.40	1.02
2N3933	TO-104	750	5§§	450	14††	200	40	1.95	1.62	1.18
2N3600	TO-72	850	4.5	200	17††	200	30	4.56	3.80	2.76
2N2857	TO-72	1000	4.5	450	12.5††	450	30	5.35	4.46	3.24
2N5179	TO-72	1000	4.5	200	15††	200	20	.97	.81	.59
2N3839	TO-72	1000	3.4	450	12.5††	450	30	16.56	13.80	11.40
2N5109	TO-39	1200	3§§	200	11††	200	40	4.16	3.47	2.52

GERMANIUM PNP TYPES—f_{hfb} (typ) to 140 MHz

I_C milliamps maximum is −10 except for types 2N410 and 2N412, −15.

Type No.	Case	CHARACTERISTICS f_T typ ††f_{hfb} MHz	TYP. OPER. G_{PE} @ dB	Oper. freq. MHz	MAX. RATINGS V_{CBO} V	P_T mW	EACH 1-9	10-99	100-Up
2N410	TO-1	14	37.8	0.455	−13	80	.58	.48	.35
2N412	TO-1	16.5	32	1	−13	80	.64	.53	.39
2N274	TO-44	†30	17	12.5	−40	120	1.54	1.24	.90
2N1224	TO-33	†30	17	12.5	−40	120	1.54	1.24	.90
2N1226	TO-33	†30	17	12.5	−60	120	1.79	1.49	1.08
2N1395	TO-33	†30	17	12.5	−40	120	2.19	1.82	1.32
2N1524	TO-1	†33	54.4	0.455	−24	80	.61	.51	.37
2N1526	TO-1	†33	48.9	1.5	−24	80	.64	.53	.38
2N1638	TO-1	†40	61.5	0.262	−34	80	.65	.54	.40
2N1639	TO-1	†45	37°	1.5	−34	80	.70	.58	.42
2N1631	TO-40	†45	47.7	1.5	−34	80	.95	.79	.58
2N1632	TO-1	†45	47.7	1.5	−34	80	.76	.63	.46
2N1637	TO-1	†45	47.7	1.5	−34	80	.73	.61	.44
2N384	TO-44	†100	15	50	−40	120	1.98	1.65	1.20
2N1225	TO-33	†100	15	50	−40	120	1.69	1.41	1.02
2N1396	TO-33	†100	15.	50	−40	120	2.32	1.93	1.40
2N1023	TO-44	†120	18	50	−40	120	3.27	2.72	1.98
2N1397	TO-33	†120	18	50	−40	120	2.58	2.15	1.56

RADIO FREQUENCY POWER TYPES

SILICON NPN TYPES—P_{OE} to 30 W

Featuring "overlay"—for linear and Class C operation. ##V_{CER}. ˣV_{CEO}. °V_{CEX}.

Type No.	Case	Characteristics P_{OE} @ oper. min W	P_{OE} @ oper. freq. MHz	G_{PE} dB	Max. Ratings P_T T_C W	V_{CEV} V	EACH 1-9	10-99	100-Up
2N1491	TO-5	0.5	70	12	3	30	2.19	1.82	1.32
40080	TO-5	0.1	27	17	0.5T_A	30ˣ	1.30	1.08	.78
40405	TO-52	0.2	172	10	1	40	1.98	1.65	1.20
40081	TO-5	0.4	27	7	2	60	1.69	1.41	1.02
2N1493	TO-5	0.5	70	12	3	100	8.51	7.01	5.10
2N3118	TO-5	1	50	10	4	85°	5.95	4.95	3.60
2N4427	TO-39	1	175	10	3.5	40##	2.58	2.15	1.56
40280	TO-39	1	175	9	7	36	5.54	4.62	3.36
2N3866	TO-39	1	400	10	5	30ˣ	1.98	1.65	1.25
2N5108	TO-39	1	1000	5	3.5	30ˣ	15.50	12.90	10.70
2N5470	AA	1 (amp)°	2						
		0.3 (osc)°	GHz	...	3.5	55##	70.47	62.25	54.00
2N5090	TO-60	1.2	400	7.8	5	30ˣ	13.70	11.40	8.30
40290	TO-39	2	135	6	7	90	2.98	2.48	1.80
2N3553	TO-39	2.5	175	10	7	65	5.24	4.37	3.18
2N4012	TO-60	2.5	1002	4	11.6	65	17.02	14.20	11.75
40605	TO-39	2.5	175	....	7	65°	54.00	45.00	37.25
40082	TO-39	3	27	9	5	60	4.85	4.04	2.94
40446	N	3	27	.....	10	60	5.15	4.29	3.12
2N3375	TO-60	3	400	5	11.6	65	12.95	10.80	8.95
40581	TO-39	3.5	27	10	5	60	5.84	4.87	3.54
40582	N	3.5	27	10	10	60	6.15	5.12	3.72
40281	TO-60	4	175	6	11.6	36	12.72	10.60	8.75
2N4440	TO-60	5	400	5	11.6	65	14.30	11.90	9.85
40292	TO-60	6	135	5	23.2	90	13.55	11.30	9.35
40666	TO-60	7.5	100	.....	11.6	65	14.40	12.00	9.85
2N2631	TO-39	7.5	50	9	8.75	80	4.56	3.80	2.76
2N2876	TO-60	10	50	7	17.5	80	20.90	17.40	14.40
2N3733	TO-60	10	400	4	23	65	18.95	15.80	13.10
2N4932	TO-60	12	88	5.4	70	50	34.80	29.00	24.00
40282	TO-60	12	175	5	23.2	36	14.30	11.90	9.85
40665	TO-60	13.5	175	.....	23	65	16.80	14.00	11.65
2N3632	TO-60	13.5	175	6	23	65	15.30	12.75	10.55
2N3229	TO-60	15	50	9	17.5	105	26.65	22.21	18.38
2N5102	TO-60	15	136	4	70	100	26.12	21.75	18.00
2N5016	TO-60	15	400	5	30	65	43.80	36.25	30.00
2N4933	TO-60	20	88	7.6	70	70	34.80	29.00	24.00
2N5071	TO-60	24	76	9	70	65	34.80	29.00	24.00
2N5070	TO-60	25(PEP)	30	13	70	65	34.80	29.00	24.00
40340	TO-60	25	50	7	70	60	34.80	29.00	24.00
40341	TO-60	30	50	10	70	70	34.80	29.00	24.00
40608	TO-39	.....	....	11VG	3.5	40##	2.98	2.48	1.80
40606	TO-60	Premium high reliability type for critical applications in industrial equipment					46.00	38.30	31.70
40675	D	75	30	13	100	65	158.20	132.00	110.00

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Make Allied your "One-Stop" Headquarters for all your industrial needs. Pay OEM factory prices, slash handling expenses and reduce paperwork in purchasing and receiving. You place one order, receive one shipment, and make one disbursement. Allied has the world's largest stock of electronic components for industry.

Silicon Rectifiers and Stacks

RCA

SEE THE SEMICONDUCTOR DIRECTORY (PAGES 7-40) FOR QUANTITY PRICES OF 1000-UP

As new RCA silicon rectifiers and stacks are released Allied Electronics will stock them for your added convenience.

Always look to Allied Electronics for prompt handling of your order, and the latest in industrial components.

EXPLANATION OF COLUMN HEADINGS

See Page 72 for Illustrations of Cases and Information on Column Headings and Symbols Used on This Page

DIFFUSED JUNCTION SILICON RECTIFIERS

WIRE LEAD TYPES—$I_{F(AV)}$ to 2 Amps

For consumer, commercial, industrial and military low power use. At degrees centigrade: *45°, †50°, ‡65°, §750°, #105°.

Type No.	Case	MAX. RATINGS $I_{F(AV)}$ A	I_{FM} (rep) A	I_{FM} (surge) A	V_{RM} V	CHAR. $I_{RM(dyn)}$ max mA	EACH 1-9	10-99	100-Up
1N3754	GG	‡0.125	1.3	30	100	0.3	.39	.32	.23
1N3755	GG	‡0.125	1.3	30	200	0.3	.40	.33	.24
1N3756	GG	‡0.125	1.3	30	400	0.3	.42	.35	.26
40265	GG	‡0.125	1.3	30	400	0.4	.42	.35	.25
1N3563	HH	§0.3	4	35	1000	0.2	1.14	.94	.69
1N3196	HH	§0.4	5	35	800	0.2	.89	.74	.54
1N3256	HH	§0.4	5	35	800	0.2	.94	.78	.57
1N3193	HH	§0.5	6	35	200	0.2	.42	.35	.26
1N3194	HH	§0.5	6	35	400	0.2	.46	.38	.28
1N3195	HH	§0.5	6	35	600	0.2	.64	.53	.39
1N3253	HH	§0.5	6	35	200	0.2	.46	.38	.28
1N3254	HH	§0.5	6	35	400	0.2	.51	.42	.30
1N3255	HH	§0.5	6	35	600	0.2	.67	.56	.41
40495	HH	‡0.5	5	25	400	0.4	.36	.30	.22
1N5214	HH	§0.6	5	50	800	0.2	.97	.81	.59
1N5218	HH	§0.6	5	50	800	0.2	1.01	.85	.62
1N444B	DO-1	†0.65	3.5		500	1.75μA	1.10	.92	.67
1N445B	DO-1	†0.65	for		600	2μA	1.35	1.12	.82
1N440B	DO-1		resis-		100	0.3μA	.64	.53	.38
1N441B	DO-1	†0.75	tive	15	200	0.75μA	.72	.60	.43
1N442B	DO-1	for	or ind.	for	300	1μA	.79	.66	.51
1N443B	DO-1	resis-	load	resis-	400	1.5μA	.95	.79	.58
1N536	DO-1	tive		tive	50	5μA	.43	.36	.27
1N537	DO-1	or		or	100	5μA	.48	.40	.29
1N538	DO-1	induc-		induc-	200	5μA	.54	.45	.32
1N539	DO-1	tive		tive	300	5μA	.60	.50	.36
1N540	DO-1	load		load	400	5μA	.67	.56	.41
1N547	DO-1				600	5μA	.95	.79	.57
1N1095	DO-1				500	5μA	.73	.61	.48
1N1763A	DO-1	§0.75	5	35	400	0.1	.51	.42	.30
1N1764A	DO-1	§0.75	5	35	500	0.1	.63	.52	.38
1N2858A	DO-1	§0.75	5	35	50	0.1	.40	.33	.24
1N2859A	DO-1	§0.75	5	35	100	0.1	.45	.37	.27
1N2860A	DO-1	§0.75	5	35	200	0.1	.48	.40	.29
1N2861A	DO-1	§0.75	5	35	300	0.1	.51	.42	.30
1N2862A	DO-1	§0.75	5	35	400	0.1	.58	.48	.35
1N2863A	DO-1	§0.75	5	35	500	0.1	.70	.58	.42
1N2864A	DO-1	§0.75	5	35	600	0.1	.84	.70	.51
1N5211	HH	§0.75	6	50	200	0.2	.46	.38	.28
1N5212	HH	§0.75	6	50	400	0.2	.51	.42	.30
1N5213	HH	§0.75	6	50	600	0.2	.67	.56	.41
1N5215	HH	§0.75	6	50	200	0.2	.51	.42	.30
1N5216	HH	§0.75	6	50	400	0.2	.54	.45	.33
1N5217	HH	§0.75	6	50	600	0.2	.72	.60	.44
40642	DO-26	*1	6.5	70	550	.....	1.19	.99	.72
40643	DO-26	*1	6	10	450	.....	1.09	.91	.66
40644	DO-26	*1	0.3	20	550	.....	1.00	.83	.60
40266	DO-1	#2	10	35	100	10	.35	.29	.21
40267	DO-1	#2	10	35	200	10	.40	.33	.24

STUD MOUNTED TYPES—$I_{F(AV)}$ to 40 Amps

For industrial and military applications. At degrees centigrade: *135°, †150°.

Type No.	Case	MAX. RATINGS $I_{F(AV)}$ A	I_{FM} (rep) A	I_{FM} (surge) A	V_{RM} V	CHAR. $I_{RM(dy)}$ max mA	EACH 1-9	10-99	100-Up
1N1612	DO-4	*5	15	150	50	1	1.30	1.08	.78
1N1613	DO-4	*5	15	150	100	1	1.49	1.24	.90
1N1614	DO-4	*5	15	150	200	1	2.28	1.90	1.38
1N1615	DO-4	*5	15	150	400	1	4.45	3.71	2.70
1N1616	DO-4	*5	15	150	600	1	6.43	5.36	3.90
1N1341B	DO-4	†6	25	160	50	0.45	1.39	1.16	.84
1N1342B	DO-4	†6	25	160	100	0.45	1.59	1.32	.96
1N1344B	DO-4	†6	25	160	200	0.45	2.58	2.15	1.56
1N1345B	DO-4	†6	25	160	300	0.45	3.66	3.05	2.22
1N1346B	DO-4	†6	25	160	400	0.45	4.75	3.96	2.88
1N1347B	DO-4	†6	25	160	500	0.45	5.75	4.79	3.48
1N1348B	DO-4	†6	25	160	600	0.45	6.94	5.78	4.20
40108	DO-4	†10	40	140	50	2	1.19	.99	.72
40109	DO-4	†10	40	140	100	2	1.39	1.16	.84
40110	DO-4	†10	40	140	200	1.5	1.89	1.57	1.14
40111	DO-4	†10	40	140	300	1.5	2.58	2.15	1.56
40112	DO-4	†10	40	140	400	1	2.98	2.48	1.80
40114	DO-4	†10	40	140	600	0.75	4.45	3.71	2.70
40115	DO-4	†10	40	140	800	0.65	7.92	6.60	4.80
1N1199A	DO-4	†12	50	240	50	3	1.49	1.24	.90
1N1200A	DO-4	†12	50	240	100	2.5	1.69	1.41	1.02
1N1202A	DO-4	†12	50	240	200	2	2.98	2.48	1.80
1N1203A	DO-4	†12	50	240	300	1.75	14.17	3.47	2.52
1N1204A	DO-4	†12	50	240	400	1.5	5.35	4.46	3.24
1N1205A	DO-4	†12	50	240	500	1.25	6.44	5.36	3.90
1N1206A	DO-4	†12	50	240	600	1	7.42	6.19	4.50
40259	DO-4	†12	50	250	600	0.6	14.86	12.40	10.25
40208	DO-5	†18	72	250	50	3	1.19	.99	.72
40209	DO-5	†18	72	250	100	3	1.59	1.32	.96
40210	DO-5	†18	72	250	200	2.5	2.35	1.78	1.30
40212	DO-5	†18	72	250	400	2	3.47	2.89	2.10
40213	DO-5	†18	72	250	500	1.75	4.37	3.63	2.64
40214	DO-5	†18	72	250	600	1.5	5.56	4.21	3.06
1N1195A	DO-5	†20	90	350	300	3.2	4.66	3.88	2.82
1N1196A	DO-5	†20	90	350	400	2.5	5.94	4.95	3.60
1N1197A	DO-5	†20	90	350	500	2.2	7.13	5.94	4.32
1N1198A	DO-5	†20	90	350	600	1.5	8.42	7.01	5.10
1N1183A	DO-5	†40	195	800	50	2.5	2.59	2.15	1.56
1N1184A	DO-5	†40	195	800	100	2.5	2.98	2.48	1.80
1N1186A	DO-5	†40	195	800	200	2.5	4.26	3.55	2.58
1N1187A	DO-5	†40	195	800	300	2.5	5.93	4.95	3.60
1N1188A	DO-5	†40	195	800	400	2.2	7.42	6.19	4.50
1N1189A	DO-5	†40	195	800	500	2	8.92	7.43	5.40
1N1190A	DO-5	†40	195	800	600	1.8	10.38	8.65	6.30

See the Semiconductor Directory, pages 7 thru 40, for quantity prices of 1000-Up

HIGH-VOLTAGE SILICON RECTIFIER STACKS

For industrial and military applications. $V_{RM(rep)}$ to 12,000 V. $V_{RM(nonrep)}$, 60-125°C. Cases: *H, †J.

Type No.	MAX. RATINGS V_{RM} (rep) V	V_{RM} (non-rep) V	V_R (rms) V	$I_{F(AV)}$ T_A=60°C A	I_{FM} (surge) A	Char I_{RM} (dyn) A	EACH 1-9	10-29	30-Up
CR201*	1900	2280	1345	0.4	10	0.1	3.72	3.10	2.96
CR102†	2530	3035	1790	0.925	20	0.3	8.65	7.20	6.85
CR103†	3165	3800	2240	0.825	20	0.3	9.76	8.15	7.75
CR203*	3165	3800	2400	0.4	10	0.1	5.75	4.80	4.56
CR104†	4430	5315	3130	0.7	20	0.3	11.50	9.60	9.10
CR204*	4800	5760	3395	0.4	10	0.1	6.90	5.75	5.47
CR105†	5065	6080	3580	0.7	20	0.3	12.66	10.55	10.05
CR106†	6330	7595	4475	0.65	20	0.3	14.40	12.00	11.40
CR107†	7595	9115	5370	0.6	20	0.3	15.54	12.95	12.30
CR208*	8000	9600	5655	0.4	10	0.1	10.08	8.40	8.00
CR108†	8230	9875	5820	0.6	20	0.3	16.70	13.90	13.20
CR109†	9495	11395	6710	0.6	20	0.3	18.42	15.35	14.60
CR110†	10130	12155	7160	0.6	20	0.3	19.60	16.30	15.50
CR212*	12000	14400	8485	0.4	10	0.1	14.40	12.00	11.40

RCA Silicon Rectifiers and Thyristors

SEE THE SEMICONDUCTOR DIRECTORY (PAGES 7-40) FOR QUANTITY PRICES OF 1000-UP

EXPLANATION OF COLUMN HEADINGS

See Page 72 for Illustrations of Cases and Information on Column Headings and Symbols Used on This Page

PLUG-IN SILICON RECTIFIERS

High-voltage diffused-junction types that are direct replacements for designated mercury-vapor and gas rectifier tubes. Hermetically sealed, need no warmup time.

Type No.	Case	Replace Types	EACH 1-9	EACH 10-99	EACH 100-Up
CR273/8008	W	8008	72.00	60.00	60.00
CR274/872A	X	872, 872A	72.00	60.00	60.00
CR275/866A/3B28/3B25	Y	866, 866A, 3B28, 3B25	15.70	13.10	13.10

SILICON RECTIFIER BRIDGES (Case K)

For wide industrial and military applications. Single-phase full-wave types. $I_{F(AV)}$ to 70 A.

Type No.	$I_{F(AV)}$ A	$V_{out(AV)}$ V	$V_{R(rms)}$ V	EACH 1-9	EACH 10-29	EACH 30-Up
CR401	18	200	222	34.20	28.00	26.60
CR402	18	400	444	38.40	32.00	30.40
CR403	18	800	888	50.48	44.00	41.80
CR404	34	200	222	36.00	30.00	28.50
CR405	34	400	444	43.20	36.00	34.20
CR406	34	800	888	64.80	54.00	51.30
CR407	70	200	222	48.00	40.00	38.00
CR408	70	400	444	57.60	48.00	45.60
CR409	70	800	888	76.80	64.00	60.80

Three-phase full-wave types. $I_{F(AV)}$ to 92 A.

Type No.	$I_{F(AV)}$ A	$V_{out(AV)}$ V	$V_{R(rms)}$ V	EACH 1-9	EACH 10-29	EACH 30-Up
CR501	24	300	222	48.00	40.00	38.00
CR502	24	600	444	57.60	48.00	45.60
CR503	46	300	222	60.00	50.00	47.50
CR504	46	600	444	74.40	62.00	58.90
CR505	92	300	222	76.80	64.00	60.80
CR506	92	600	444	108.00	84.00	79.80

THYRISTORS—SILICON TRIACS

*At T_A, †V_{GM} @ T_C, 25°C, maximum V. #Gate Trigger Cap., 0.1 μF minimum. V_{DROM} @ T j=100°C gate open, except §90°C. V_{GT} and I_{GT} @ T_C=25°C. ΔIntegral trigger types. ‡TO-5, two 1" leads. ♦Can be triggered by IC zero-voltage switch RCA-CA3059. **Forced-air cooling. ##Heat-sink temperature. V_{GT} of 2.5 or less, except internal trigger types, 40f, and types 40664 and 40667, 4.

Type No.	Case	MAX. RATINGS On-State Current I_T (rms) A	@T_C	V_{DROM} V	Gate Power P_{GM} W	$P_{G(AV)}$ W	CHAR. I_{GT} max mA	EACH 1-9	EACH 10-99	EACH 100-Up
40731♦	N	2.3	75°C**	200	16	0.2	45	2.08	1.73	1.26
40732♦	N	2.3	75°C**	400	16	0.2	45	2.68	2.23	1.62
2N5754	Modified TO-5	2.5	70°C	100	10	0.15	40	1.68	1.40	1.02
2N5755	Modified TO-5	2.5	70°C	200	10	0.15	40	1.76	1.47	1.07
2N5756	Modified TO-5	2.5	70°C	400	10	0.15	40	2.22	1.85	1.34
40684	N	2.5	70°C	100	10	0.15	40	1.88	1.57	1.14
40685	N	2.5	70°C	200	10	0.15	40	1.96	1.63	1.19
40686	N	2.5	70°C	400	10	0.15	40	2.42	2.01	1.46
40693♦	N	2.5	70°C	100	10	0.15	45	1.88	1.57	1.14
40694♦	N	2.5	70°C	200	10	0.15	45	1.97	1.64	1.19
40695♦	N	2.5	70°C	400	10	0.15	45	2.42	2.01	1.46
40696♦	Modified TO-5	2.5	70°C	100	10	0.15	45	1.69	1.41	1.02
40697♦	Modified TO-5	2.5	70°C	200	10	0.15	45	1.76	1.47	1.97
40698♦	Modified TO-5	2.5	70°C	400	10	0.15	45	2.22	1.85	1.34
40525	Modified three 1" leads	2.5	60°C	100§	10	0.15	3	1.89	1.57	1.14
40526	Modified three 1" leads	2.5	60°C	200§	10	0.15	3	2.14	1.78	1.30
40527	Modified three 1" leads	2.5	60°C	400§	10	0.15	3	2.93	2.48	1.80
40528	Modified three 1" leads	2.5	70°C	100	10	0.15	10	1.89	1.57	1.14
40529	Modified three 1" leads	2.5	70°C	200	10	0.15	10	1.95	1.62	1.18
40530	Modified three 1" leads	2.5	70°C	400	10	0.15	10	2.77	2.31	1.68
40531	N	2.5	60°C*	Same data as 40525				2.08	1.73	1.26
40532	N	2.5	60°C*	Same data as 40526				2.33	1.94	1.41
40533	N	2.5	60°C*	Same data as 40527				3.18	2.65	1.92
40534	N	2.5	70°C*	Same data as 40528				2.08	1.73	1.26
40535	N	2.5	70°C*	Same data as 40529				2.14	1.78	1.30
40536	N	2.5	70°C*	Same data as 40530				2.98	2.48	1.80
40733♦	N	4.2	75°C##	200	16	0.2	45	1.98	1.65	1.20

THYRISTORS—SILICON TRIACS (Cont'd)

Type No.	Case	MAX. RATINGS On-State Current I_T (rms) A	@T_C	V_{DROM} V	Gate Power P_{GM} W	$P_{G(AV)}$ W	CHAR. I_{GT} max mA	EACH 1-9	EACH 10-99	EACH 100-Up
40734♦	N	4.2	75°C##	400	16	0.2	45	2.58	2.15	1.56
40723♦	Modified TO-5	6	75°C	450	16	0.2	45	2.39	1.95	1.42
40724♦	N	6	75°C	450	16	0.2	45	2.46	2.05	1.49
40725♦	Modified TO-5	6	75°C	200	16	0.2	45	1.89	1.57	1.14
40726♦	Modified TO-5	6	75°C	400	16	0.2	45	2.47	2.06	1.50
40727♦	TO-66	6	75°C	200	16	0.2	45	2.47	2.06	1.50
40728♦	TO-66	6	75°C	400	16	0.2	45	2.87	2.39	1.74
40729♦	P	6	75°C	200	16	0.2	45	2.68	2.23	1.62
40730♦	P	6	75°C	400	16	0.2	45	3.12	2.56	1.86
40429	TO-66	6	75°C	200	20	0.2	25	2.47	2.06	1.50
40430	TO-66	6	75°C	400	20	0.2	25	2.87	2.39	1.74
40502	P	6	75°C*	Same data as 40429				2.68	2.23	1.62
40503	P	6	75°C*	Same data as 40430				3.08	2.56	1.86
40485	‡	6	75°C	200	20	0.2	25	1.99	1.57	1.14
40486	‡	6	75°C	400	20	0.2	25	2.47	2.06	1.50
40509	N	6	75°C*	Same data as 40485				2.08	1.73	1.26
40510	N	6	75°C*	Same data as 40486				2.68	2.23	1.62
40431Δ	‡	6	75°C	200	20	0.2	0.1#	3.08	2.56	1.86
40432Δ	‡	6	75°C	400	20	0.2	0.1#	3.57	2.97	2.16
40511Δ	N	6	75°C*	Same data as 40431				3.27	2.72	1.98
40512Δ	N	6	75°C*	Same data as 40432				3.77	3.14	2.28
40638	S	6	58°C	200	16	0.2	40	1.98	1.65	1.20
40639	S	6	58°C	400	16	0.2	40	2.57	2.15	1.56
40664	‡	6	75°C	450	16	0.2	50	2.67	2.22	1.61
40667	CC	6	75°C	450	16	0.2	50	2.77	2.31	1.68
40668	CC	8	80°C	200	16	0.2	25	1.94	1.62	1.18
40669	CC	8	80°C	400	16	0.2	25	2.19	1.82	1.32
40721♦	CC	8	80°C	200	16	0.2	45	1.95	1.62	1.18
40722♦	CC	8	80°C	400	16	0.2	45	2.14	1.82	1.32
40717♦	B	10	85°C	200	16	0.5	45	4.06	3.38	2.46
40718♦	B	10	85°C	400	16	0.5	45	5.30	4.41	3.20
40719♦	A	10	85°C	200	16	0.5	45	4.56	3.80	2.82
40720♦	A	10	85°C	400	16	0.5	45	5.88	4.90	3.56
2N5567	B	10	85°C	200	16	0.5	25	4.06	3.38	2.46
2N5568	B	10	85°C	400	16	0.5	25	5.30	4.41	3.20
2N5569	A	10	85°C	200	16	0.5	25	4.66	3.88	2.82
2N5570	A	10	85°C	400	16	0.5	25	5.88	4.90	3.56
40711♦	B	15	80°C	200	16	0.5	45	4.17	3.47	2.52
40712♦	B	15	80°C	400	16	0.5	45	5.58	4.65	3.38
40713♦	A	15	80°C	200	16	0.5	45	4.75	3.96	2.88
40714♦	A	15	80°C	400	16	0.5	45	6.18	5.15	3.74
40715♦	TO-66	15	70°C	200	20	0.45	45	2.98	2.48	1.80
40716♦	TO-66	15	70°C	400	20	0.45	45	3.92	3.27	2.38
2N5571	B	15	80°C	200	16	0.5	50	4.16	3.47	2.52
2N5572	B	15	80°C	400	16	0.5	50	5.58	4.65	3.38
2N5573	A	15	80°C	200	16	0.5	50	4.75	3.96	2.88
2N5574	A	15	80°C	400	16	0.5	50	6.18	5.15	3.74
40575	TO-66	15	70°C	200	20	0.45	80	2.98	2.48	1.80
40576	TO-66	15	70°C	400	20	0.45	80	3.95	3.29	2.38
40660	B	30	65°C	200	40	0.75	50	6.94	5.78	4.20
40661	B	30	65°C	400	40	0.75	50	9.87	8.22	5.98
40662	A	30	65°C	200	40	0.75	50	7.54	6.27	4.56
40663	A	30	65°C	400	40	0.75	50	10.48	8.71	6.34
40671	B	30	65°C	600	40	0.75	.....	13.38	11.14	8.10
40672	A	30	65°C	600	40	0.75	.....	12.42	10.37	8.58
40705♦	B	30	65°C	200	40	0.75	45	6.93	5.78	4.20
40706♦	B	30	65°C	400	40	0.75	45	9.86	8.22	5.98
40707♦	A	30	60°C	200	40	0.75	45	7.53	6.27	4.56
40708♦	A	30	60°C	400	40	0.75	45	10.48	8.71	6.34
40709♦	B	30	65°C	600	40	0.75	45	13.38	11.14	8.10
40710♦	A	30	60°C	600	40	0.75	45	12.42	10.37	8.58
40699♦	B	40	70°C	200	40	0.75	45	9.80	8.17	5.94
40700♦	B	40	70°C	400	40	0.75	45	13.75	11.47	8.34
40701♦	B	40	70°C	600	40	0.75	45	16.38	13.63	11.28
40702♦	A	40	65°C	200	40	0.75	45	10.40	8.66	6.30
40703♦	A	40	65°C	400	40	0.75	45	12.62	10.51	8.70
40704♦	A	40	65°C	600	40	0.75	45	17.05	14.21	11.76
2N5441	B	40	70°C	200	40	0.75	50	9.80	8.17	5.94
2N5442	B	40	70°C	400	40	0.75	50	13.75	11.47	8.34
2N5443	B	40	65°C	600	40	0.75	50	16.35	13.63	11.28
2N5444	A	40	65°C	200	40	0.75	50	10.40	8.66	6.30
2N5445	A	40	65°C	400	40	0.75	50	12.62	10.51	8.70
2N5446	A	40	65°C	600	40	0.75	50	17.10	14.21	11.76

THYRISTORS—SILICON DIACS (Case DO-26)

Bidirectional trigger diodes for triggering triacs.

Type No.	MAX. RATINGS I_{FM} A	Device Dissip. to T_C=75°C	CHAR. at T_C=25°C $V_{(BO)O}$ min.	Break-down V Sym. max.	$I_{(BO)M}$ max.	EACH 1-9	EACH 10-99	EACH 100-Up
1N5411	2	0.5 W	29	±3	50 μA	.73	.61	.44

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Thyristors, Diodes, Switching Transistors

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THYRISTORS—SCR'S

High-quality Thyristors specially designed for a wide variety of military, industrial and consumer applications. $I_{T(rms)}$ to 16 amps. V_{GT} @ T_C, 25° C. $V_{(BO)O}$ @ T_C, 100° C; except†, T_C, 125° C. *T_A, ° Three leads. Types 2N3528, 2N3529 and 2N4102 have 2 amps, maximum rms rating. Types 2N3228 to 40641 have 5 amps maximum rms rating. Types 2N3668 to 2N4103 have 12.5 amps maximum rms rating. Types 2N1842A to 2N1850A have 16 amps maximum rms rating. Types 2N684 to 2N690 have 25 amps maximum rms rating. Types 2N3870 to 40735 have 35 amps maximum rms rating.

Type No.	Case	MAX. RATINGS I_T Av. A	@ T_C °C	V_{RSOM} V	CHARACTERISTICS $V_{(BO)O}$ min V	V_{GT} max VDC	I_{GT} max mADC	EACH 1-9	10-99	100-Up
2N3528	TO-8	1.3	25*	330	200	2	15	1.90	1.58	1.14
2N3529	TO-8	1.3	25*	660	400	2	15	2.36	1.96	1.43
2N4102	TO-8	1.3	25*	700	600	2	15	3.17	2.64	1.92
2N3228	TO-66	3.2	75	330	200	2	15	1.95	1.62	1.18
2N3525	TO-66	3.2	75	660	400	2	15	2.77	2.31	1.68
2N4101	TO-66	3.2	75	700	600	2	15	3.65	3.05	2.22
40504	P	3.2	75*	330	200	2	15	2.14	1.78	1.30
40505	P	3.2	75*	660	400	2	15	2.98	2.48	1.80
40506	P	3.2	75*	700	600	2	15	3.87	3.22	2.34
40553	TO-66	3.2	60	330	200	3.5	40	3.30	2.75	2.00
40554	TO-66	3.2	60	660	400	3.5	40	5.32	4.44	3.22
40555	TO-66	3.2	60	700	600	3.5	40	5.72	4.76	3.47
40640	TO-66	3.2	60	.....	500	4	30	3.27	2.72	1.98
40641	TO-66	3.2	60	.....	400	4	30	3.42	2.85	2.08
40378	C	4.5	60	330	200	2	15	1.77	1.47	1.07
40379	C	4.5	60	660	400	2	15	2.22	1.85	1.34
40507	N	4.5	60*	330	200	2	15	1.96	1.63	1.19
40508	N	4.5	60*	660	400	2	15	2.41	2.01	1.46
40654	C°	.....	60	200	250	1.5	15	1.95	1.62	1.18
40655	C°	.....	60	400	500	1.5	15	2.44	2.03	1.48
40656	S	.....	.....	200	250	1.5	15	2.04	1.70	1.24
40657	S	.....	.....	400	500	1.5	15	2.53	2.11	1.54
40658	N	.....	.....	200	250	1.5	15	2.24	1.86	1.36
40659	N	.....	.....	400	500	1.5	15	2.63	2.19	1.60
2N3668	TO-3	8	80	150	100	2	40	2.87	2.39	1.74
2N3669	TO-3	8	80	330	200	2	40	3.38	2.81	2.04
2N3670	TO-3	8	80	660	400	2	40	4.56	3.80	2.76
2N4103	TO-3	8	80	700	600	2	40	6.15	5.12	3.72
2N1842A	TO-48	10	80	35	25†			2.64	2.20	1.60
2N1846A	TO-48	10	80	300	200†	3.7 V	4.5 mA	5.35	4.46	3.75
2N1847A	TO-48	10	80	350	250†	@	@	6.12	5.10	3.70
2N1848A	TO-48	10	80	400	300†	T_C=	T_C=	6.62	5.51	4.00
2N1849A	TO-48	10	80	500	400†	−65° C	125° C	7.84	6.54	4.75
2N1850A	TO-48	10	80	600	500†			9.07	7.56	5.50
2N684	TO-48	16	65	225	150†			5.03	4.19	3.05
2N685	TO-48	16	65	300	200†			5.77	4.81	3.50
2N686	TO-48	16	65	350	250†	3 V	25mA	6.44	5.36	3.90
2N687	TO-48	16	65	400	300†	@	@	6.93	5.77	4.20
2N688	TO-48	16	65	500	400†	T_C=	T_C=	8.09	6.74	4.90
2N689	TO-48	16	65	600	500†	−65° C	125° C	9.70	8.05	5.85
2N690	TO-48	16	65	720	600†			10.40	8.67	6.30
2N3870	B	22	65	150	100	2	40	4.66	3.88	2.82
2N3871	B	22	65	330	200	2	40	5.45	4.54	3.30
2N3872	B	22	65	660	400	2	40	7.35	6.11	4.44
2N3873	B	22	65	700	600	2	40	9.88	8.22	5.98
2N3896	A	22	65	150	100	2	40	5.25	4.37	3.18
2N3897	A	22	65	330	200	2	40	6.04	5.03	3.66
2N3898	A	22	65	660	400	2	40	7.92	6.60	4.80
2N3899	A	22	65	700	600	2	40	10.50	8.75	6.36
2N3650	TO-48	25	40	150	100	3	180	11.90	9.90	7.20
2N3651	TO-48	25	40	300	200	3	180	14.86	12.40	10.26
2N3652	TO-48	25	40	400	300	3	180	22.50	18.71	15.48
2N3653	TO-48	25	40	500	400	3	180	27.35	22.77	18.48
40680	II	25	60	100	100	2	40	6.54	5.45	3.96
40681	II	25	60	200	200	2	40	7.44	6.19	4.50
40682	II	25	60	400	400	2	40	9.30	7.76	5.64
40683	II	25	60	600	600	2	40	11.40	9.90	7.20
40735	TO-48	25	40	700	600	3	180	37.75	31.40	26.00

THYRISTORS—PULSE TYPE SCR

TO-48 case. Designed to meet rigid standards of industry and military. Performance is not affected by temperature and atmospheric conditions. $V_{(BO)O}$ T_C=125° C is 600 volts.

Type No.	MAX. RATINGS I_{TRM} Sinusoidal A	rep rate p/s	base width μS	V_{RSOM} V	di/dt A/μS	$P_{T(AV)}$ T_C= 65° C W	CHAR. V_T @ 400A/ 2 μS pt V	EACH 1-9	10-99	100-Up'
40216	900	800	16	720	400	30	14	50.60	42.20	34.90

GERMANIUM TUNNEL DIODES (Case T)

Small-signal. $I_{P(typ)}$ to 100 mA. * includes 0.8 pF case cap.

Type No.	CHARACTERISTICS I_P max mA	C^* max pF	I_P/I_V min	V_{PP} min mV	V_{PP} max mV	tr typ ps	EACH 1-9	10-99	100-Up
40561	5.5	25	6:1	430	590	1800	5.45	4.54	3.30
40566	5.25	15	8:1	490	560	1200	8.90	7.43	5.40
40571	5.25	8	8:1	490	560	600	10.30	8.60	6.24
40562	11	25	6:1	440	600	900	5.45	4.54	3.30
40567	10.5	15	8:1	510	580	600	7.84	6.52	4.74
40572	10.5	8	8:1	510	580	300	8.40	7.01	5.10
40563	22	30	6:1	460	620	600	5.45	4.54	3.30
40568	21	20	8:1	530	600	400	8.40	7.01	5.10
40573	21	10	8:1	530	600	200	9.77	8.15	5.94
40564	55	40	6:1	530	640	350	5.45	4.54	3.30
40569	52.5	25	8:1	550	620	200	8.90	7.43	5.40
40574	52.5	12	8:1	550	620	100	12.90	10.75	7.80
40565	110	40	6:1	540	650	150	5.45	4.54	3.30
40570	105	25	8:1	550	630	100	12.90	10.75	7.80

GERMANIUM COMPENSATING DIODES

For temperature, voltage variations. 2-lead TO-1 Case GG.

Type No.	MAX. RATINGS I_{FM} (peak) mA	$I_{F(AV)}$ mA	V_{RM} V	CHAR. V_F @ T_A=25° C mV @ mA		EACH 1-9	10-99	100-Up
1N2326	200	100	−1	280 max.	100	.66	.55	.40

GERMANIUM DAMPER DIODES

For TV horizontal deflection systems. Case TO-3.

Type No.	MAX. RATINGS V_{RM} peak V	V_R cont. V	I_{FM} peak A	CHAR. $V_{F(AV)}$ V	I_R μA	EACH 1-9	10-99	100-Up
40442	200	40	10	0.77	150	1.00	.83	.60
1N4785	320	60	10	0.77	150	1.30	1.08	.78

COMPUTER SWITCHING AND PULSE TRANSISTORS

SILICON PNP TYPES—LOW LEVEL/MEDIUM SPEED

All are Case TO-5 except *N and †M.

Type No.	CHARACTERISTICS f_T min MHz	V_{CE} (sat) max V	C_{obo} max pF	h_{FE} @ I_C min	mA	MAX. RATINGS V_{CBO} V	I_C A	EACH 1-9	10-99	100-Up
2N5322	50	−0.7	.....	30	−500	−100	−2	2.28	1.90	1.38
2N5323	50	−1.2	.....	40	−500	−75	−2	1.69	1.41	1.02
2N4036	60	−0.65	30	40	−150	−90	−1	1.59	1.32	.96
2N4037	60	−1.4	30	50	−150	−60	−1	1.39	1.16	.84
2N4314	60	−1.4	30	50	−150	−90	−1	1.49	1.24	.90
40391 *	60	−1.4	30	50	−150	−60	−1	1.49	1.24	.90
40394 †	60	−1.4	30	50	−150	−60	−1	1.49	1.24	.90

SILICON NPN TYPES LOW LEVEL/HIGH SPEED

All have TO-18 case, except 2N3119, TO-5; 2N5186, 2N5187 and 2N3261, TO-52. #Pulsed. **Limited by dissipation. Maximum range on C_{obo} is 3 to 6 pF.

Type No.	CHARACTERISTICS f_T min MHz	$V_{CE(sat)}$ max V	h_{FE} @ I_C min	mA	ton max ns	MAX. RATINGS V_{CBO} V	I_C A	EACH 1-9	10-99	100-Up
2N706	200	0.6	20	10#	...	25	...	.66	.55	.40
2N706A	200	0.6	20	10	40	25	50	.88	.73	.53
2N3119	250	0.5	50	100#	40	100	0.5	6.44	5.36	3.90
2N834	350	0.25	25	10	35	40	0.2	2.38	1.98	1.44
2N3011	400	0.2	30	10#	15	30	0.2	1.19	.99	.72
2N5186	400	0.3	25	10	25	10	0.3	.48	.40	.29
2N5187	400	0.25	30	10	18	25	0.5	.54	.45	.33
2N2369A	500	0.2	20	100#	12	40	0.2	1.98	1.65	1.20
2N709	600	0.3	20	10#	15	15	**	1.59	1.32	.96
2N2475	600	0.4	30	20	15	**	**	1.95	1.62	1.18
2N3261	600	0.35	40	10	13	40	0.5	1.59	1.32	.96

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RCA Switching Transistors

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EXPLANATION OF COLUMN HEADINGS

See Page 72 for Illustrations of Cases and Information on Column Headings and Symbols Used on This Page

COMPUTER SWITCHING AND PULSE TRANSISTORS

SILICON NPN TYPES—HIGH VOLTAGE

#Pulsed.

Type No.	Case	CHARACTERISTICS f_T min. MHz	V_{CE} (sat) max. V	h_{FE} @ I_C min	I_C mA	MAX. RATINGS V_{CBO} V	P_T T_A W	EACH 1-9	10-99	100-Up
2N2476	TO-5	250	0.75	20	150	60	0.6	1.39	1.16	.84
2N2477	TO-5	250	0.65	40	150	60	0.6	1.59	1.32	.96
2N3512	TO-5	250	0.4	10	500#	60	0.8	1.30	1.08	.78
2N5188	TO-39	250	0.5	20	500#	60	0.8	.79	.66	.48
2N5189	L	250	1	35	500	60	1	.78	.65	.47
2N5262	L	250	0.8	20	1A#	75	1	1.95	1.62	1.18
2N3262	TO-52	600	0.35	30	100	40	0.3	8.58	7.43	5.40

GERMANIUM PNP TYPES—HIGH VOLTAGE (Case TO-5)

Type No.	CHARACTERISTICS f_T min kHz	h_{FE} min	I_C mA	h_{FE} @ I_C min	mA	MAX. V_{CBO} V	P_T T_A mW	EACH 1-9	10-99	100-Up
2N398	20	20	−5	.....	.....	−105	50	1.19	.99	.72
2N398A	40	20	−5	20	1	−105	150	1.17	.97	.71
2N398B	.....	20	−5	40	1	−105	250	1.49	1.24	.90

GERMANIUM PNP TYPES—LOW AND MEDIUM SPEED

CASE TO-5 ##f_T min. *Minimum.

Type No.	CHARACTERISTICS f_{hfb} min MHz	$V_{CE(sat)}$ max V	h_{FE} @ I_C min	mA	MAX. RATINGS V_{CBO} V	I_C mA	EACH 1-9	10-99	100-Up
2N1303	3	−0.2	20	−10	−30	−300	.54	.45	.32
2N404	4	−0.15	30	−12	−25	−100	.54	.45	.32
2N404A	4	−0.15	30	−12	−40	−150	.70	.58	.42
2N1305	5	−0.2	40	−10	−30	−300	.64	.53	.38
2N414	8	.....	.....	.....	−30	−200	.55	.46	.34
2N1307	10	−0.2	60	−10	−30	−300	.77	.64	.47
2N1309	15	−0.2	80	−10	−30	−300	1.12	.97	.41

GERMANIUM NPN TYPES—LOW AND MED. SPEED (Case TO-5)

Type No.	CHARACTERISTICS f_{hfb} min. MHz	$V_{CE(sat)}$ max. V	h_{FE} @ I_C min.	mA	MAX. RATINGS V_{CBO} V	I_C mA	EACH 1-9	10-99	100-Up
2N1302	3	0.2	20	10	25	300	.54	.45	.32
2N1605	4	0.15	40	20	25	100	.79	.66	.48
2N1605A	4	0.15	40	20	40	100	1.73	1.44	.83
2N388	5	.....	60	30	25	200	.60	.50	.36
2N388A	5	.....	60	30	40	200	1.13	.94	.68
2N1304	5	0.2	40	10	25	300	.64	.53	.38
2N1306	10	0.2	60	10	25	300	.79	.66	.48
2N1308	15	0.2	80	10	25	300	1.16	.97	.71

POWER SWITCHING AND PULSE TRANSISTORS

SILICON NPN TYPES—HIGH CURRENT

*High power. †High speed. #Pulsed. ‡$V_{CER(sus)}$. §T_A. ††Max.

Type No.	Case	Max. Ratings P_T T_C W	V_{CEO} (sus) V	I_C A	Characteristics h_{FE}@I_C min.	A	V_{CB} (sat) V	EACH 1-9	10-99	100-Up
2N5038†	TO-3	140	90	20	20	12	1	17.40	14.50	12.00
2N5039†	TO-3	140	75	20	20	10	1	13.90	11.60	9.60
2N5575*	EE	300	50	80	10	60	2#	43.60	36.25	30.00
2N5576*	DD	300	50	80	10	60	2#	43.60	36.25	30.00
2N5577*	FF	300	50	80	10	60	2#	48.70	40.60	33.60
2N5578*	EE	300	70	60	10	40	1.5#	52.20	43.50	36.00
2N5579*	DD	300	70	60	10	40	1.5#	52.20	43.50	36.00
2N5580#	FF	300	70	60	10	40	1.5#	55.25	47.85	39.60

POWER SWITCHING AND PULSE TRANSISTORS (Cont'd)

SILICON PNP TYPES—LOW SPEED

Type No.	Case	Max. Ratings P_T T_C W	V_{CEO} (sus) V	I_C A	Characteristics h_{FE} @ I_C Min.	A	V_{CE} (sat) V	EACH 1-9	10-99	100-Up
40406	TO-5	1§	−50	−0.7	30	−0.1	.....	1.43	1.19	.87
40410	N	3§	−90‡	−0.7	50	−150	1.4††	1.59	1.32	.96
40391	N	3.5§	−40	−1	50	−150#	1.4††	1.49	1.24	.90
40419	TO-5	5	−40	−0.7	35	−50	1.4††	1.39	1.16	.84
40362	TO-5	5	−70‡	−0.7	35	−50	1.4††	1.49	1.24	.90
40394	N	7	−40	−1	50	−150	1.4††	1.49	1.24	.90
2N5781	TO-5	10	−65	−3.5	20	−1	−0.5††	1.69	1.41	1.02
2N5782	TO-5	10	−50	−3.5	20	−1.2	−0.75††	1.49	1.24	.90
2N5783	TO-5	10	−40	−3.5	20	−1.6	−1.0††	1.39	1.16	.84

SILICON NPN TYPES—LOW SPEED

Type No.	Case	Max. Ratings P_T T_C W	V_{CEO} (sus) V	I_C A	Characteristics h_{FE} @ I_C Min.	A	V_{CE} (sat) V	EACH 1-9	10-99	100-Up
2N5784	TO-5	10	65	3.5	20	1	0.5††	1.49	1.24	.90
2N5785	TO-5	10	50	3.5	20	1.2	0.75††	1.30	1.08	.78
2N5786	TO-5	10	40	3.5	20	1.6	1.0††	1.19	.99	.72

GERMANIUM PNP TYPES—LOW SPEED

Type No.	Case	Max. Ratings P_T T_C W	V_{CEO} (sus) V	I_C A	Characteristics h_{FE} @ I_C Min.	A	V_{CE} (sat) V	EACH 1-9	10-99	100-Up
2N1183	TO-8	7.5	−20	−3	20	−0.4	−2	2.14	1.82	1.32
2N1183A	TO-8	7.5	−30	−3	20	−0.4	−2	2.77	2.31	1.68
2N1183B	TO-8	7.5	−40	−3	20	−0.4	−2	3.47	2.89	2.10
2N1184	TO-8	7.5	−20	−3	40	−0.4	−2	2.98	2.48	1.80
2N1184A	TO-8	7.5	−30	−3	40	−0.4	−2	3.37	2.81	2.04
2N1184B	TO-8	7.5	−40	−3	40	−0.4	−2	4.96	4.13	3.00
2N1905	TO-3	30	−100♦	−6	50	−1	−2	4.96	4.13	3.00
2N1906	TO-3	30	−130♦	−6	75	−1	−2	7.92	6.60	4.80

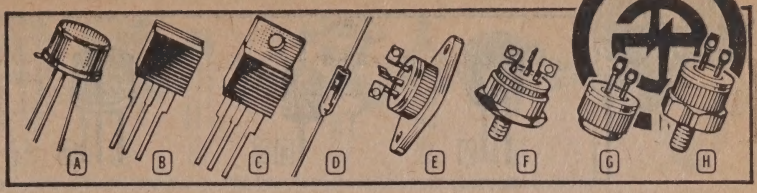
SILICON NPN TYPES—HIGH VOLTAGE

§$V_{CEO(sus)}$. ‡$V_{CER(sus)}$. §§Typ. #Pulsed.

Type No.	Case	MAX. RATINGS V_{CEO} (sus) V	P_T T_C W	CHARACTERISTICS f_T min MHz	h_{FE} @ I_C min	mA	EACH 1-9	10-99	100-Up
2N4347	TO-3	120§	100	0.8§§	20	2A	3.57	2.97	2.16
2N4348	TO-3	120§	120	0.7§§	15	5A	5.96	4.13	2.00
2N4390	TO-104	120	0.5T_A	50	20	20	.90	.75	.54
2N3441	TO-66	140§	25	1.2§§	20	500	2.98	2.48	1.80
2N3442	TO-3	140§	117	0.8§§	20	3A	5.45	4.54	3.30
2N3773	TO-3	140§	150	0.7§§	15	8A#	8.92	7.43	5.40
40349	TO-5	140§	8.75	1.1§§	25	150	1.88	1.56	1.13
40349V1	N	140§	4.4T_A	1.1§§	25	150	1.97	1.64	1.19
40373	P	140§	5.8T_A	1.2§§	20	500	3.13	2.56	1.86
2N4068	TO-104	150	0.5T_A	50	30	30	1.61	1.34	.97
40354	TO-104	150	0.5T_A	50	55§§	10	1.42	1.18	.86
40355	R	150	1T_A	50	55§§	10	1.49	1.24	.90
2N3583	TO-66	175§	35	15	10	1A	2.98	2.48	1.80
40346	TO-5	175‡	10	10	25	10	1.37	1.14	.83
40346V1	N	175‡	4T_A	10	25	10	1.48	1.23	.89
40346V2	M	175‡	10	10	25	10	1.48	1.23	.89
40374	P	175§	5.8T_A	15	10	1A	3.07	2.56	1.86
2N5415	TO-5	−200§§	10	15	30	−50	3.97	3.30	2.40
2N5239	TO-3	225§§	100	5	20	2A#	6.93	5.77	4.20
2N5804	TO-3	225	110	.....	3	1.0A	17.40	14.50	12.00
2N5838	TO-3	250	100	.....	20	0.5A	7.53	6.27	4.56
2N3440	TO-5	250§	10	15	40	20	2.19	1.82	1.32
2N3584	TO-66	250§	35	15	25	1A	4.96	4.13	3.00
2N4064	M	250§	10	15	40	20	2.28	1.90	1.38
40390	N	250§	3.5T_A	15	40	20	2.58	2.15	1.56
40412	TO-5	250‡	10	10	40	30	1.27	1.06	.77
40412V2	M	250‡	10	10	40	30	1.37	1.14	.83
2N5839	TO-3	275	100	.....	20	0.5A	6.34	5.28	3.84
2N5805	TO-3	300	110	.....	3	1.0A	22.62	18.85	15.60
2N3585	TO-66	300§	35	15	25	1A	7.92	6.60	4.80
2N4240	TO-66	300§	35	15	30	750	3.48	2.89	2.10
2N5240	TO-3	300§§	100	5	20	2A#	8.89	7.42	5.40
2N5416	TO-5	−300§§	10	15	30	−50	5.94	4.95	3.60
2N3439	TO-5	350§	10	15	40	20	4.45	3.71	2.70
2N4063	M	350§	10	15	40	0	4.56	3.80	2.76
2N5840	TO-3	350	100	.....	20	0.5A	10.70	8.91	6.48

ECC Corporation SCRs, Triacs, Diacs

CASE DESCRIPTIONS: Fig. A, TO-5 metal for 1.6A devices; Fig. B, clipped thermotab for 1.6A devices; Fig. C, thermotab for 3-16A devices; Fig. D, diac case; Fig. E, TO-3 press-fit for 40A devices; Fig. F, press fit with stud; Fig. G, press fit. Fig. I, plastic TO-5. ECC has SCRs, triacs and diacs to fill all of your solid-state control needs.



SILICON TRIAC THYRISTORS

ECC offers electrically isolated packages, which allow direct mounting to heat sink without requiring mica or other insulation. High reliability heavy glass passivation gives high voltage capability as well as long term high reliability. Triacs from 1.6A-40A and with voltages from 200-800 volts available. If you need higher voltages than listed, contact Allied Electronics. *Case isolated.

Type No.	Case	Max. on State $I_{T(RMS)}$ 60°C	Max. on State $I_{T(RMS)}$ 80°C	V_{DROM} Min.	V_{gt} Max.	I_{gt} mA	I_{HO} mA	Surge I_{TSM}	EACH 1-9	EACH 10-99	EACH 100-Up
Q2001MS2	A	2.3A	1.6A	200	3	10	4	20	1.90	1.59	1.06
Q-15	A	2.3A	1.6A	200	3	3	10	20	2.34	1.95	1.30
Q2001MT2	A	2.3A	1.6A	200	3	Trgr	10	20	1.90	1.59	1.06
Q4001MS2	A	2.3A	1.6A	400	3	10	4	20	1.99	1.66	1.11
Q-16	A	2.3A	1.6A	400	3	3	10	20	3.24	2.70	1.80
Q4001MT2	A	2.3A	1.6A	400	3	Trgr	10	20	1.99	1.66	1.11
Q2001P	J	2.3A	1.6A	200	3	25	10	20	1.90	1.59	1.06
A03002	B*	2.3A	1.6A	200	3	25	10	20	1.45	1.21	.81
A03022	B*	2.3A	1.6A	200	3	Trgr	10	20	1.90	1.59	1.06
Q4001P	J	2.3A	1.6A	400	3	25	10	20	1.99	1.66	1.11
A03004	B*	2.3A	1.6A	400	3	25	10	20	1.54	1.29	.86
A03024	B*	2.3A	1.6A	400	3	Trgr	10	20	1.99	1.66	1.11
A01001	C*	4.3A	3.0A	200	3	10	4	20	1.90	1.59	1.06
A01002	C*	4.3A	3.0A	200	3	25	10	20	1.45	1.21	.81
A01012	C*	4.3A	3.0A	200	3	Trgr	10	20	1.90	1.59	1.06
A01003	C*	4.3A	3.0A	400	3	10	4	20	1.99	1.66	1.11
A01004	C*	4.3A	3.0A	400	3	25	10	20	1.54	1.29	.86
A01014	C*	4.3A	3.0A	400	3	Trgr	10	20	1.99	1.66	1.11
A01021	C*	6.4A	4.5A	200	3	25	20	60	1.69	1.41	.94
A01041	C*	6.4A	4.5A	200	3	Trgr	20	60	2.34	1.95	1.30
A01022	C*	6.4A	4.5A	400	3	25	20	60	1.98	1.65	1.10
A01042	C*	6.4A	4.5A	400	3	Trgr	20	60	2.62	2.19	1.46
A01024	C*	6.4A	4.5A	600	3	25	20	60	3.78	3.15	2.10
A01044	C*	6.4A	4.5A	600	3	Trgr	20	60	4.42	3.69	2.46
A01061	C*	9.2A	6.5A	200	3	25	20	80	1.80	1.50	1.00
A01081	C*	9.2A	6.5A	200	3	Trgr	20	80	2.44	2.04	1.36
A01062	C*	9.2A	6.5A	400	3	25	20	80	2.08	1.74	1.16
A01082	C*	9.2A	6.5A	400	3	Trgr	20	80	2.73	2.28	1.52
A01064	C*	9.2A	6.5A	600	3	25	20	80	3.88	3.24	2.16
A01084	C*	9.2A	6.5A	600	3	Trgr	20	80	4.53	3.78	2.52
A01101	C*	12A	8.5A	200	3	25	35	100	2.12	1.77	1.18
A01121	C*	12A	8.5A	200	3	Trgr	35	100	2.77	2.31	1.54
A01102	C*	12A	8.5A	400	3	25	35	100	2.37	1.98	1.32
A01122	C*	12A	8.5A	400	3	Trgr	35	100	3.02	2.52	1.68
A01104	C*	12A	8.5A	600	3	25	35	100	4.17	3.48	2.42
A01124	C*	12A	8.5A	600	3	Trgr	35	100	4.82	4.02	2.68
A01141	C*	14A	10A	200	3	25	35	110	2.34	1.95	1.30
A01161	C*	14A	10A	200	3	Trgr	35	110	2.98	2.49	1.66
A01142	C*	14A	10A	400	3	25	35	110	2.88	2.40	1.60
A01162	C*	14A	10A	400	3	Trgr	35	110	3.52	2.94	1.96
A01144	C*	14A	10A	600	3	25	35	110	4.68	3.90	2.80
A01164	C*	14A	10A	600	3	Trgr	35	110	5.32	4.44	2.96
A01181	C*	22.5A	16A	200	3	50	35	180	3.24	2.70	1.80
A01201	C*	22.5A	16A	200	3	Trgr	35	180	3.88	3.24	2.16
A01182	C*	22.5A	16A	400	3	50	35	180	4.22	3.52	2.35
A01202	C*	22.5A	16A	400	3	Trgr	35	180	4.87	4.06	2.71
A01184	C*	22.5A	16A	600	3	50	35	180	10.41	8.68	5.80
A01204	C*	22.5A	16A	600	3	Trgr	35	180	11.10	9.25	6.15
Q2025C	E*	35A	25A	200	3	50	35	230	7.44	6.20	4.13
Q2025D	F*	35A	25A	200	3	50	35	230	7.80	6.50	4.33
Q4025C	E*	35A	25A	400	3	50	35	230	10.38	8.65	5.76
Q4025D	F*	35A	25A	400	3	50	35	230	10.74	8.95	5.96
Q6025C	E*	35A	25A	600	3	50	35	230	12.54	10.45	6.97
Q6025D	F*	35A	25A	600	3	50	35	230	12.90	10.75	7.17
Q2040PFC	E*	57A	40A	200	3	100	35	300	9.52	7.95	5.30
Q2040PFD	F*	57A	40A	200	3	100	35	300	9.90	8.25	5.50
Q4040PFC	E*	57A	40A	400	3	100	35	300	14.34	11.95	7.95
Q4040PFD	F*	57A	40A	400	3	100	35	300	14.70	12.25	8.15
Q6040PFC	E*	57A	40A	600	3	100	35	300	19.74	16.45	10.95
Q6040PFD	F*	57A	40A	600	3	100	35	300	20.10	16.75	11.15

TRIGGER DIACS

For triggering SCR's and triacs. For use in relaying and switching applications and for modulating power controls—motor speed, light dimming or heating.

Type No.	Case	VBO	VBB Min.	Symmetry	T_{on} µsec	Firing Cap. µF	EACH 1-9	EACH 10-99	EACH 100-Up
GT40	D	43±5V	3V	±2V	1	.15	.72	.60	.40
GT60	D	60±5V	3V	±2V	1	.15	.72	.60	.40

SENSITIVE SCR THYRISTORS

ECC offers high reliability SCRs from 1.6 A to 10 A with working voltage from 30-800 volts with gate current to trigger in 50 µA-200 µA and 1.5 mA ratings. Available in electrically isolated thermotab package. Heavy glass passivation gives high reliability and high voltage capability. If you need higher voltages than listed, contact Allied Electronics. *Case isolated.

Type No.	Case	Max. on State $I_{T(RMS)}$ 60°C	Max. on State $I_{T(RMS)}$ 80°C	V_{DROM} Min. Volts	V_{gt} Max. Vols	I_{gt} Max.	I_{HO} Max.	Surge I_{TSM}	EACH 1-9	EACH 10-99	EACH 100-Up
B03601	B*	2.3A	1.6A	30	1.0	50µA	6mA	50A	1.02	.85	.61
B03604	B*	2.3A	1.6A	30	1.0	200µA	6mA	50A	.90	.75	.51
B03602	B*	2.3A	1.6A	50	1.0	50µA	6mA	50A	1.20	1.00	.67
B03605	B*	2.3A	1.6A	50	1.0	200µA	6mA	50A	1.05	.88	.59
B03603	B*	2.3A	1.6A	100	1.0	50µA	6mA	50A	1.26	1.05	.70
B03606	B*	2.3A	1.6A	100	1.0	200µA	6mA	50A	1.14	.95	.63
B03001	B*	2.3A	1.6A	200	1.0	50µA	6mA	50A	1.68	1.40	.94
B03002	B*	2.3A	1.6A	200	1.0	200µA	6mA	50A	1.56	1.30	.87
B03004	B*	2.3A	1.6A	400	1.0	50µA	6mA	50A	1.80	1.50	1.00
B03005	B*	2.3A	1.6A	400	1.0	200µA	6mA	50A	1.68	1.40	.94
B01607	C*	4.3A	3.0A	30	1.0	50µA	6mA	50A	1.02	.85	.61
B01610	C*	4.3A	3.0A	30	1.0	200µA	6mA	50A	.90	.75	.51
B01608	C*	4.3A	3.0A	50	1.0	50µA	6mA	50A	1.20	1.00	.67
B01611	C*	4.3A	3.0A	50	1.0	200µA	6mA	50A	1.05	.88	.59
B01609	C*	4.3A	3.0A	100	1.0	50µA	6mA	50A	1.26	1.05	.70
B01612	C*	4.3A	3.0A	100	1.0	200µA	6mA	50A	1.14	.95	.63
B01021	C*	4.3A	3.0A	200	1.0	50µA	6mA	50A	1.68	1.40	.94
B01022	C*	4.3A	3.0A	200	1.0	200µA	6mA	50A	1.56	1.30	.87
B01024	C*	4.3A	3.0A	400	1.0	50µA	6mA	50A	1.80	1.50	1.00
B01025	C*	4.3A	3.0A	400	1.0	200µA	6mA	50A	1.68	1.40	.94
B01613	C*	8.6A	6.0A	30	1.0	200µA	6mA	100A	1.20	1.00	.67
B01614	C*	8.6A	6.0A	50	1.0	200µA	6mA	100A	1.34	1.12	.74
B01615	C*	8.6A	6.0A	100	1.0	200µA	6mA	100A	1.52	1.27	.85
B01051	C*	8.6A	6.0A	200	1.0	200µA	6mA	100A	1.69	1.41	.94
B01053	C*	8.6A	6.0A	400	1.0	200µA	6mA	100A	1.98	1.65	1.10
B01619	C*	12.2A	8.5A	30	1.0	200µA	6mA	100A	1.39	1.16	.77
B01620	C*	12.2A	8.5A	50	1.0	200µA	6mA	100A	1.58	1.32	.88
B01621	C*	12.2A	8.5A	100	1.0	200µA	6mA	100A	1.77	1.48	.98
B01071	C*	12.2A	8.5A	200	1.0	200µA	6mA	100A	1.98	1.65	1.10
B01073	C*	12.2A	8.5A	400	1.0	200µA	6mA	100A	2.29	1.91	1.27
B01625	C*	14.3A	10A	30	1.0	200µA	6mA	100A	1.63	1.36	.91
B01626	C*	14.3A	10A	50	1.0	200µA	6mA	100A	1.87	1.56	1.04
B01627	C*	14.3A	10A	100	1.0	200µA	6mA	100A	2.10	1.75	1.17
B01091	C*	14.3A	10A	200	1.0	200µA	6mA	100A	2.34	1.95	1.30
B01093	C*	14.3A	10A	400	1.0	200µA	6mA	100A	2.61	2.18	1.45

NON-SENSITIVE SCR THYRISTORS

Non-sensitive SCRs available from 1.6A-40A with I_{gt} 10-25 mA in 30-800 volt ratings. If you need higher voltages than listed, contact your nearest Allied Electronics office. *Case isolated.

B04300	A	2.3A	1.6A	200	1.5	10mA	10mA	50A	1.56	1.30	.87
B04302	A	2.3A	1.6A	400	1.5	10mA	10mA	50A	1.68	1.40	.94
B01410	C*	4.3A	3.0A	200	1.5	10mA	10mA	50A	1.56	1.30	.87
B01411	C*	4.3A	3.0A	400	1.5	10mA	10mA	50A	1.68	1.40	.94
B19032	H	8.6A	6.0A	50	1.5	15mA	10mA	100A	1.22	1.02	.68
B19033	H	8.6A	6.0A	100	1.5	15mA	10mA	100A	1.36	1.14	.76
B19034	H	8.6A	6.0A	200	1.5	15mA	10mA	100A	1.52	1.27	.85
B19035	H	8.6A	6.0A	400	1.5	15mA	10mA	100A	1.80	1.50	1.00
B19042	H	12.2A	8.5A	50	1.5	15mA	10mA	100A	1.80	1.50	1.00
B19043	H	12.2A	8.5A	100	1.5	15mA	10mA	100A	2.05	1.71	1.14
B19044	H	12.2A	8.5A	200	1.5	15mA	10mA	100A	2.30	1.91	1.27
B19045	H	12.2A	8.5A	400	1.5	15mA	10mA	100A	2.70	2.25	1.50
B19052	H	14.3A	10.0A	50	1.5	15mA	10mA	100A	2.07	1.73	1.15
B19053	H	14.3A	10.0A	100	1.5	15mA	10mA	100A	2.32	1.94	1.29
B19054	H	14.3A	10.0A	200	1.5	15mA	10mA	100A	2.61	2.18	1.45
B19055	H	14.3A	10.0A	400	1.5	15mA	10Am	100A	3.07	2.56	1.71
B19062	H	22.5A	16A	50	1.5	15mA	15mA	160A	3.27	3.00	2.00
B19063	H	22.5A	16A	100	1.5	15mA	15mA	160A	4.10	3.75	2.50
B19064	H	22.5A	16A	200	1.5	15mA	15mA	160A	4.90	4.50	3.00
B19065	H	22.5A	16A	400	1.5	15mA	15mA	160A	6.12	5.62	3.75
B18004	G	35.6A	25A	200	2.0	25mA	20mA	200A	5.82	4.85	3.24
B19004	H	35.6A	25A	200	2.0	25mA	20mA	200A	6.18	5.15	3.44
B18005	G	35.6A	25A	400	2.0	25mA	20mA	200A	8.52	7.10	4.95
B19005	H	35.6A	25A	400	2.0	25mA	20mA	200A	8.88	7.40	5.15
B18024	G	57A	40A	200	2.0	25mA	20mA	400A	6.85	5.10	3.80
B19024	H	57A	40A	200	2.0	25mA	20mA	400A	7.20	6.00	4.00
B18025	G	57A	40A	400	2.0	25mA	20mA	400A	9.40	7.85	5.25
B19025	H	57A	40A	400	2.0	25mA	20mA	400A	9.80	8.15	5.45

Texas Instruments Semiconductors

As new types are released by Texas Instruments Allied Electronics will stock them

A SILICON NPN PLANAR AMPLIFIER TRANSISTORS

Plastic-encapsulated transistors withstand soldering temperatures without deformation. Stable under high humidity, capable of meeting MIL-STD-202C Method 160B. Insensitive to light. 0.2x0.2" body. 3 inline leads, spaced 0.05". P_t at 25°C free air. *Nanoamps; others are in microamperes.

Type No.	P_t mW	I_c mA	BV_{CBO} V	I_{CBO} μA	h_{FE} @ I_c Min	Max	mA	EACH 1-9	10-99	100-Up
2N3707	250	30	30	0.5	100	400	.1	.41	.34	.29
2N3708	250	30	30	0.5	45	600	1	.32	.27	.24
2N3709	250	30	30	100*	45	165	1	.35	.29	.25
2N3710	250	30	30	0.5	90	330	1	.36	.30	.27
2N3711	250	30	30	0.5	180	660	1	.38	.32	.28
2N3826	250	30	60	.....	40	160	10	.65	.54	.36
2N3827	250	30	60	.....	100	400	10	.70	.58	.39

A SILICON TRANSISTORS AS ABOVE BUT PNP

Type No.	P_t mW	I_c mA	BV_{CBO} V	I_{CBO} μA	h_{FE} @ I_c Min	max	mA	EACH 1-9	10-99	100-Up
2N4058	250	30	−30	−100*	100	400	100μA	.42	.35	.31
2N4059	250	30	−30	−100*	45	660	1	.35	.29	.25
2N4060	250	30	−30	−100*	45	165	1	.36	.30	.27
2N4061	250	30	−30	−100*	90	330	1	.38	.32	.28
2N4062	250	30	−30	−100*	180	660	1	.41	.34	.29
TIS37	200	32	−35	−100*	45	....	−1	.46	.38	.34
TIS38	200	32	−35	−100*	25	....	−1	.42	.35	.31

A SILICON NPN PLANAR GENERAL-PURPOSE TRANSISTORS

Plastic-encapsulated. Withstand soldering temperatures without deformation. Stable under high humidity, can meet MIL STD 202C Method 160B. Insensitive to light. 0.2x0.2" body. 3 inline leads spaced 0.05". P_t, 250°C. free air. *Nanoamps. f_t, 100 MHz.

Type No.	P_t mW	I_c mA	BV_{CBO} V	I_{CBO} μA	h_{FE} @ I_c Min	Max	mA	EACH 1-9	10-99	100-Up
2N3704	300	800	50	0.5	90	330	50	.41	.34	.29
2N3705	300	800	50	0.5	45	165	50	.35	.29	.25
2N3706	300	800	40	0.5	30	600	50	.32	.27	.24

SILICON EPITAXIAL PLANAR PNP TYPES. *Nanoamps.

Type No.	P_t mW	I_c mA	BV_{CBO} V	I_{CBO} μA	h_{FE} @ I_c Min	Max	mA	EACH 1-9	10-99	100-Up
2N3702	300	200	40	*100	60	300	50	.44	.37	.32
2N3703	300	200	50	*100	30	150	50	.41	.34	.29
TIS61	300	400	−40	*−100	160	300	50	.69	.57	.38

SILICON PLANAR UNIJUNCTION

- Reduces Component Count, Replaces 2 or More Transistors
- 155,000 Hours Operating Life Test, Withstands 60,000 G.
- Low Leakage, Ideal for Precision Timing Circuits

Plastic-encapsulated. For use in SCR triggering circuits, counters, timers, multivibrators, waveform generators, astable or bistable circuits. Characteristics: V_{OB1}, 3 V; n, 0.55 min., 0.80 max.; I_p, 5μA; I_v, 2 mA min; r_{bb}, 4000 ohms min., 9100 ohms max. Case, TO-92. Leakage; 10 nA max. at 25° C.

TIS43.....1-9 Each .91....10-99 Each .76.....100-Up Each .66

A SILICON PLANAR FIELD-EFFECT TRANSISTORS

Feature high input impedance, low noise and high radiation resistance. I_{GSS}—gate cutoff current. Y_{fs}—small signal common source forward transfer admittance. *N-channel type. †P-channel type.

Type No.	Case TO-	I_{GSS} μA	Y_{fs} Min.	(μS) Max	EACH 1-9	10-99	100-Up
2N3819*	92	2	2000	6500	.67	.56	.49
2N3820†	92	20	800	5000	.88	.72	.63

B SILICON RECTIFIERS—ECONOMY EPOXY PACKAGE

Low-cost silicon rectifiers for a wide variety of uses.

Type No.	PIV (V)	I_O (mA)	I_{RP} (A)	Max. I_R (μA @ V)	EACH 1-9	10-99	100-Up
1N2069	200	750	6	10 @ 200	.54	.45	.29
1N2070	400	750	6	10 @ 400	.66	.55	.33
1N2071	600	750	6	10 @ 600	.74	.62	.42

C GERMANIUM BIDIRECTIONAL SMALL-SIGNAL NPN SWITCHING TRANSISTORS

TO-5 Case. All are alloy type. All have P_t=150 mW and I_c=300 mA. h_{FE} test conditions: for Types 2N594 and 2N596, V_{CE}=+0.2 V., I_c=+1 mA; for Types 2N1995 and 2N1996, V_{CE}=+1 V., I_c=+10 mA. Characteristics measured at 25°C free air temperature.

Type No.	BV_{CBO} (V)	I_{CBO} (μA)	h_{FE}	f_{hfb} MHz	EACH 1-9	10-99	100-Up
2N594	20	5	20	1.5	3.30	2.75	1.83
2N595	20	5	35	3	5.10	4.25	2.83
2N596	20	5	50	5	6.78	5.65	3.77
2N1994	30	6	15	3	2.80	2.33	1.55
2N1995	25	6	25	5	4.50	3.75	2.50
2N1996	20	6	35	8	6.17	5.14	3.43

C GERMANIUM SMALL-SIGNAL GENERAL-PURPOSE SWITCHING AND AMPLIFIER TRANSISTORS

Power dissipation at 25°C free air temperature. Germanium alloy PNP transistors, except those with •NPN. +Positive voltage, others negative.

Type No.	P_t mW	BV_{CBO} V	I_c mA	I_{CBO} μA	@ V_{CB} V	h_{FE} Min.	EACH 1-9	10-99	100-Up
2N388•	150	25	200	5	+1	60	.57	.47	.34
2N388A•	150	+40	200	5	+1	60	1.06	.88	.64
2N396	150	30	250	6	20	30	.73	.61	.41
2N398	50	105	100	−14	−2.5	20	1.08	.90	.60
2N398A	150	105	200	−50	−105	20	1.18	.98	.65
2N404	150	25	100	5	12	30	.51	.42	.28
2N404A	150	40	150	5	12	30	.70	.58	.39
2N428	150	30	400	4	1.5	60	1.48	1.23	.82
2N659	170	30	1000	6	12	25	1.56	1.30	.87
2N660	250	25	1000	1.5	25	40	1.78	1.48	.99
2N1302•	150	+25	300	6	+25	20	.51	.42	.31
2N1303	150	30	300	6	25	20	.51	.42	.30
2N1304•	150	+25	300	6	+25	40	.60	.50	.36
2N1305	150	30	300	6	25	40	.58	.48	.35
2N1306•	150	+25	300	6	+25	60	.75	.62	.45
2N1307	150	30	300	6	25	60	.70	.58	.42
2N1308•	150	+25	300	6	+25	80	1.09	.91	.66
2N1372	250	25	200	7	20	30	.97	.81	.54
2N1373	250	45	200	7	20	30	1.44	1.20	.80
2N1374	250	25	200	7	20	50	1.23	1.02	.68
2N1375	250	45	200	7	20	50	1.66	1.38	.92
2N1376	250	25	200	7	20	75	1.55	1.29	.86
2N1377	250	45	200	7	20	75	1.80	1.50	1.00
2N1378	250	12	200	7	12	95	1.55	1.29	.86
2N1379	250	25	200	7	20	95	1.73	1.44	.96
2N1380	250	12	200	14	12	30	.79	.66	.44
2N1381	250	25	200	14	20	30	.81	.72	.48
2N1404	150	25	300	5	15	.....	.70	.58	.39
2N1605•	150	+25	100	5	+12	40	.75	.62	.45
2N1997	250	45	500	6	15	40	2.13	1.77	1.18
2N1999	250	30	500	6	15	75	2.49	2.07	1.38
2N2000	300	50	1000	10	30	50	3.00	2.50	1.67
2N2001	300	30	1000	6	15	60	2.60	2.17	1.45

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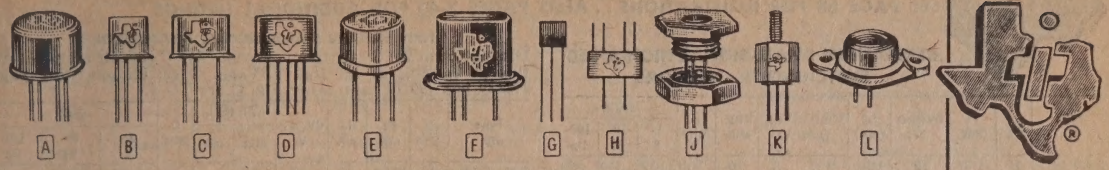


SILICON SMALL-SIGNAL HIGH-FREQUENCY NPN AMPLIFIERS

NPN types for VHF and UHF oscillator and amplifier applications. *f_{hfb}—common-base alpha cutoff freq., MHz. †BV_{CBO}. See following page for explanation of column heads.

Type No.	Fig.	† V	f_T MHz	I_C mA	P_t W	C_{OB} pF	EACH 1-9	10-99	100-Up
2N916	B	45	300	.....	1.2	6	3.38	3.65	2.90
2N917	B	30	500	0.1 μA	3.00	1.7	2.98	2.48	1.65
2N918	B	30	600	50	.3	3	3.96	3.30	2.20
2N3572	B	25	1000	50	.35	.85	7.10	5.90	3.95
2N4252	C	30	600	50	.2	.1	2.34	1.95	1.30

SILICON SMALL SIGNAL HIGH-SPEED SWITCHING TRANSISTORS

Figures: TO-18, B; TO-5, C. TO-52 case similar to Fig. E. •NPN, others PNP.

Type No.	Case TO-	BV_{CBO} V	I_C mA	P_t W	h_{FE} Min	h_{FE} Max	f_T MHz	EACH 1-9	10-99	100-Up
2N706A•	18	25	.....	1	20	60	200	.76	.63	.42
2N709•	18	15	.....	.5	20	120	600	1.55	1.29	.86
2N743•	18	20	200	1	20	60	300	1.13	.94	.63
2N744•	18	20	200	1	40	120	300	1.65	1.37	.91
2N914•	18	40	500	1.2	30	120	300	1.14	.95	.63
2N2368•	18	40	500	1.2	20	60	400	1.14	.95	.69
2N2411	18	18	100	1	20	60	140	1.93	1.61	1.07
2N2412	18	25	100	1	40	120	140	2.10	1.73	1.15
2N2894	18	12	200	1.2	40	150	400	1.49	1.24	.83
2N3012	18	12	200	1.2	30	120	400	1.41	1.17	.78
2N3013•	18	40	500	1.2	30	120	350	1.63	1.36	.91
2N3014•	18	40	500	1.2	30	120	350	1.55	1.29	.86
2N3015•	5	60	500	3	30	120	250	1.81	1.51	.99
2N3576	18	20	200	1.2	40	120	400	2.94	2.45	1.63
2N3829	52	35	500	1.2	30	120	350	6.54	5.45	3.62

GERMANIUM SMALL-SIGNAL HIGH-FREQUENCY AMPLIFIERS

Dissipation specifications are given at 25° C free-air temperature. All are PNP types. ‡f_{ab}. Fig. B is case TO-58; C is case TO-39; D is case TO-72.

Type No.	Fig.	P_t mW	I_C mA	BV_{CBO} V	h_{FE} @ I_C Min	h_{FE} @ I_C Max	I_C mA	f_T MHz	EACH 1-9	10-99	100-Up
2N1142	C	300	100	30	10	....	10	‡600	4.86	4.05	2.70
2N1143	C	300	100	25	10	....	10	‡480	4.01	3.34	2.22
2N2188	B	125	...	40	40	160	1.5	60	1.54	1.28	.85
2N2189	B	125	11	40	60	180	1.5	102	1.97	1.64	1.09
2N2190	B	125	...	60	40	160	1.5	60	1.77	1.47	.98
2N2191	B	125	...	60	60	180	1.5	102	2.22	1.85	1.23
2N2996	D	75	50	15	25	500	4	400	1.72	1.43	.95
2N2997	D	75	50	30	40	500	4	400	3.70	3.08	2.05

[E] HIGH-VOLTAGE GERMANIUM PNP SWITCHING TRANSISTORS

Germanium alloy transistors for direct control of neon indicators. Have TO-5 cases.

Type No.	P_t mW	I_C mA	BV_{CBO} V	h_{FE} @ I_C Min	h_{FE} @ I_C mA	f_{hfb} MHz	EACH 1-9	10-99	100-Up
2N398	50	100	105	20	5	.8	1.08	.90	.60
2N398A	150	200	105	20	5	.8	1.18	.98	.65

SILICON DUAL FIELD-EFFECT TRANSISTORS

N-channel type. Case TO-5 is Fig. C, TO-18, Fig. A. nA, nanoamperes.

Type No.	Case TO-	I_{GSS} nA	Y_{fs}(μS) Min.	Y_{fs}(μS) Max.	NF dB	EACH 1-9	10-99	100-Up
TIS26	5	.25	1500	6000	.5	10.20	8.50	6.90
TIS27	5	.25	1500	6000	.....	8.64	7.20	5.85

FIELD-EFFECT TRANSISTORS

Feature high input impedance, low noise and high radiation resistance. *Indicates N-channel type. †P-channel type. Type TO-5 is Fig. C, TO-18 is Fig. B, TO-39 is Fig. C, TO-72 is Fig. D, and TO-92 is Fig. G.

Type No.	Case TO-	I_{DSS}	V_{GS}	C_{iss}	EACH 1-9	10-99	100-Up
TIS14*	72	0.5-15.0	30	8	3.00	2.50	1.90
TIS58*	92	2.5-8	25	6	.75	.62	.55
TIS59*	92	6-25	25	6	.74	.61	.53
TIS78*	..	2-10	300	15	1.85	1.54	1.34
TIS79*	..	2-10	200	18	1.44	1.20	1.05
TIXS80*	72	5-25	30	17	9.90	8.25	5.50
TIXS81*	72	15-75	30	17	8.10	6.75	4.50
2N2386†	5	...	20	50	3.24	2.70	1.80
2N2498†	72	2-6	20	32	4.44	3.70	2.45
2N2499†	72	5-15	20	32	4.32	3.60	2.40
2N3329†	72	1-3	20	20	4.56	3.80	2.55
2N3331†	72	5-15	20	20	4.38	3.65	2.45
2N3458*	18	3-15	50	18	2.34	1.95	1.40
2N3459*	18	0.8-4	50	18	2.58	2.15	1.55
2N3460*	18	0.2-1	50	18	3.30	2.65	1.90
2N3823*	72	4-20	30	6	2.34	1.95	1.40
2N3909†	72	0.3-15	20	32	2.46	2.05	1.40
2N4416*	72	5-15	30	4	2.58	2.15	1.45
2N4416A*	72	5-15	35	4	2.70	2.25	1.50
2N5245*	..	5-15	30	4.5	.84	.70	.62
2N5246*	..	1.5-7	30	4.5	.69	.58	.50
2N5247*	..	8-24	30	4.5	1.00	.83	.73
2N5248*	92	4-20	30	6	.73	.61	.53
2N5543*	39	2-10	75	10	5.40	4.50	3.00
2N5544*	39	2-10	50	10	3.90	3.25	2.50
2N5548†	..	40-120	25	10	2.19	1.82	1.60
3N160†	72	40-120	25	10	7.15	5.95	4.50
3N161†	72	40-120	25	10	7.40	6.15	4.70

FIELD-EFFECT CHOPPERS

*Indicates N-channel type. †Indicates P-channel type.

Type No.	Case TO-	C_{iss} Max.	$r_{ds(on)}$ Max. Ω	V_{GS} Max.	EACH 1-9	10-99	100-Up
TIS73*	92	18	25	30	2.11	1.76	1.54
TIS74*	92	18	40	30	1.85	1.54	1.34
TIS75*	92	18	60	30	1.92	1.60	1.40
3N174†	72	4	1000	30	7.80	6.50	5.30
2N3824*	72	6	250	50	2.28	1.90	1.35
2N3970*	18	25	30	40	3.90	3.25	2.40
2N3971*	18	25	60	40	3.60	3.00	2.15
2N3972*	18	25	100	40	3.18	2.65	1.90
2N3993†	72	16	150	25	6.72	5.60	4.05
2N3993A†	72	12	150	25	6.84	5.70	4.20
2N3994†	72	16	300	25	5.76	4.80	3.42
2N3994A†	72	12	300	25	5.94	4.95	3.54
2N4091*	18	16	30	40	4.26	3.35	2.40
2N4092*	18	16	50	40	3.60	3.00	2.15
2N4093*	18	16	80	40	3.18	2.65	1.90
2N4391*	18	14	30	40	4.26	3.35	2.40
2N4392*	18	14	60	40	3.60	3.00	2.15
2N4393*	18	14	100	40	3.18	2.65	1.90
2N4856*	18	18	25	40	3.84	3.20	2.30
2N4856A*	18	10	25	40	4.02	3.35	2.40
2N4857*	18	18	40	40	3.48	2.90	2.05
2N4857A*	18	10	40	40	3.60	3.00	2.15
2N4858*	18	18	60	40	3.25	2.70	1.80
2N4858A*	18	10	60	40	3.18	2.65	1.90
2N4859*	18	18	25	30	3.12	2.60	1.85
2N4859A*	18	10	25	30	3.36	2.80	2.00
2N4860*	18	18	40	30	2.87	2.35	1.68
2N4860A*	18	10	40	30	3.24	2.70	1.80
2N4861*	18	18	60	30	2.64	2.20	1.56
2N4861A*	18	10	60	30	2.87	2.35	1.68
2N5549*	18	8	100	40	5.22	4.35	3.30

Texas Instruments Semiconductors

SEE PAGE 83 FOR ILLUSTRATIONS . . ALSO PAGES 7-40 FOR ADDITIONAL LISTINGS

GERMANIUM SMALL-SIGNAL HIGH-SPEED SWITCHING TRANSISTORS

Type No.	Fig.	P_t (mW)	BV_{CBO} (V)	I_C (mA)	I_{CBO} @ V_{CB} (μA@V)		h_{FE} Min.	f_T MHz	EACH 1-9	10-99	100-Up
2N711	B	150	12	100	3	5	20	300	1.07	.89	.59
2N711B	B	150	18		1.5	10	30	300	1.13	.94	.63
2N797	B	150	20	150	1	10	40	1000	5.12	4.27	2.85
2N964	B	150	15	150	3	6	40	300	1.19	.99	.66
2N967	B	150	12	150	5	6	40	250	1.04	.87	.58

PNP SILICON SMALL-SIGNAL GP TRANSISTORS

Type No.	Fig.	P_t W	I_c mA	BV_{CBO} V	h_{FE} @ I_c Min	Max	mA	f_T MHz	EACH 1-9	10-99	100-Up
2N1132	A	2	....	−50	30	90	−150	50	1.75	1.46	1.27
2N2906	B	1.8	600	60	40	120	150	200	1.49	1.24	.82
2N2906A	B	1.8	600	60	40	120	150	200	1.92	1.60	1.07
2N2907A	B	1.8	600	60	100	300	150	200	1.65	1.38	.91
2N3504	B	....	400	.....	45	100	300	...	2.40	2.00	1.32

SILICON EPITAXIAL PLANAR DUAL EMITTER CHOPPERS

Ideal for differential amplifier applications. Two matched units in one package. •NPN.

Type No.	Fig.	P_t mW	BV_{E1E2} V	I_{E1E2} nA	V_{E1E2} μA	EACH 1-9	10-99	100-Up
3N74•	D	600	18	±2	50	14.90	12.40	8.25
3N79•	D	600	12	±10	200	4.42	3.68	2.45
3N111	D	600	±30	±0.5	150	10.60	8.85	5.90

MINIATURE NPN PLANAR SILICON TRANSISTORS

Audio amplifiers for microelectronics. Case only 0.06x0.06x0.05"

Type No.	Fig.	BV_{CEO} V.	I_c m	P_t mW	h_{FE} Min.	Max.	EACH 1-9	10-99	100-Up
TIS22	G	45	50	150	40	120	5.05	4.20	2.80
TIS23	G	45	50	150	100	300	5.60	4.65	3.10
TIS24	G	60	50	150	100	500	7.75	6.45	4.30

[D] SILICON DUAL DIFFERENTIAL AMPLIFIER TRANSISTORS

h_{FE1}/h_{FE2}—static fwd. curr. gain bal. ratio. $V_{BE1VBE2}$—base-emitter voltage diff. ΔV_{BE}—base-emitter volt. diff./temp. gradient. Fig. D. except *. Fig. H.

Type No.	BV_{CBO} V	h_{FE} @ I_c Min	μA	h_{FE1} / h_{FE2}	V_{BE1} − V_{BE2} mV	ΔV_{BE} μV	EACH 1-9	10-99	100-Up
2N2640	45	50	10	20%	10	20	8.10	6.75	4.50

Type No.	BV_{CBO} V	h_{FE} @ I_c Min.	μA	V_{BE1} − V_{BE2} mV	EACH 1-9	10-24	25-Up
2N3838*	60	35	100	0.85	33.30	27.75	24.00

GERMANIUM MEDIUM-POWER TRANSISTORS

All are PNP alloy-junction types I_C, 3A.

Type No.	Fig. or Desc.	P_C (W)	h_{FE} @ I_c Min.-Max.	$V_{CE(sat)}$ (V)	BV_{CBO} (V)	EACH 1-9	10-99	100-Up
2N1038	Round	20	20-60 @ 1A	0.25	40	2.16	1.80	1.20
2N1039	Round	20	20-60 @ 1A	0.25	60	2.88	2.40	1.60
2N1040	J	20	20-60 @ 1A	0.25	80	4.32	3.60	2.40
2N1042	J	20	20-60 @ 3A	0.75	40	3.42	2.85	1.90
2N1043	J	20	20-60 @ 3A	0.75	60	5.04	4.20	2.80
2N2552	K	20	20-60 @ 1A	0.25	40	2.26	1.88	1.25
2N2553	K	20	20-60 @ 1A	0.25	60	2.98	2.48	1.65
2N2557	J	20	20-60 @ 1A	0.25	60	2.98	2.48	1.65
2N2564	J	20	20-60 @ 3A	0.75	40	3.60	3.00	2.00
2N2659	Round	15	30-90 @ ½A	0.2	50	1.98	1.65	1.10
2N2660	Round	15	30-90 @ ½A	0.2	70	2.35	1.95	1.30
2N2661	Round	15	30-90 @ ½A	0.2	90	3.42	2.85	1.90
2N2662	K	15	30-90 @ ½A	0.2	30	1.98	1.65	1.10
2N2663	K	15	30-90 @ ½A	0.2	40	2.88	2.40	1.60
2N2665	Round	15	50-150 @ ½A	0.2	50	2.88	2.40	1.60
2N2668	K	15	50-150 @ ½A	0.2	50	2.80	2.33	1.55

[L] GERMANIUM HIGH-POWER TRANSISTORS

All are PNP alloy-junction types I_C, 25A.

Type No.	P_C (W)	h_{FE} @ I_c Min.-Max.	$V_{CE(sat)}$ (V)	BV_{CBO} (V)	EACH 1-9	10-99	100-Up
2N511B	150	20-60 @ 10A	0.5	80	6.21	5.18	3.45
2N513	150	20-60 @ 20A	1.5	40	7.28	6.00	4.00
2N513A	150	20-60 @ 20A	1.5	60	8.00	6.65	4.43

NPN SILICON SMALL-SIGNAL TRANSISTORS

Dissipation at 25°C case temp., except *25° C free-air temperature †h_{fb} at I_E. §h_{fe} at I_E. ‡f_{ab}. #BV_{CEO}. Figs. on preceding page 2N339 has TO-11 case, other Fig. C are TO-5.

Type No.	Fig.	P_t mW	I_o mA	BV_{CBO} V	h_{FE} @ I_c Min	mA	f_t MHz	EACH 1-9	10-99	100-Up
2N118A	F	*150	25	45	18	.....	‡7	9.80	8.15	5.45
2N119	F	*150	25	45	36	.....	‡6	13.25	11.05	7.35
2N332	C	*150	25	45	9	.....	‡6	5.58	4.65	3.10
2N333	C	*150	25	45	18	.....	....	5.58	4.65	3.10
2N333A	C	*500	25	45	18	.....	....	5.88	4.90	3.30
2N334	C	*150	25	45	18	.....	‡8	5.58	4.65	3.10
2N335	C	*150	25	45	36	.....	‡11	5.88	4.90	3.30
2N335A	C	*500	25	45	36	.....	‡11	6.25	5.20	3.50
2N336	C	*150	25	45	76	.....	‡13	7.15	5.95	3.95
2N336A	C	*500	25	45	76	.....	‡13	7.50	6.35	4.20
2N337	C	*125	20	45	20	10	‡20	5.82	4.85	3.20
2N338	C	*125	20	45	45	10	‡30	6.60	5.50	3.65
2N339	C	1W	60	55	†.9	5	....	9.75	8.12	6.08
2N341	C	1W	60	125	†.9	5	....	16.80	14.00	10.49
2N343	C	1W	60	60	†.97	5	....	17.70	14.72	11.03
2N542	C	*200	25	30	80	5	....	7.45	6.20	4.10
2N543	C	*200	25	45	80	5	....	9.42	7.95	5.30
2N696	C	2W	....	60	20	150	40	.62	.52	.46
2N697	C	2W	....	60	40	150	50	.62	.52	.46
2N698	C	2W	....	120	20	150	40	1.89	1.57	1.05
2N717	B	1.8W	....	60	20	150	40	1.19	.99	.66
2N718	B	1.8W	....	60	40	150	50	.48	.40	.38
2N718A	B	1.8W	....	75	40	150	60	.90	.75	.50
2N720	B	1.8W	....	120	40	150	50	1.32	1.10	.70
2N730	B	1.5W	....	60	20	150	40	.84	.70	.47
2N731	B	1.5W	....	60	40	150	50	1.32	1.10	.75
2N1277	C	*150	25	40	§18	1	‡30	5.10	4.25	2.84
2N1278	C	*150	25	40	§37	1	‡30	5.70	4.75	3.15
2N1507	C	2W	....	60	100	150	50	1.44	1.20	.80
2N1973	C	3W	....	100	§80	5	60	2.64	2.20	1.48
2N1974	C	3W	....	100	§40	5	50	1.62	1.35	.90
2N2217	C	3W	800	#30	20	150	250	1.20	1.00	.81
2N2220	B	1.8W	800	#30	20	150	250	1.33	1.11	.74
2N2222	B	1.8W	800	#30	100	150	250	1.14	.95	.63
2N2243	C	2.8W	1A	#80	40	150	50	2.23	1.86	1.24
2N3036	C	5W	1.2A	120	50	150	50	6.60	5.50	3.70
2N3712	C	5W	200	150	30	30	40	3.60	3.00	2.00

[E] UNIJUNCTION SILICON TRANSISTORS

For pulse timing circuits, relaxation oscillators, medium power switches. Maximum ratings of the units listed in the table below are as follows: peak emitter current, 2 amperes; rms, 50 milliamps. All are grown junction types with power dissipation from 450 to 600 milliwatts. PNP types, except • NPN.

Type No.	V_{BB} V	P_t mW	η Min.	Max.	EACH 1-9	10-99	100-Up
2N489•	65	600	.51	.62	8.50	7.10	4.75
2N491•	65	600	.56	.68	10.10	8.40	5.60
2N492•	65	600	.56	.68	11.65	9.80	6.55
2N493•	65	600	.62	.75	12.90	10.75	7.20
2N494•	65	600	.62	.75	13.10	10.90	7.30
2N1671•	35	450	.47	.62	3.54	2.95	1.98
2N1671A•	35	450	.47	.62	3.84	3.20	2.14
2N1671B•	35	450	.47	.62	4.26	3.55	2.36
2N489A	65	600	.51	.62	9.18	7.65	5.10
2N489B	65	600	.51	.62	11.00	9.15	6.10
2N490A	65	600	.51	.62	10.00	8.35	5.55
2N490B	65	600	.51	.62	11.80	9.85	6.55
2N491A	65	600	.56	.68	10.70	8.90	5.95
2N491B	65	600	.56	.68	12.50	10.40	6.95
2N492A	65	600	.56	.68	12.50	10.40	6.95
2N492B	65	600	.56	.68	14.30	11.90	7.95
2N494B	65	600	.62	.75	15.50	12.90	8.60
2N494C	65	.....	.62	.75	17.90	14.95	9.90
2N2160	35	450	.47	.80	1.78	1.49	.99

LOW-LEVEL LOW-NOISE SILICON SWITCHING AND AMPLIFIER TRANSISTORS

*TO-46 case. P-W in table below is given at 25° case temperature, except †free-air temperature. •NPN types, others PNP.

Type No.	Fig.	S	P_t W	BV_{CBO} V	h_{FE} @ I_c Min	μA	f_T MHz	EACH 1-9	10-99	100-Up
2N929	B	•P	0.6	45	40	10	60	1.79	1.49	.98
2N1247	C	•P	0.6	60	25	5	....	16.20	13.50	9.00
2N2484	B	•P	1.2	60	100	10	60	1.63	1.36	.91
2N2586	C	•P	0.6	60	80	1	45	2.23	1.86	1.25
2N2604	*	EP	†0.4	60	40	10	30	3.12	2.60	1.74
2N2605	*	EP	†0.4	60	100	10	30	2.82	2.35	1.56
2N2862	B	EP	1	25	12	10	45	1.46	1.22	.81

Highest Percentage of Orders Filled in the U.S.A.

Texas Instruments Optoeletronic Semiconductors

OPTICALLY COUPLED ISOLATORS AND AMPLIFIERS

Optically coupled pulse amplifier consisting of gallium arsenide light-emitting diode for use where spurious currents prevent interconnection of grounds, and rejection of *V_{in-out} = ± 5kV †V_{in-out} = 100V. common-mode noise at the end of a long data-transmission line. High input-output isolation of optical coupling permits use as a broadband pulse transformer with response extending to zero frequency.

OPTICALLY COUPLED ISOLATERS

Type No.	Case	R (Input) to Output Typ.	$I_{C(on)}$ Min. mA	$I_{C(off)}$ Max. nA	V_F Max. V	$V_{CE(sat)}$ Max. V	EACH 1-9	10-99	100-Up
TIXL101	IIII	10^{13}*	0.25	25	1.4	0.3	14.40	12.00	8.05
TIXL102	V	10^{13}*	2.5	100	1.3	0.3	12.00	10.00	6.70
TIXL103	V	10^{12}†	10	100	1.3	0.3	14.40	12.00	8.05

OPTICALLY COUPLED PULSE AMPLIFIERS

Type No.	Case	Output Y *$V_{out(1)}$ Min. V	Output Y **$V_{out(0)}$ Max. V	Output Y †$V_{out(1)}$ V Min.	Output Y ††$V_{out(0)}$ V Max.	V_F @10mA Typ. V	Max. Diss. mW	EACH 1-9	10-24	25-99	100-Up
TIXL104	TT			2.5	0.5	1.2	75	59.40	49.50	42.50	36.00
TIXL105	TT	5	0.5			1.2	75	59.40	49.50	42.50	36.00
TIXL106	TT	5	0.5	2.5	0.3	1.2	75	81.00	67.50	56.25	47.00

*I_{in} = 10 mA, N_{DC} = 7. **I_{in} = 0.5 mA, N_{DC} = 7.
†I_{in} = 0.5 mA, N_{DC} = 4. ††I_{in} = 10 mA, N_{DC} = 4.

SILICON PLANAR AND PLANAR EPITAXIAL SENSORS

Designed to meet a wide variety of uses in both industrial and commerical applications, or wherever photo switching, character recognition, tape read-out, proportional control, differential amplifiers, velocity indicators are needed. Feature excellent stability and long lasting reliability plus highly sensitive operation. Every silicon light sensor undergoes the most rigid inspection and aging which assures the utmost in maximum reliability. TIL601 through TIL616 series is available for printed circuit board mounting for custom-designed array or matrix applications. Sensitivity across an entire array is matched to within 50%. Compact size easily allows these components to be mounted directly on printed circuit boards.

Type No.	Case	Min. Light Current (mA)	Max. Light Current (mA)	Light Current @V	Max. Dark Current (nA)	Dark Current @V	Max. Diss. mW	EACH 1-9	10-99	100-Up
H11	ZZZ	0.04*		±10	500	±50	250	4.80	4.00	2.80
H35	ZZZ	0.06*		±10	500	±50	250	6.00	5.00	3.50
H38	ZZZ	0.1*		±10	10,000	±50	250	4.80	4.00	2.80
TIL58	XXX	1†		5	25	30	50	10.68	8.90	7.75
H 60	ZZZ	0.1*	0.2*	±10	500	±50	250	9.60	8.00	5.60
H61	ZZZ	0.2*	0.3*	±10	500	±50	250	10.80	9.00	6.25
H62	ZZZ	0.3*	0.4*	±10	500	±50	250	16.20	13.50	10.00
TIL63	YYY	0.4†		5	25	30	50	1.20	1.00	.67
TIL64	YYY	0.4†	1.6	5	25	30	50	1.39	1.16	.78
TIL65	YYY	10†	4	5	25	30	50	1.42	1.18	.79
TIL66	YYY	2.5†	10	5	25	30	50	1.51	1.26	.84
TIL67	YYY	6†		5	25	30	50	1.80	1.50	1.00
LS400 (IN4378)	BBBB	1†		5	25	±50	50	9.36	7.80	5.20
LS600	JJJJ	0.8*		5	25	30	50	3.84	3.20	2.15
LSX900	AAAA	0.006†		30	9	30	50	10.62	8.85	5.90
IN2175	ZZZ	1.1*		±10	500	30	50	7.20	6.00	4.00
TIL601	JJJJ	0.5†	3†	5	25	30	50	3.90	3.25	2.36
TIL602	JJJJ	2†	5†	5	25	30	50	4.44	3.70	2.48
TIL603	JJJ	4†	8†	5	25	30	50	4.56	3.80	2.60
TIL604	JJJ	7†		5	25	30	50	4.92	4.10	2.75
TIL605	KKKK	0.5†	3†	5	25	30	50	4.44	3.70	2.48
TIL606	KKKK	2†	5†	5	25	30	50	4.75	3.97	2.66
TIL607	KKKK	4†	8†	5	25	30	50	4.98	4.15	2.77
TIL608	KKKK	7†		5	25	30	50	5.23	4.36	2.92
TIL609	LLLL	0.5†	3†	5	25	30	50	4.23	3.52	2.36
TIL610	LLLL	2†	5†	5	25	30	50	4.44	3.70	2.48
TIL611	LLLL	4†	8†	5	25	30	50	4.66	3.88	2.60
TIL612	LLLL	7†		5	25	30	50	4.92	4.10	2.75
TIL613	MMMM	0.5†	3†	5	25	30	50	4.44	3.70	2.48
TIL614	MMMM	2†	5†	5	25	30	50	4.75	3.97	2.66
TIL615	MMMM	4†	8†	5	25	30	50	4.96	4.13	2.77
TIL616	MMMM	7†		5	25	30	50	5.23	4.36	2.92

*H = 9 mW/cm², λ = 0.7 to 1 μm.
†H = 20 mW/cm². Source is unfiltered tungsten linear-filament bulb operating at a color temperature of 2870°K.

STABISTORS—SILICON FORWARD-CONDUCTANCE DIODES PIV, 10 V.

Type No.	Max. I_F (mA)	Max. V_F @ 1 mA	Temp. Coef. @ 1 mA	EACH 1-9	10-99	100-Up
G129	250	0.56	−2mv/°C	1.20	1.00	.75

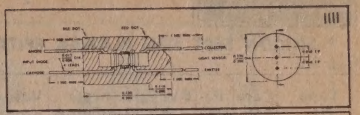
HIGH-CONDUCTANCE 600-mW DIFFUSED SILICON DIODES

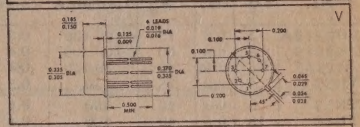
Type No.	Max. V_R (V)	BV_R (V)	Min. I_F (mA)	EACH 1-9	10-99	100-Up
IN645	225	275	400	1.68	1.40	.80
IN645A	225	275	400	1.98	1.65	1.10
IN646	300	360	400	1.92	1.60	1.05
IN647	400	480	400	2.04	1.70	1.10
IN648	500	600	400	2.16	1.80	1.20

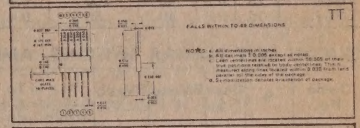
SILICON COMPUTER DIODES

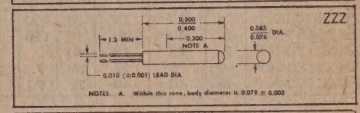
Computer diodes, all with Type A-21 glass case. Uni/G pack. †JAN, 256 (30 milliamp I_F switched to 35 volts. VR recovery to 400k); *JAN 256 (5 mA to 40 V recovery to 200k); §JAN 256 (5 mA to 40 V recovery to 100k); ††JAN 256 (5 mA to 10 V recovery to 24k).

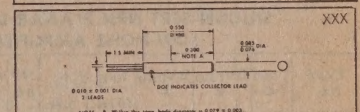
Type No.	PIV (V)	trr (μsec)	Max. I_R (μA)	EACH 1-9	10-99	100-Up
IN251	30	0.15††	0.1	.39	.32	.21
IN643	175	0.3*	1	1.96	.98	.65
IN658	50	0.3*	1	1.78	1.48	.98
IN659	50	0.3†	5	.67	.56	.36
IN660	100	0.3†	5	.78	.65	.34
IN661	200	0.3†	10	1.18	.98	.68
IN662	80	0.5§	20	.30	.25	.15
IN663	80	0.5*	5	.70	.58	.38

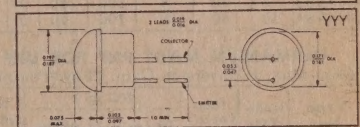


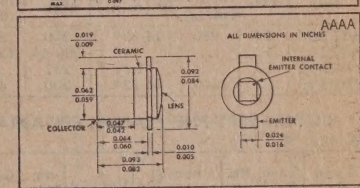


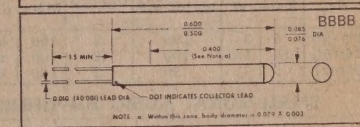


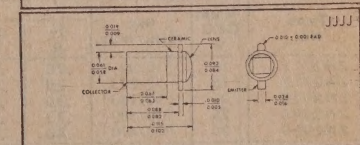


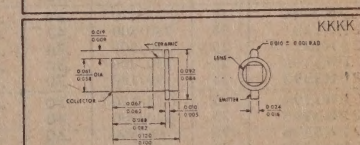


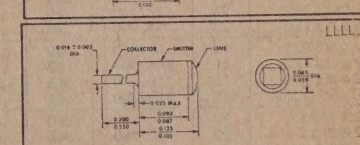


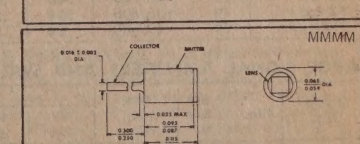












Sprague Semiconductors

SILICON SEPT NPN PLANAR EPITAXIAL HI-SPEED

C_{ob}, 8pF.

Type No.	Case TO-	Pd (W)	BV_{CBO} V	h_{FE} @ I_C-150mA	V_{CESAT} (max)	f_T MHz	EACH 1-9	10-99	100-Up
2N2218A	5	0.8	75	40-120	0.3	250	1.80	1.50	1.00
2N2219	5	0.8	60	100-300	0.4	250	1.20	1.00	.65
2N2845	18	0.36	60	30-120	0.4	250	5.94	4.05	3.30
TN53	5	0.8	75	50	0.5	100	1.02	.85	.57
TN59	5	0.8	40	100	0.4	100	.78	.65	.45
TN60	18	0.5	40	100	0.4	100	.78	.65	.45
TN61	5	0.8	40	50	0.4	100	.72	.60	.40

SILICON SEPT PLANAR SWITCHES, AMPLIFIERS, CHOPPERS

Type No.	S	Case TO-	BV_{CBO} V	BV_{EBO} V	h_{FE} @ I_C min	max	mA	rs ohms	EACH 1-9	10-99	100-Up
2N2944	PNP	46	15	15	80	450	1	20	6.60	5.50	3.68
2N2946	PNP	46	40	40	30	150	1	45	6.60	5.50	3.68
2N3217	PNP	46	15	15	40	...	1	20	3.06	2.55	1.70
2N3218	PNP	46	25	25	30	...	1	35	2.70	2.25	1.50
2N3219	PNP	46	40	40	20	...	1	45	3.06	2.55	1.70

SILICON SEPT NPN PLANAR LOW-LEVEL LOW-NOISE AMPLIFIERS

Type No.	Case TO-	BV_{CBO} V	BV_{EBO} V	h_{FE} @ I_C Min.	μA	NF dB	C_{ob} pF	EACH 1-9	10-99	100-Up
2N4383	5	40	5	100	10	2	8	1.26	1.05	.70
2N4384	18	40	5	100	10	2	8	1.26	1.05	.70

GERMANIUM MADT PNP FOR UHF APPLICATIONS

*Min.-Max. †Conversion Gain. ‡Power output, mW. BV_{CBO}, 20 V.

Type No.	Case TO-	f_{Max} (min) (MHz)	PG @ f dB (min.)	MHz	NF (max) (dB)	EACH 1-9	10-99	100-Up
2N2360	12	980	14-19*	200	5.5	4.74	3.95	2.75
2N2361	12	.....	14†	200-44	12	3.96	3.30	2.20
2N2362	12	.....	1.5‡	257	.....	2.57	2.10	1.55
2N2398	12	1200	16-22*	200	4.5	4.68	3.90	2.95

SILICON SEPT PNP PLANAR EPITAXIAL TRANSISTORS

BV_{CBO}, 40 V.

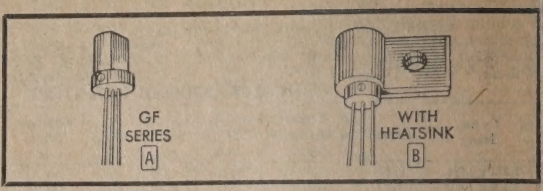
Type No.	Case TO-	Pd W	h_{FE} @ I_C-150 mA	$V_{CE(sat)}$	f_T MHz	C_{ob} pF	EACH 1-9	10-99	100-Up
TQ-59	5	3	100	.2	100	8	1.19	.99	.68
TQ-60	18	1.8	100	.2	100	8	1.19	.99	.68
TQ-61	5	3	50	.2	100	8	1.03	.86	.58

SMALL-SIGNAL AUDIO AMPLIFIERS (NPN, *PNP)

Type No.	$V_{(BR)CEO}$ V	h_{FE} min./max.	EACH 1-9	10-99	100-999	1000-Up
2N2711	18	30/90	.28	.23	.15	.12
2N2712	18	75/225	.29	.24	.16	.13
2N2923	25	90/180	.30	.25	.17	.14
2N2924	25	150/300	.33	.27	.18	.15
2N2925	25	235/470	.40	.33	.22	.18
2N2926	18	35/470	.29	.24	.16	.13
2N3391	25	250/500	.47	.39	.26	.21
2N3391A	25	250/500	.54	.45	.30	.24
2N3392	25	150/300	.30	.25	.17	.14
2N3393	25	90/180	.30	.25	.17	.14
2N3394	25	55/110	.30	.25	.17	.14
2N3395	25	150/500	.40	.33	.22	.18
2N3396	25	90/500	.30	.25	.17	.14
2N3397	25	55/500	.29	.24	.16	.13
2N3398	25	55/800	.29	.24	.16	.13
2N3721	18	60/660	.29	.24	.16	.13
2N5172	25	100/500	.23	.19	.12	.10
2N3900	18	250/500	.43	.36	.24	.19
2N3900A	18	250/500	.47	.39	.26	.21
TZ-81	30	100/500	.50	.42	.28	.22
TZ-82	30	40/500	.46	.38	.25	.20
TZ-581*	30	100/500	.61	.51	.34	.27
TZ-582*	30	40/500	.54	.45	.30	.24

LARGE SIGNAL AMPLIFIERS AND SWITCHES (NPN, *PNP)

Type No.	Fig.	$V_{(BR)CEO}$ V	h_{FE} min./max.	EACH 1-9	10-99	100-999	1000-Up
2N2713	A	18	30/90	.46	.38	.26	.21
2N2714	A	18	75/225	.43	.36	.24	.19



LARGE SIGNAL AMPLIFIERS AND SWITCHES (Cont'd)

Type No.	Fig.	$V_{(BR)CEO}$ V	h_{FE} min./max.	EACH 1-9	10-99	100-999	1000-Up
2N3402	B	25	75/225	.40	.33	.22	.18
2N3403	B	25	180/540	.42	.35	.23	.19
2N3404	B	50	75/225	.60	.50	.33	.26
2N3405	B	50	180/540	.72	.60	.40	.32
2N4425	A	40	180/540	.52	.43	.29	.23
2N3414	A	25	75/225	.34	.28	.19	.16
2N3415	A	25	180/540	.36	.30	.20	.17
2N3416	A	50	75/225	.54	.45	.30	.24
2N3417	A	50	180/540	.66	.55	.37	.30
2N4424	A	40	180/540	.47	.39	.26	.21
TP3638*	A	25	30/—	.50	.42	.28	.22
TP3638*	A	25	100/—	.54	.45	.30	.24
D29A4*	A	25	30/90	.50	.42	.28	.21
D29A5*	A	25	75/225	.54	.45	.30	.23
2N3975	A	30	35/100	.46	.38	.26	.21
2N3976	A	30	55/200	.49	.41	.27	.23

HIGH-VOLTAGE INDICATOR DRIVERS (NPN)

Type No.	$V_{(BR)CEO}$ V	h_{FE} min./max.	EACH 1-9	10-99	100-999	1000-Up
2N3877	70	20/250	.54	.45	.30	.24
2N3877A	85	20/250	.59	.49	.33	.26

HIGH-FREQUENCY AMPLIFIER/OSCILLATORS (NPN)

Type No.	h_{FE} min./max.	$V_{(BR)CEO}$ V	f_t MHz min.	EACH 1-9	10-99	100-999	1000-Up
2N3854A	35/70	30	100	.38	.32	.21	.18
2N3855A	60/120	30	130	.41	.34	.23	.19
2N3856A	100/200	30	140	.43	.36	.24	.20
2N3854	35/70	18	100	.35	.29	.20	.17
2N3855	60/120	18	130	.38	.32	.21	.18
2N3856	100/200	18	140	.41	.34	.23	.19
2N3843A	20/40	30	60	.52	.43	.29	.24
2N3844A	35/70	30	90	.54	.45	.30	.25
2N3845A	60/120	30	126	.56	.47	.32	.26
2N3843	20/40	30	60	.49	.41	.27	.23
2N3844	35/70	30	90	.52	.43	.29	.24
2N3845	60/120	30	126	.54	.45	.30	.25
2N3858	60/120	30	90	.30	.25	.17	.14
2N3859	100/200	30	90	.27	.27	.18	.15
2N3860	150/300	30	90	.38	.32	.21	.17
2N3858A	60/120	60	90	.40	.33	.22	.18
2N3859A	100/200	60	90	.43	.36	.24	.19

DIFFERENTIAL AMPLIFIERS (NPN/NPN, *PNP/PNP)

Type No.	$V_{(BR)CBO}$ V	$V_{(BR)CEO}$ V	h_{FE} @100μA min.	h_{FE1}/h_{FE2} min./max. @ 100 μA	EACH 1-9	10-99	100-Up
TD-100	60	30	120	0.9/1.0	2.70	2.25	1.50
TD-101	60	30	120	0.9/1.0	1.80	1.50	1.00
TD-400*	40	30	120	0.9/1.0	3.60	3.00	2.00
TD-401*	40	30	120	0.9/1.0	2.34	1.95	1.30

DUAL TRANSISTORS

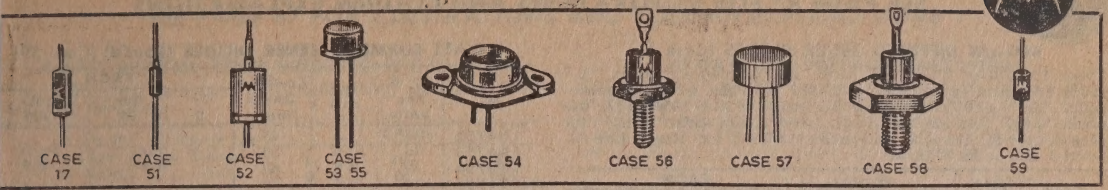
Type No.	Structure	$V_{(BR)CBO}$ V	$V_{(BR)CEO}$ V	EACH 1-9	10-99	100-Up
TD-102	NPN/NPN	60	30	1.62	1.35	.90
TD-402	PNP/PNP	40	30	2.16	1.80	1.20
TD-602	NPN/PNP	40	30	1.80	1.50	1.00
TD-2219	NPN/NPN	60	30	2.70	2.25	1.50
TD-2905	PNP/PNP	60	40	2.70	2.55	1.70

COMPLEMENTARY PAIRS (NPN/PNP)

Type No.	$V_{(BR)CBO}$ V	$V_{(BR)CEO}$ V	Features	EACH 1-9	10-99	100-Up
TD-600	40	30	h_{FE1}/h_{FE2} 0.9/1.0	3.24	2.70	1.80
TD-601	40	30	V_{off} =2mV @ I_B 2 mA	1.98	1.65	1.10

Depend on Allied for the Latest in Industrial Electronics

Motorola Silicon Zener Diodes



DIFFUSED ZENER DIODES—150 MW TO 50 WATTS

xtensive line of zener diodes covering all popular power categories om 150 mW to 50 watts) and voltages (from 2.4 to 200 volts). l are 100% oscilloscope-tested. Wide selection of case sizes and ounting arrangements for just about every application.

V_{ZT} and Z_{ZT} @ I_{ZT}, zener breakdown voltage and impedance at test current. Z_{ZK} @ I_{ZK}, zener impedance at zener current near breakover knee. I_R @ V_R, leakage current at reverse bias voltages (before breakover). V_F @ I_F, forward voltage at forward current.

50-MW DIFFUSED ZENER DIODES (Case 53) ±10% tolerance.

Type No.	Vz @ Izt Volts	Izt mA	Zzt @ Izt Ohms Max.	EACH 1-9	EACH 10-99	EACH Single Type 100-999
N1313	8.75	.200	.....			
N1314	10.50	.200	.....			
N1317	19.00	.200	.....	3.72	3.10	2.35
N1321	41.00	.200	.....			
N1323	58.00	.200	.....			
N1324	71.00	.200	.....			

50-MW DIFFUSED ZENER DIODES (Case 51) ±5% tolerance.

Z4614	1.8	.250	1200	4.62	3.85	2.90
Z4615	2.0	.250	1250	4.62	3.85	2.90
Z4616	2.2	.250	1300	4.62	3.85	2.90
Z4617	2.4	.250	1400	4.62	3.85	2.90
Z4618	2.7	.250	1500	4.62	3.85	2.90
Z4619	3.0	.250	1600	4.62	3.85	2.90
Z4620	3.3	.250	1650	4.62	3.85	2.90
Z4621	3.6	.250	1700	4.62	3.85	2.90
Z4622	3.9	.250	1650	4.62	3.85	2.90
Z4623	4.3	.250	1600	4.62	3.85	2.90
Z4624	4.7	.250	1550	4.62	3.85	2.90
Z4625	5.1	.250	1500	4.62	3.85	2.90
Z4626	5.6	.250	1400	4.62	3.85	2.90
Z4627	6.2	.250	1200	4.62	3.85	2.90

¼-WATT PASSIVATED DIFFUSED ZENER DIODES (Case 51)

aximum noise density, N_D @ I_{ZT}, 40 μV per square root cycle. ypes below have standard tolerance of 5%.

N4099	6.8	.250	200	4.62	3.85	2.90
N4100	7.5	.250	200	4.62	3.85	2.90
N4101	8.2	.250	200	4.62	3.85	2.90
N4102	8.7	.250	200	4.62	3.85	2.90
N4103	9.1	.250	200	4.62	3.85	2.90
N4104	10	.250	200	4.62	3.85	2.90
N4105	11	.250	200	4.62	3.85	2.90
N4106	12	.250	200	4.62	3.85	2.90
N4107	13	.250	200	4.62	3.85	2.90
N4109	15	.250	100	4.62	3.85	2.90
N4114	20	.250	150	4.62	3.85	2.90
N4117	25	.250	150	4.62	3.85	2.90
N4124	43	.250	250	6.06	5.05	3.80

250 MILLIWATT REFERENCE DIODE (Case 51)

5-1 mA. V_Z, 6.4V ±5% @ I_{ZT} of 1.0 mA. No suffix, 20% tol., +25, +75°C. A suffix: 10% tol., −55, 0, +25, +75, +100°C.

Type No.	ΔVz Volts (max.)	T. C. %/°C	Zzt Ohms (max.)	EACH 1-9	EACH 10-99	EACH Single-Type 100-999
N4571	0.024	0.005	100	8.75	7.30	5.50
N4572	0.010	0.002	100	15.90	13.25	9.95
N4573	0.005	0.001	100	29.10	24.25	18.25
N4574	0.002	0.0005	100	65.38	56.50	42.50
N4571A	0.050	0.005	100	9.72	8.10	6.10
N4572A	0.020	0.002	100	17.70	14.75	11.10
N4573A	0.010	0.001	100	32.40	27.00	20.30

TYPE MZK100 ZENER DIODE HANDYLAB

148.00 Value When ought Separately. Ideal ol for the engineer and chnician. Indispensable r lab and prototype ork. 100 premium-quali- Motorola 1-watt Sur- etic zener diodes from 3 to 100 volts (±5% l.), 15-drawer plastic abinet.

ZK100.....79.00

5-WATT DIFFUSED ZENER DIODES (Case 17)

Silicon oxide passivated for tight limits and better operating characteristics. 180-watt surge rating at 8.3 msec. Axial leads. A suffix, ±10% tolerance; add suffix "B" for ±5% tolerance.

Type No.	Vz @ Izt Volts	Izt mA	Zzt @ Izt Ohms Max.	EACH 1-9	EACH 10-99	EACH Single Type 100-999
1N5333A	3.3	380	3.0			
1N5334A	3.6	350	2.5			
1N5335A	3.9	320	2.0			
1N5336A	4.3	290	2.0			
1N5337A	4.7	260	2.0			
1N5338A	5.1	240	1.5			
1N5339A	5.6	220	1.0			
1N5340A	6.0	200	1.0			
1N5341A	6.2	200	1.0			
1N5342A	6.8	175	1.0			
1N5343A	7.5	175	1.5			
1N5344A	8.2	150	1.5			
1N5345A	8.7	150	2.0			
1N5346A	9.1	150	2.0			
1N5347A	10	125	2.0			
1N5348A	11	125	2.5			
1N5349A	12	100	2.5			
1N5350A	13	100	2.5			
1N5351A	14	100	2.5			
1N5352A	15	75	2.5			
1N5353A	16	75	2.5	"A" suffix, ±10% tol.		
1N5354A	17	70	2.5	2.64	2.20	1.65
1N5355A	18	65	2.5			
1N5356A	19	65	3.0	"B" suffix, ±5% tol.		
1N5357A	20	65	3.0	2.94	2.45	1.85
1N5358A	22	50	3.5			
1N5359A	24	50	3.5			
1N5360A	25	50	4.0			
1N5361A	27	50	5.0			
1N5362A	28	50	6.0			
1N5363A	30	40	8.0			
1N5364A	33	40	10			
1N5365A	36	30	11			
1N5366A	39	30	14			
1N5367A	43	30	20			
1N5368A	47	25	25			
1N5369A	51	25	27			
1N5370A	56	20	35			
1N5371A	60	20	40			
1N5372A	62	20	42			
1N5373A	68	20	44			
1N5374A	75	20	45			
1N5375A	82	15	65			
1N5376A	87	15	75			
1N5377A	91	15	75			
1N5378A	100	12	90			
1N5379A	110	12	125			
1N5380A	120	10	170			
1N5381A	130	10	190	"A" suffix, ±10% tol.		
1N5382A	140	8.0	230	3.12	2.60	1.95
1N5383A	150	8.0	330			
1N5384A	160	8.0	350	"B" suffix, ±5% tol.		
1N5385A	170	8.0	380	3.42	2.85	2.15
1N5386A	180	5.0	430			
1N5387A	190	5.0	450			
1N5388A	200	5.0	480			

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Motorola Silicon Zener Diodes

SEE PAGE 87 FOR ILLUSTRATIONS AND COLUMN EXPLANATIONS

400-mW DIFFUSED ZENER DIODES (Case 51)

Types 1N4370 to 1N759, No suffix ±10% tolerance; suffix "A," ±5% tolerance, Types 1N957 to 1N992, No suffix ±20% tolerance; suffix "A," ±10% tolerance. To order MIL-S-19500/127, use prefix "JAN"; for Meg-A-Life II, Level 1, add suffix "ML1"; for Meg-A-Life II, Level 2, add suffix "ML2"; for Meg-A-Life II, Level 3, add suffix "ML 3."

Type No.	Vz @ Izt Volts	Izt mA	Zzt@Izt Ohms (max.)	EACH 1-9	10-99	100-999
1N4370	2.4	20	30			
1N4371	2.7	20	30			
1N4372	3.0	20	29			
1N746	3.3	20	28			
1N747	3.6	20	24	No Suffix (±10% tolerance)		
1N748	3.9	20	23			
1N749	4.3	20	22	2.40	2.00	1.50
1N750	4.7	20	19			
1N751	5.1	20	17			
1N752	5.6	20	11			
1N753	6.2	20	7	"A" Suffix (±5% tolerance)		
1N754	6.8	20	5			
1N755	7.5	20	6			
1N756	8.2	20	8	3.30	2.75	2.05
1N757	9.1	20	10			
1N758	10.0	20	17			
1N759	12.0	20	30			
1N957	6.8	18.5	4.5			
1N958	7.5	16.5	5.5			
1N959	8.5	15	6.5			
1N960	9.1	14	7.5			
1N961	10	12.5	8.5			
1N962	11	11.5	9.5			
1N963	12	10.5	11.5	No Suffix (±20% tolerance)		
1N964	13	9.5	13			
1N965	15	8.5	16	2.58	2.15	1.60
1N966	16	7.8	17			
1N967	18	7.0	21			
1N968	20	6.2	25			
1N969	22	5.6	29			
1N970	24	5.2	33	"A" Suffix (±10% tolerance)		
1N971	27	4.6	41			
1N972	30	4.2	49	2.82	2.35	1.75
1N973	33	3.8	58			
1N974	36	3.4	70			
1N975	39	3.2	80			
1N976	43	3.0	93	"B" Suffix (±5% tolerance)		
1N977	47	2.7	105			
1N978	51	2.5	125	3.54	2.95	2.20
1N979	56	2.2	150			
1N980	62	2.0	185			
1N981	68	1.8	230			
1N982	75	1.7	270			
1N984	91	1.4	400			
1N985	100	1.3	500	No Suffix (±20%)		
1N987	120	1.0	900	3.12	2.60	1.95
1N989	150	.85	1500	"A" Suffix (±10%)		
1N991	180	.68	2200	3.60	3.00	2.25
1N992	200	.65	2500	"B" Suffix (±5%)		
.....	.....	.....	.....	4.38	3.65	2.75

1-WATT SURMETIC ZENER DIODES (Case 59)

1N4728	3.3	76	10			
1N4729	3.6	69	10			
1N4730	3.9	64	9			
1N4731	4.3	58	9			
1N4732	4.7	53	8			
1N4733	5.1	49	7			
1N4734	5.6	45	5			
1N4735	6.2	41	2			
1N4736	6.8	37	3.5	No suffix, ±10% tol.		
1N4737	7.5	34	4.0			
1N4738	8.2	31	4.5	1.51	1.26	.95
1N4739	9.1	28	5.0			
1N4740	10	25	7	"A" suffix, ±5% tol.		
1N4741	11	23	8			
1N4742	12	21	9			
1N4743	13	19	10	2.32	1.93	1.45
1N4744	15	17	14			
1N4745	16	15.5	16			
1N4746	18	14	20			
1N4747	20	12.5	22			
1N4748	22	11.5	23			
1N4749	24	10.5	25			
1N4750	27	9.4	35			
1N4751	30	8.5	40			

1-WATT SURMETIC ZENER DIODES (Cont'd) (Case 59)

Type No.	Vz @ Izt Volts	Izt mA	Zzt@Izt Ohms (max.)	EACH 1-9	10-99	100-999
1N4752	33	7.5	45			
1N4753	36	7.0	50			
1N4754	39	6.5	60			
1N4755	43	6.0	70			
1N4756	47	5.5	80	No suffix, ±10% tol.		
1N4757	51	5.0	95	1.51	1.26	.95
1N4758	56	4.5	110			
1N4759	62	4.0	125	"A" suffix, ±5% tol.		
1N4760	68	3.7	150	2.32	1.93	1.45
1N4761	75	3.3	175			
1N4762	82	3.0	200			
1N4763	91	2.8	250			
1N4764	100	2.5	350			

1-WATT LOW-VOLTAGE ZENER DIODES (Case 52)

Add suffix "A" for 5% tol. No suffix, 10% tol. *When ordering MIL types, add prefix "JAN." For Meg-A-Life II level 1, add suffix "ML1"; level 2, "ML2"; level 3, "ML3." MIL and Meg-A-Life types available in 5% tol. only, at slightly higher prices.

*1N3821	3.3	76	10			
*1N3822	3.6	69	10			
*1N3823	3.9	64	9	No suffix, ±10% tol.		
*1N3824	4.3	58	9	2.52	2.10	1.60
*1N3825	4.7	53	8			
*1N3826	5.1	49	7			
*1N3827	5.6	45	5	"A" suffix, ±5% tol.		
*1N3828	6.2	41	2	3.18	2.65	2.00
1N3829	6.8	37	1.5			
1N3830	7.5	34	1.5			

1-WATT DIFFUSED ZENER DIODES (Case 52)

Add suffix "A" for 10% tolerance, suffix "B" for 5% tolerance. No suffix indicates normal 20% tolerance. For MIL types, add prefix JAN. For Meg-A-Life II, level 1, add suffix ML1; level 2, ML2 level 3, ML3. MIL and Meg-A-Life types available in 5% tolerance only, at slightly higher prices. Reverse polarity available on special order, add suffix "R."

1N3016	6.8	37	3.5			
1N3017	7.5	34	4.0			
1N3018	8.2	31	4.5			
1N3019	9.1	28	5			
1N3020	10	25	7			
1N3021	11	23	8			
1N3022	12	21	9			
1N3023	13	19	10			
1N3024	15	17	14			
1N3025	16	15.5	16			
1N3026	18	14	20			
1N3027	20	12.5	22	No suffix, ±20% tolerance.		
1N3028	22	11.5	23			
1N3029	24	10.5	25	3.42	2.85	2.15
1N3030	27	9.5	35			
1N3031	30	8.5	40	"A" suffix, ±10% tolerance.		
1N3032	33	7.5	45			
1N3033	36	7.0	50	3.48	3.20	2.40
1N3034	39	6.5	60			
1N3035	43	6.0	70	"B" suffix, ±5% tolerance.		
1N3036	47	5.5	80			
1N3037	51	5.0	90	4.44	3.70	2.80
1N3038	56	4.5	110			
1N3039	62	4.0	125			
1N3040	68	3.7	150			
1N3041	75	3.3	175			
1N3042	82	3.0	200			
1N3043	91	2.8	250			
1N3044	100	2.5	350			
1N3045	110	2.3	450	No suffix, ±20% tolerance.		
1N3046	120	2.0	550	3.54	2.95	2.20
1N3047	130	1.9	700	"A" suffix, ±10% tolerance.		
1N3048	150	1.7	1000	3.90	3.25	2.45
1N3049	160	1.6	1100	"B" suffix, ±5% tolerance.		
1N3050	180	1.4	1200	5.58	4.65	3.50
1N3051	200	1.2	1500			

1.5-WATT DIFFUSED ZENER DIODES (Case 55)

Add suffix "A" for 10% tolerance, suffix "B" for 5% tolerance. No suffix indicates normal 20% tolerance. Reverse polarity available on Special Order. For reverse polarity, add suffix "R."

1N3785	6.8	55	2.7	
1N3786	7.5	50	3.0	Prices same as 1N3790 to 1N3813, page 89
1N3787	8.2	46	3.5	
1N3788	9.1	41	4.0	
1N3789	10	37	5	

Best Percentage of Order Handling in the Country

Motorola Silicon Zener Diodes

SEE PAGE 87 FOR ILLUSTRATIONS AND COLUMN EXPLANATIONS

1.5-WATT DIFFUSED ZENER DIODES (Cont'd) (Case 55)

*No suffix, 20% tolerance; †"A" suffix, 10% tolerance; §"B" suffix, 5% tolerance.

Type No.	Vz @ Izt Volts	Izt mA	Zzt @ Izt Ohms (max)	EACH 1-9	10-99	100-999
1N3790	11	34	6			
1N3791	12	31	7			
1N3792	13	29	8			
1N3793	15	25	10			
1N3794	16	23	11			
1N3795	18	21	13			
1N3796	20	19	15			
1N3797	22	17	16			
1N3798	24	16	17	No suffix, ±20% tol.		
1N3799	27	14	20	4.50	3.75	2.80
1N3800	30	12	25	"A" suffix, ±10% tol.		
1N3801	33	11	30	6.36	5.30	4.00
1N3802	36	10	35	"B" suffix, ±5% tol.		
1N3803	39	10	40	8.34	6.95	5.25
1N3804	43	9.0	45			
1N3805	47	8.0	55			
1N3806	51	7.4	65			
1N3808	62	6.0	85			
1N3809	68	5.5	95			
1N3810	75	5.0	110			
1N3811	82	4.5	130			
1N3813	100	3.7	200			
1N3815	120	3.1	350	6.70** 7.74† 10.00§	4.75** 6.45† 8.35§	3.55** 4.85† 6.30§
1N3817	150	2.5	700	6.70**	4.75**	3.55**
1N3820	200	1.9	1000	8.80† 10.52§	7.05† 8.80§	5.30† 6.60§

10-WATT DIFFUSED ZENER DIODES (Case 56)

Add suffix "A" for 10% tol., suffix "B," 5% tol. No suffix, 20% tol. *For MIL types, add prefix JAN. For Meg-A-Life II, level 1, add suffix ML1; level 2, ML2; level 3, ML3. MIL and Meg-A-Life available in 5% tolerance only, at slightly higher prices. For reverse polarity in above types (same prices), add suffix "R." Quantities of 500 and up will be factory shipped. Contact Allied for prices.

Type No.	Vz @ Izt Volts	Izt mA	Zzt @ Izt Ohms (max)	EACH 1-9	10-99	100-499
*1N2970	6.8	370	1.2			
*1N2971	7.5	335	1.3			
*1N2972	8.2	305	1.5			
*1N2973	9.1	275	2.0			
*1N2974	10	250	3			
*1N2975	11	230	3			
*1N2976	12	210	3			
*1N2977	13	190	3			
1N2978	14	180	3			
*1N2979	15	170	3			
*1N2980	16	155	4			
*1N2982	18	140	4			
*1N2984	20	125	4			
*1N2985	22	115	5			
*1N2986	25	105	5			
1N2987	25	100	6	No suffix, ±20% tol.		
*1N2988	27	95	7	6.54	5.45	4.10
*1N2989	30	85	8	"A" suffix, ±10% tol.		
*1N2990	33	75	9	7.02	5.85	4.40
*1N2991	36	70	10	"B" suffix, ±5% tol.		
*1N2992	39	65	11	8.75	7.30	5.50
*1N2993	43	60	12			
1N2994	45	55	13			
*1N2995	47	55	14			
1N2996	50	50	15			
*1N2997	51	50	15			
1N2998	52	50	15			
*1N2999	56	45	16			
*1N3002	75	33	22			
*1N3003	82	30	25			
*1N3004	91	28	35			
*1N3005	100	25	40			
1N3006	105	25	45			
*1N3007	110	23	55			
*1N3008	120	20	75			
*1N3009	130	19	100			
*1N3011	150	15	175			
1N3013	175	14	250	7.20	6.00	4.50
*1N3014	180	14	260	10.80 (A)	9.00 (A)	6.75 (A)
*1N3015	200	12	300	16.50 (B)	13.75 (B)	10.35 (B)

10-WATT LOW-VOLTAGE ZENER DIODES

Add suffix "A" for 5% tolerance. No suffix in Type indicates 10% tolerance. For MIL types, add prefix JAN. For Meg-A-Life II, level 1, add suffix ML1; level 2, ML2, level 3; ML3. MIL and Meg-A-Life types, in 5% tolerance only, at slightly higher prices. For reverse polarity (at same prices) add suffix "R."

Type No. Case 56	Vz @ Izt Volts	Izt mA	Zzt @ Izt Ohms (max)	EACH 1-9	10-99	100-999
1N3993	3.9	640	2.0			
1N3994	4.3	580	1.5			
1N3995	4.7	530	1.2	No suffix, ±10% tol.		
1N3996	5.1	490	1.1	6.72	5.65	4.25
1N3997	5.6	445	1.0	"A" suffix, ±5% tol.		
1N3998	6.2	405	1.1	9.24	7.70	5.80
1N3999	6.8	370	1.2			
1N4000	7.5	335	1.3			

50-WATT DIFFUSED ZENER DIODES

Add suffix "A" for 10% tolerance suffix "B" for 5% tolerance. No suffix, 20% tolerance. *For MIL types, add prefix JAN. For Meg-A-Life II, level 1, add suffix ML1; level 2, ML2; level 3, ML3. MIL and Meg-A-Life types in 5% tolerance only, at slightly higher prices. For reverse polarity (at same prices), add suffix "R."

Type No. Case 54	Type No. Case 58	Vz @ Izt Volts	Izt mA	Zzt @ Izt Ohms	EACH 1-9	10-99	100-999
*1N2804	1N3305	6.8	1850	0.2			
*1N2805	1N3306	7.5	1750	0.3			
*1N2806	1N3307	8.2	1500	0.4			
*1N2807	1N3308	9.1	1370	0.5			
*1N2808	1N3309	10	1200	0.6			
*1N2809	1N3310	11	1100	0.8			
*1N2810	1N3311	12	1000	1.0			
*1N2811	1N3312	13	960	1.1			
1N2812	1N3313	14	890	1.2			
*1N2813	1N3314	15	830	1.4			
.....	1N3315	16	780	1.6			
.....	1N3316	17	740	1.8			
*1N2816	1N3317	18	700	2.0			
1N2817	1N3318	19	660	2.2	No suffix, ±20% tol.		
*1N2818	1N3319	20	630	2.4	6.72	5.65	4.25
*1N2819	1N3320	22	570	2.5	"A" suffix, ±10% tol.		
*1N2820	1N3321	24	520	2.6	9.18	7.65	5.75
1N2821	1N3322	25	500	2.7	"B" suffix, ±5% tol.		
*1N2822	1N3323	27	460	2.8	12.80	10.65	8.00
.....	1N3324	30	420	3.0			
*1N2824	1N3325	33	380	3.2			
*1N2825	1N3326	36	350	3.5			
*1N2826	1N3327	39	320	4.0			
*1N2827	1N3328	43	290	4.5			
1N2828	1N3329	45	280	4.5			
*1N2829	1N3330	47	270	5.0			
1N2830	1N3331	50	250	5.0			
*1N2831	1N3332	51	245	5.2			
.....	1N3334	56	220	6			
*1N2833	1N3335	62	200	7			
*1N2834	.....	68	180	8			
*1N2835	.....	75	170	9			
.....	1N3338	82	150	11			
.....	1N3339	91	140	15			
*1N2838	1N3340	100	120	20			
.....	1N3341	105	120	25			
.....	1N3342	110	110	30	No suffix, ±20% tol.		
*1N2841	1N3343	120	100	40	8.15	6.80	5.10
*1N2842	1N3344	130	95	50	"A" suffix, ±10% tol.		
.....	1N3345	140	90	60	13.56	11.30	8.50
*1N2843	1N3346	150	85	75	"B" suffix, ±5% tol.		
.....	1N3347	160	80	80	21.55	17.95	13.50
.....	1N3848	175	70	85			
*1N2846	1N3350	200	65	100			

50-WATT LOW-VOLTAGE ZENER DIODES

Type No. Case 54	Type No. Case 58	Vz @ Izt Volts	Izt mA	Zzt @ Izt Ohms	EACH 1-9	10-99	100-999
1N4557	1N4549	3.9	3.2	0.16	No suffix, ±20% tol.		
.....	1N4550	4.3	2.9	0.16	7.26	6.05	4.55
.....	1N4551	4.7	2.65	0.12	"A" suffix, ±10% tol.		
1N4560	1N4552	5.1	2.45	0.12	9.60	8.00	6.00
.....	1N4553	5.6	2.25	0.12	"B" suffix, ±5% tol,		
1N4562	1N4554	6.2	2.0	0.14	13.80	11.50	8.65
.....	.....	.....	.....	.....			
.....	.....	.....	.....	.....			

Motorola Diodes

SEE PAGE 87 FOR EXPLANATION OF COLUMN HEADS

400 MILLIWATT DIODES (Case 51)

Types 1N4575 to 1N4579A. V_Z, 6.4 volts ±5% at I_{ZT} of 2.0 mA.
Types 1N4580 to 1N4584A. V_Z, 6.4 volts ±5% at I_{ZT} of 4.0 mA.
Test temperatures: No suffix (20% tolerance), 0, +25, +75° C.
A suffix (10% tolerance), −55, 0, +25, +75, +100° C.

Type No.	Vz Volts (max.)	T. C. %/°C	Zzt Ohms (max.)	EACH 1-9	10-99	Single-Type 100-Up
1N4575	0.048	0.01	50	3.60	3.00	2.25
1N4576	0.024	0.005	50	4.38	3.65	2.75
1N4577	0.010	0.002	50	7.92	6.60	4.95
1N4578	0.005	0.001	50	14.58	12.15	9.15
1N4579	0.002	0.0005	50	33.90	28.25	21.25
1N4575A	0.099	0.01	50	3.96	3.30	2.50
1N4576A	0.050	0.005	50	4.86	4.05	3.05
1N4577A	0.020	0.002	50	8.76	7.30	5.50
1N4578A	0.010	0.001	50	16.20	13.50	10.15
1N4579A	0.005	0.0005	50	37.68	31.40	23.60
1N4580	0.048	0.01	25	3.60	3.00	2.25
1N4581	0.024	0.005	25	4.38	3.65	2.75
1N4582	0.010	0.002	25	7.92	6.60	4.95
1N4583	0.005	0.001	25	14.58	12.15	9.15
1N4584	0.002	0.0005	25	33.90	28.25	21.25
1N4580A	0.099	0.01	25	3.96	3.30	2.50
1N4581A	0.050	0.005	25	4.86	4.05	3.05
1N4582A	0.020	0.002	25	8.76	7.30	5.50
1N4583A	0.010	0.001	25	16.20	13.50	10.15
1N4584A	0.005	0.0005	25	37.68	31.40	23.60

MOLDED ASSEMBLY REFERENCE DIODES (†Illus. on Page 87)

Type No.	Case	Vz ± 5% Volts	T. C. %/°C	EACH 1-9	10-99	Single-Type 100-Up
*1N429	53†	6.2	0.01	6.80	5.45	4.10
1N1530	57†	8.4	0.002	21.00	16.55	12.45
1N1735	41	6.2	0.01	6.75	5.40	4.05
1N1736	41	12.4	0.01	10.90	8.75	6.60
1N1736A	41	12.4	0.005	13.40	10.70	8.05
1N1738A	41	24.8	0.005	20.20	16.20	12.20

*Military types available. Prices slightly higher.

LOW VOLTAGE ZENER REGULATOR DIODES (Case 51)

These highly reliable low voltage silicon regulators utilize an oxide-passivated junction for long-term voltage stability. Special "Ram-Rod" construction provides a rugged, glass-enclosed, hermetically sealed structure. T_A=25°C. Based on DC measurements at thermal equilibrium; V_F 1.1 Max @ I_F=200 mA for all types.

Type No.	Vz (V) @ Izt (mA)	EACH 1-9	10-99	Single-Type 100-Up
1N5518	3.3 20			
1N5519	3.6 20			
1N5520	3.9 20			
1N5521	4.3 20			
1N5522	4.7 10			
1N5523	5.1 5.0			
1N5524	5.6 3.0			
1N5525	6.2 1.0			
1N5526	6.8 1.0			
1N5527	7.5 1.0			
1N5528	8.2 1.0			
1N5529	9.1 1.0	"A" Suffix (±10% Tolerance)		
1N5530	10.0 1.0	(Guaranteed limits on 3 parameters)		
1N5531	11.0 1.0	3.68	2.95	2.25
1N5532	12.0 1.0			
1N5533	13.0 1.0	"B" Suffix (±5.0% Tolerance)		
1N5534	14.0 1.0	(Guaranteed limits on 6 parameters)		
1N5535	15.0 1.0	5.25	4.20	3.15
1N5536	16.0 1.0			
1N5537	17.0 1.0			
1N5538	18.0 1.0			
1N5539	19.0 1.0			
1N5540	20.0 1.0			
1N5541	22.0 1.0			
1N5542	24.0 1.0			
1N5543	25.0 1.0			
1N5544	28.0 1.0			
1N5545	30.0 1.0			
1N5546	33.0 1.0			

750 MILLIWATT DIODES (Case 52)

Vz, 9.4 volts ±0.4 V (±0.2 V suffix A, 10% to 1.). Izt, 10 mA.

Type No.	Vz Volts (max.)	T. C. %/°C	Zzt Ohms (max.)	EACH 1-9	10-99	Single-Type 100-Up
1N2163	0.033	0.005	15	4.12	3.30	2.50
1N2163A	0.033	0.005	15	4.30	3.45	2.60
1N2166	0.007	0.001	15	8.50	6.80	5.10
1N2166A	0.007	0.001	15	10.20	8.10	6.10
1N2169	0.004	0.0005	15	21.20	16.95	12.75
1N2169A	0.004	0.0005	15	31.20	25.00	18.80
1N2164	0.086	0.005	15	5.60	4.50	3.40
1N2164A	0.086	0.005	15	6.85	5.50	4.15
1N2167	0.017	0.001	15	10.80	8.65	6.50
1N2167A	0.017	0.001	15	13.80	11.05	8.30
1N2170	0.009	0.0005	15	29.95	23.95	18.00
1N2170A	0.009	0.0005	15	46.00	36.95	27.80
1N2165	0.115	0.005	15	7.05	5.65	4.25
1N2165A	0.115	0.005	15	9.10	7.30	5.50
1N2168	0.023	0.001	15	14.90	11.90	8.95
1N2168A	0.023	0.001	15	20.00	15.95	12.00
1N2171	0.012	0.0005	15	43.00	34.85	26.20
1N2171A	0.012	0.0005	15	53.40	44.50	33.50

500-MILLIWATT ZENER REGULATOR DIODES (Case 51)

Type No.	Vz @ Izt (V) (mA)	EACH 1-9	10-24	25-99	100-249	250-499	500-999	1000-Up
1N5221	2.4 20							
1N5222	2.5 20							
1N5223	2.7 20							
1N5224	2.8 20							
1N5225	3.3 20							
1N5226	3.3 20							
1N5227	3.6 20							
1N5228	3.9 20							
1N5229	4.3 20							
1N5230	4.7 20							
1N5231	5.1 20							
1N5232	5.6 20							
1N5233	6.0 20							
1N5234	6.2 20							
1N5235	6.8 20	No Suffix (±10% Tolerance)						
1N5236	7.5 20	(Guaranteed limits on 3 parameters)						
1N5237	8.2 20	.80	.67	.60	.45	.43	.40	.38
1N5238	8.7 20							
1N5239	9.1 20	"A" Suffix (±10% Tolerance)						
1N5240	10 20	(Guaranteed limits on 6 parameters)						
1N5241	11 20	1.09	.90	.80	.60	.57	.54	.51
1N5242	12 20							
1N5243	13 9.5	"B" Suffix (±5% Tolerance)						
1N5244	14 9.0	1.26	1.05	.93	.70	.66	.63	.59
1N5245	15 8.5							
1N5246	16 7.8							
1N5247	17 7.4							
1N5248	18 7.0							
1N5249	19 6.6							
1N5250	20 6.2							
1N5251	22 5.6							
1N5252	24 5.2							
1N5253	25 5.0							
1N5254	27 4.6							
1N5255	28 4.5							
1N5256	30 4.2							
1N5257	33 3.8							
1N5258	36 3.4							
1N5259	39 3.2							
1N5260	43 3.0	No Suffix (±10% Tolerance)						
1N5261	47 2.7	(Guaranteed limits on 3 parameters)						
1N5262	51 2.5	1.09	.90	.80	.60	.57	.54	.51
1N5263	56 2.2							
1N5264	60 2.1	"A" Suffix (±10% Tolerance)						
1N5265	62 2.0	(Guaranteed limits on 6 parameters)						
1N5266	68 1.8	1.34	1.12	1.00	.75	.71	.67	.64
1N5267	75 1.7							
1N5268	82 1.5	"B" Suffix (±5.0% Tolerance)						
1N5269	87 1.4	1.52	1.27	1.13	.85	.81	.76	.72
1N5270	91 1.4							
1N5271	100 1.3							
1N5272	110 1.1	(No Suffix ±10% Tolerance)						
1N5273	120 1.0	(Guaranteed limits on 3 parameters)						
1N5274	130 0.95	1.52	1.27	1.13	.85	.81	.76	.72
1N5275	140 0.90							
1N5276	150 0.85	"A" Suffix (±10% Tolerance)						
1N5277	160 0.80	(Guaranteed limits on 6 parameters)						
1N5278	170 0.74	1.80	1.50	1.33	1.00	.95	.90	.85
1N5279	180 0.68							
1N5280	190 0.66	"B" Suffix (±5.0% Tolerance)						
1N5281	200 0.65	1.98	1.65	1.46	1.10	1.04	.99	.93

Motorola MIDA & Silicon Rectifier Assemblies

MIDA RECTIFIER ASSEMBLIES

5 amp single-phase voltage doublers. $I_{FM(surge)}$, 32 amps. $I_{R(AV)}$,) μA.

$V_{RM(rep)}$ Volts	Case 106 Type No.	Case 107 Type No.	EACH 1-9	10-24	25-99	100-Up
25	.....	MDA930A-1	.99	.82	.73	.55
50	.....	MDA930A-2	1.08	.90	.80	.60
100	MDA930-3	MDA930A-3	1.11	.97	.86	.65
200	MDA930-4	MDA930A-4	1.37	1.14	1.01	.76
300	.....	MDA930A-5	1.50	1.21	1.08	.81
400	MDA930-6	MDA930A-6	1.53	1.27	1.13	.85
600	MDA930-7	MDA930A-7	1.98	1.65	1.46	1.10

0 amp single-phase full-wave bridges.

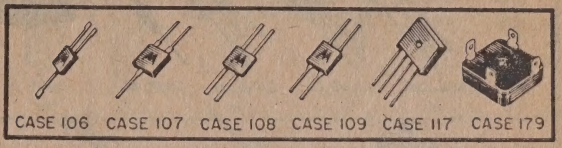
$V_{RM(rep)}$ Volts	Case 108 Type No.	Case 109 Type No.	EACH 1-9	10-24	25-99	100-Up
25	MDA920-1	MDA920A-1	1.70	1.42	1.26	.95
50	MDA920-2	MDA920A-2	2.03	1.69	1.50	1.13
100	MDA920-3	MDA920A-3	2.34	1.95	1.73	1.30
200	MDA920-4	MDA920A-4	2.76	2.30	2.05	1.55
300	MDA920-5	MDA920A-5	2.88	2.40	2.10	1.60
400	MDA920-6	MDA920A-6	2.94	2.45	2.20	1.65
600	MDA920-7	MDA920A-7	3.84	3.20	2.85	2.15

.0 amp. Single-phase center tap, common anode.

$V_{RM(rep)}$ Volts	Case 106 Type No.	Case 107 Type No.	EACH 1-9	10-24	25-99	100-Up
25	.....	MDA940A-1	.99	.82	.73	.55
50	.....	MDA940A-2	1.08	.90	.80	.60
100	.....	MDA940A-3	1.16	.97	.86	.65
200	.....	MDA940A-4	1.37	1.14	1.01	.76
300	.....	MDA940A-5	1.45	1.21	1.08	.81
400	.....	MDA940A-6	1.52	1.27	1.13	.85
600	.....	MDA940A-7	1.98	1.65	1.46	1.10

.0 amp. Single-phase center tap, common cathode.

25	.....	MDA950A-1	.99	.82	.73	.55
50	.....	MDA950A-2	1.08	.90	.80	.60
100	.....	MDA950A-3	1.16	.97	.86	.65
200	MDA950-4	MDA950A-4	1.37	1.14	1.01	.76
300	.....	MDA950A-5	1.45	1.21	1.08	.81
400	.....	MDA950A-6	1.52	1.27	1.13	.85
600	MDA950-7	MDA950A-7	1.98	1.65	1.46	1.10



2.5 amp. Single-phase full-wave bridge rectifiers. $I_{FM(surge)}$ 75 amps. I_R, 1.0 mA.

$V_{RM(rep)}$ Volts	Case 117 Type No.	EACH 1-9	10-24	25-99	100-Up
50	MDA960-1	3.48	2.90	2.55	1.95
100	MDA960-2	4.02	3.35	2.95	2.25
200	MDA960-3	4.50	3.75	3.30	2.50

4.0 amp. Single-phase full-wave bridge rectifiers. $I_{FM(surge)}$, 150 amps. I_R, 1.0 mA.

50	MDA970-1	3.84	3.20	2.00	2.15
100	MDA970-2	4.38	3.65	3.30	2.45
200	MDA970-3	4.92	4.10	3.70	2.75

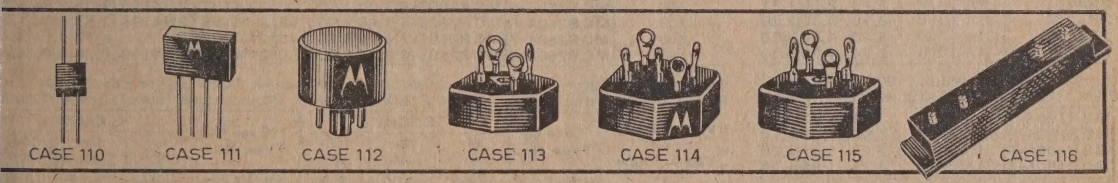
CASE 179. I_{out}=12 amps @ 55° C.

$V_{RM(rep)}$ Volts	Type No.	EACH 1-9	10-24	25-99	100-Up
50	MDA980-1	3.84	3.20	2.90	2.40
100	MDA980-2	4.14	3.45	3.10	2.60
200	MDA980-3	4.86	4.05	3.65	3.05
300	MDA980-4	5.40	4.50	4.10	3.40
400	MDA980-5	6.06	5.05	4.55	3.80
600	MDA980-6	8.27	6.90	6.25	5.20

CASE 179. I_{out} 25=amps @ 55° C.

$V_{RM(rep)}$ Volts	Type No.	EACH 1-9	10-24	25-99	100-Up
50	MDA990-1	4.80	4.00	3.60	3.00
100	MDA990-2	5.10	4.25	3.85	3.20
200	MDA990-3	5.76	4.80	4.30	3.60
300	MDA990-4	6.36	5.30	4.80	4.00
400	MDA990-5	6.96	5.80	5.20	4.30
600	MDA990-6	9.41	7.85	7.10	5.95

MOLDED RECTIFIER BRIDGE ASSEMBLIES



ndividually hermetically-sealed rectifiers interconnected and en- apsulated in molded assemblies for use as single-phase and three- phase full-wave bridge configurations. Output current range from 1.5 to 16 amps, peak reverse voltage ($V_{RM\ (rep)}$) from 50 to 600 V.

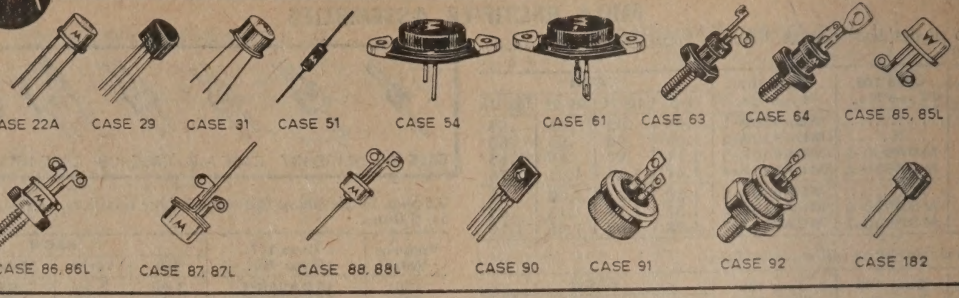
SINGLE-PHASE FULL WAVE BRIDGES—1.5 AMPS

$V_{RM(rep)}$ Volts	Case 110 Type No.	EACH 1-9	10-24	25-99	100-Up	Case 111 Type No.	EACH 1-9	10-24	25-99	100-Up	Case 112 Type No.	EACH 1-9	10-24	25-99	100-Up
50	MDA942-1	3.00	2.50	2.20	1.85	MDA942A-1	3.12	2.60	2.35	1.95	MDA1491-1	2.58	2.11	1.92	1.60
100	MDA942-2	3.36	2.80	2.50	2.10	MDA942A-2	3.48	2.90	2.65	2.20	MDA1491-2	2.87	2.39	2.16	1.80
200	MDA942-3	3.90	3.25	2.95	2.45	MDA942A-3	4.08	3.40	3.05	2.55	MDA1491-3	3.14	2.66	2.40	2.00
300	MDA942-4	4.44	3.70	3.35	2.80	MDA942A-4	4.62	3.85	3.50	2.90	MDA1491-4	3.38	2.82	2.64	2.20
600	MDA942-5	5.04	4.20	3.80	3.15	MDA942A-5	5.16	4.30	3.90	3.25	MDA1491-5	3.80	3.12	2.82	2.35
600	MDA942-6	5.51	4.65	4.20	3.50	MDA942A-6	5.76	4.80	4.30	3.60	MDA1491-6	4.93	4.12	3.72	3.10
							4.0 AMPS—(Case 112)					6.0 AMPS—(Case 113)			
50	.....	.....	.....	.....	.....	MDA1591-1	3.19	2.66	2.40	2.00	MDA952-1	3.90	3.25	2.95	2.45
100	.....	.....	.....	.....	.....	MDA1591-2	3.39	2.82	2.64	2.20	MDA952-2	4.20	3.50	3.20	2.65
200	.....	.....	.....	.....	.....	MDA1591-3	4.34	3.62	3.18	2.65	MDA952-3	5.34	4.45	4.00	3.35
300	.....	.....	.....	.....	.....	MDA1591-4	4.70	3.92	3.54	2.95	MDA952-4	5.89	4.90	4.45	3.70
400	.....	.....	.....	.....	.....	MDA1591-5	5.42	4.52	4.08	3.40	MDA952-5	7.20	6.00	5.40	4.50
600	.....	.....	.....	.....	.....	MDA1591-6	6.77	5.65	5.10	4.25	MDA952-6	8.75	7.30	6.60	5.50
							10 AMPS—(Case 114)					16 AMPS—(Case 116)			
50	.....	.....	.....	.....	.....	MDA962-1	4.38	3.65	3.30	2.75	MDA972-1	11.56	9.65	8.70	7.25
100	.....	.....	.....	.....	.....	MDA962-2	4.88	3.90	3.55	2.95	MDA972-2	12.30	10.25	9.25	7.70
200	.....	.....	.....	.....	.....	MDA962-3	5.82	4.85	4.40	3.65	MDA972-3	13.72	11.45	10.30	8.60
300	.....	.....	.....	.....	.....	MDA962-4	6.36	5.30	4.80	4.00	MDA972-4	15.00	12.55	11.35	9.45
400	.....	.....	.....	.....	.....	MDA962-5	7.68	6.40	5.75	4.80	MDA972-5	16.50	13.75	12.40	10.35

8.0 AMPS THREE-PHASE FULL WAVE BRIDGES—(Case 115)

$V_{RM(rep)}$ Volts	Type No.	1-9, EA.	10-24, EA.	25-99, EA.	100-Up, EA.	$V_{RM(rep)}$ Volts	Type No.	1-9, EA.	10-24, EA.	25-99, EA.	100-Up, EA.
50	MDA1505-1	6.58	5.65	5.10	4.25	300	MDA1505-4	9.50	7.91	7.15	5.95
100	MDA1505-2	7.26	6.05	5.45	4.55	400	MDA1505-5	11.15	9.30	8.40	7.00
200	MDA1505-3	8.80	7.32	6.60	5.50	600	MDA1505-6	12.52	10.45	9.42	7.85

Motorola Thyristors



9 voltages from 25-800 V and currents to 35 amps rms, plus special thyristor types: for low-cost consumer applications; fast switching industrial/military use; also bidirectional types and pulse modulator types. 15 cases meet all mounting requirements. Case numbe in tables below and in listings on facing page refer to illustratio above. 86L cases have extended leads.

I_F=800 mA, I_{GT}=0.2 mA. For quantity prices of 1000-4999 refer to Directory, (starts on page 7).

Type No.	Case	V_{FXM}/V_{FOM} and V_{RXM}/V_{ROM}	EACH 1-9	10-99	100-999
2N5060	29	30	.83	.69	.46
2N5061	29	60	.94	.78	.52
2N5062	29	100	1.08	.90	.60
2N5063	29	150	1.35	1.12	.75

1.6 amp types. Same as MCR914 series. Surge current, ½ cycle @ $T_{J(max)}$, 15 amps. Junction temperature, 125° C. Forward "On" voltage (1A @ 25° C), 2.0 volts (max.). Gate trigger current @ 25° C, 10 mA (max.).

2N1595	31A	50	2.58	2.15	1.45
2N1596	31A	100	3.13	2.60	1.75
2N1597	31A	200	5.94	4.95	3.30
2N1598	31A	300	10.32	8.60	5.75
2N1599	31A	400	14.82	12.35	8.25

As above, but forward "On" voltage, 1.5 V, Gate trigger current, 0.1 mA.

2N4212	31A	25	2.58	2.15	1.45
2N4213	31A	50	3.13	2.60	1.75
2N4214	31A	100	3.96	3.30	2.20
2N4215	31A	150	5.40	4.50	3.00
2N4216	31A	200	5.94	4.95	3.30

As above, Junc. temp., 100° C. Forward "On" voltage, 1.75 V, trigger mA, 1 (max.).

MCR1906-1	31A	25	1.88	1.57	1.05
MCR1906-2	31A	50	1.98	1.65	1.10
MCR1906-3	31A	100	2.25	1.87	1.25
MCR1906-4	31A	200	2.38	1.98	1.35

As above, but Junc. temp., 125° C. Forward "On" voltage, 1.5 volts (max.). Gate trigger current, 200 μA.

2N2322	31	25	2.76	2.30	1.55
2N2323	31	50	3.42	2.85	1.90
2N2324	31	100	4.50	3.75	2.50
2N2325	31	150	5.94	4.95	3.30
2N2326	31	200	6.48	5.40	3.60

2.0 amp types. Surge current, ½ cycle @ $T_{J(max)}$, 30 amps. Junc. temp., 105° C. Forward "On" voltage, 1.6 V (max.) Gate trigger current @ 25° C, 50 mA (max.).

MCR846-1	63	25	6.18	5.15	3.45
MCR846-3	63	100	8.82	7.35	4.90

I_F=4.0 A, I_{GT}=200 μA.

MCR406-1	90	30	1.08	.90	.60
MCR406-2	90	60	1.26	1.05	.70
MCR406-3	90	100	1.35	1.12	.75
MCR406-4	90	200	1.52	1.27	.85

I_F=4.0 A, I_{GT}=500 μA.

MCR407-1	90	30	.99	.82	.55
MCR407-2	90	60	1.15	.96	.65
MCR407-3	90	100	1.26	1.05	.70
MCR407-4	90	200	1.44	1.20	.80

I_F=8.0 A, I_{GT}=30 mA.

2N4441	90	50	1.44	1.20	.80
2N4442	90	200	1.80	1.50	1.00
2N4443	90	400	2.40	2.00	1.35
2N4444	90	600	5.40	4.50	3.00

8-amp types. Same as MCR2304 and MCR2304L series. Surge current, ½ cycle @ $T_{J(max)}$ 100 amps. Junction temp. 100° C. Forward "On", (5A @ 25° C), 1.3 V (max.). Gate trigg mA @ 25° C, 20 (max.) Holding mA @ 25° C, 25 (max.).

V_{FXM}/V_{FOM} and V_{RXM}/V_{ROM}	Case 85 Type No.	EACH 1-9	10-99	100-999	Case 85L Type No.	EACH 1-9	10-99	100-999
25	2N4151	1.74	1.45	1.05				
50	2N4152	1.92	1.60	1.10	2N4160	1.92	1.60	1.1
100	2N4153	2.10	1.75	1.25				
200	2N4154	2.34	1.95	1.35	2N4162	2.34	1.95	1.3
300	2N4155	2.88	2.40	1.60				
400	2N4156	3.36	2.80	1.85	2N4164	3.36	2.80	1.8
	Case 86				Case 86L			
25	2N4167	1.92	1.60	1.20	2N4175	1.92	1.60	1.2
50	2N4168	2.10	1.75	1.25				
100	2N4169	2.28	1.90	1.40	2N4177	2.28	1.90	1.4
200	2N4170	2.52	2.10	1.50	2N4178	2.52	2.10	1.5
300	2N4171	3.06	2.55	1.75	2N4179	3.06	2.55	1.7
400	2N4172	3.54	2.95	2.00	2N4180	3.54	2.95	2.0
500	2N4173	6.18	5.15	3.50				
600	2N4174	8.27	6.90	4.65	2N4182	8.27	6.90	4.6
	Case 87 / Case 88				Case 87L / Case 88L			
25	MCR2604-1 / MCR2605-1	1.86	1.55	1.15	2N4183 / 2N4191	1.91	1.59	1.1
50	MCR2604-2 / MCR2605-2	2.04	1.70	1.20	2N4184 / 2N4192	2.09	1.74	1.2
100	MCR2604-3 / MCR2605-3	2.22	1.85	1.35	2N4185 / 2N4193	2.27	1.89	1.3
200	MCR2604-4 / MCR2605-4	2.46	2.05	1.45	2N4186 / 2N4194	2.51	2.09	1.4
300	MCR2604-5 / MCR2605-5	3.00	2.50	1.70	2N4187 / 2N4195	3.05	2.54	1.7
400	MCR2604-6 / MCR2605-6	3.48	2.90	1.95	2N4188 / 2N4196	3.53	2.94	1.9
500	MCR2604-7 / MCR2605-7	6.12	5.10	3.45	2N4189	6.17	5.14	3.4
600	MCR2604-8 / MCR2605-8	8.22	6.85	4.60	2N4190	8.26	6.89	4.6

16-amp types. Surge current, 1-cycle @ $T_{J(max)}$ 125 amps. Gate trigger current @ 25° C 80 mA (max.). Junc. temps., 100° C, *125° C. Fwd. "On" voltage, (max.), 1.8 V, †1.6 V

V_{FXM}/V_{FOM} and V_{RXM}/V_{ROM}	Case 64 Type No.	EACH 1-9	10-99	100-999	*†Case 64 Type No.	EACH 1-9	10-99	100-999
25	2N1842	3.60	3.00	2.00	2N1842A	3.75	3.15	2.10
50	2N1843	4.50	3.75	2.50	2N1843A	4.85	4.05	2.70
100	2N1844	6.00	5.00	3.35				
150	2N1845	6.84	5.70	3.80	2N1845A	7.27	6.05	4.05
200	2N1846	7.20	6.00	4.00	2N1846A	7.60	6.35	4.25
250	2N1847	7.56	6.30	4.20	2N1847A	8.10	6.75	4.50
100	2N1848	15.90	13.25	8.85	2N1848A	17.10	14.25	9.50
400	2N1849	18.00	15.00	10.00	2N1849A	19.30	16.10	10.75
500	2N1850	20.90	18.15	12.10	2N1850A	23.78	19.80	13.20

BIDIRECTIONAL THYRISTORS (T_J=100°C)

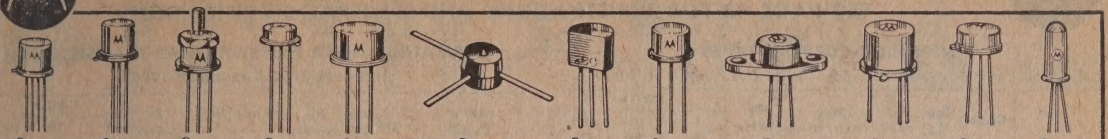
I_A, 8.0 A @ T_C, 75°C. Commutation: 5.0 V/μs typ. Series MAC1, 2, 3: Surge current, 80 A; V_F=1.5 V @ I_F, 5.0 A. Series MAC4, 5, 6: Surge current, 80 A; V_F=1.5 V @ I_F, 5.0 A.

V_{BOM} V	I_{GT} mA max.	I_{HO} mA max.	Type No. Case 85	EACH 1-9	10-99	100-999	Type No. Case 86	EACH 1-9	10-99	100-999	Type No. Case 87L	EACH 1-9	10-99	100-999
50	30	30	MAC1-2	2.38	1.98	1.32	MAC2-2	2.64	2.20	1.47	MAC3-2	2.56	2.13	1.4
200	30	30	MAC1-4	3.96	3.30	2.20	MAC2-4	4.22	3.52	2.35	MAC3-4	4.14	3.45	2.3
400	30	30	MAC1-6	6.30	5.25	3.50	MAC2-6	6.57	5.47	3.65	MAC3-6	6.48	5.40	3.6
50	50	50	MAC4-2	2.15	1.79	1.19	MAC5-2	2.38	1.98	1.32	MAC6-2	2.30	1.92	1.2
200	50	50	MAC4-4	3.57	2.97	1.98	MAC5-4	3.82	3.18	2.12	MAC6-4	2.73	3.10	2.0
400	50	50	MAC4-6	5.66	4.72	3.15	MAC5-6	5.90	4.92	3.28	MAC6-6	5.33	4.85	3.2

BILATERAL TRIGGER DIODES

Case 182 Type	I_{pulse} @ 30 μs, 120 Hz Amp max.	$I_{(BR)}$ μAmp max.	$V_{(BR)}$ Volts min./max.	ΔV Volts min./typ.	EACH 1-9	10-99	100-999	1000-9999
MPT20	2.0	100	16/24	5.0/7.0	.80	.67	.45	.38
MPT28	2.0	50	24/32	7.0/10	.80	.67	.45	.38
MPT32	2.0	50	28/36	7.0/10	.80	.67	.45	.38

Motolora Silicon Annular Switching Transistors



NPN HIGH-SPEED LOW-CURRENT TYPES

PN types for high-speed low-current applications. Offer stable rformance and reliable operation at low cost. h_{FE}, in table below measured with I_C at 10 mA. Case column refers to illustrations ove.

Type No.	Case	V_{CB} (V)	P_D mW	h_{FE} min/max	f_T MHz (min)	EACH 1-9	10-99	100-999	1000-Up
4702	22	25	300	20/160	70	8.10	6.75	4.50	.....
4703**	22	25	300	40/100	70	8.10	6.75	4.50	.....
4706**	22	25	300	20/—	200	.83	.69	.46	.41
4706A	22	25	300	20/60	200	1.42	1.18	.79	.....
4706B	22	25	300	20/60	200	1.78	1.48	.99	.....
4706(JAN)	22	25	300	30/120	200	1.15	.96	.64	.58
4708	22	40	360	30/120	300	.96	.80	.53	.45
4743	22	12	200	40/120	282	7.45	6.20	4.15	.....
4744	22	20	300	40/120	280	3.48	2.90	1.95	.....
4753	22	25	300	40/120	200	2.36	1.97	1.31	.....
4834	22	40	300	25/—	350	2.40	2.00	1.35	.....
4835	22	25	300	20/—	300	1.80	1.50	1.00	.....
4914	22	40	360	30/120	300	1.14	.95	.63	.....
1708	26	12	300	20/—	200	3.84	3.20	2.20	.....
2242	22	15	360	40/120	250	6.96	5.80	3.90	.....
2256	22	7	150	171/—	250	1.35	1.12	.75	.....
2257	22	7	150	40/—	250	1.52	1.27	.85	.....
2368	22	40	360	20/60	400	1.29	1.07	.93	.82
2369	22	40	360	40/120	500	1.50	1.25	.84	.76
2369A**	22	15	360	40/—	500	1.80	1.50	.99	.89
2481**	22	40	360	40/120	300	3.16	2.63	1.75	.....
2501	22	40	360	50/150	350	5.64	4.70	3.15	.....
2710	22	15	360	40/—	500	9.00	7.50	5.00	.....
3009	27	6	360	30/120	350	2.38	1.98	1.32	.....
3010	22	12	300	25/125	600	2.28	1.90	1.27	.....
3011	22	15	360	30/120	400	1.20	1.00	.67	.....
3013	27	20	360	30/120	350	2.57	2.10	1.39	1.25
3014	27	15	360	30/120	350	2.10	1.75	1.16	1.04
3210	22	15	360	30/120	300	1.00	.83	.55	.....
3211	22	20	360	50/150	350	1.52	1.27	.85	.....
3227	22	40	360	100/300	500	2.88	2.40	1.60	.....
3509	26	40	400	100/300	500	6.48	5.40	3.60	.....
3946	22	60	360	50/150	250	3.28	2.40	1.60	.....
3947	22	60	360	100/300	300	3.30	2.75	1.85	.....
3959	22	20	400	40/200	1300	12.60	10.50	7.00	.....
3960	22	15	400	40/200	1600	15.72	13.10	8.75	.....
M709	27	15	400	15/200	300	1.09	.91	.61	.55
M1605	20	10	200	25/200	2000	16.20	13.50	9.00	8.10
M1606	20	10	200	25/200	2000	13.50	11.25	7.50	6.75
M1607	20	10	200	25/200	1700	9.90	8.25	5.55	5.00
M1748	27	6	300	20/120	600	.64	.53	.35	.....
MT2222	28	30	225	50/—	200	3.42	2.85	1.90	.....
MT2369	28	15	225	40/120	500	2.34	1.95	1.30	.....
MT3903	28	40	225	50/150	250	2.88	2.40	1.60	.....
MT3904	28	40	225	100/300	300	3.60	3.00	2.00	.....
MT3960A	28	8	225	30/200	2250	12.40	10.35	6.90	.....

*Meg-A-Life II, military units available at slightly higher prices.

PNP HIGH-SPEED LOW-CURRENT TYPES

h_{FE} @ I_C, 10 mA.

Type No.	Case	V_{CB} V	P_D mW	h_{FE} min/max	f_T MHz (min) + (typ)	EACH 1-9	10-99	100-999	1000-Up
N869A**	22	25	360	40/120	400	5.40	4.50	3.00	.....
N2894	22	12	360	30/—	400	2.34	1.95	1.30	.....
N3248	22	15	360	50/150	250	4.68	3.90	2.60	.....
N3249	22	15	360	100/300	300	5.58	4.65	3.10	.....
N3250**	22	50	360	50/150	250	3.84	3.20	2.15	1.94
N3250A**	22	60	360	50/150	250	4.26	3.55	2.38	2.14
N3251**	22	50	360	100/300	300	4.26	3.55	2.38	2.14
N3251A**	22	60	360	100/300	300	4.68	3.90	2.59	2.33
N3304	22	6.0	300	30/120	500	5.40	4.50	3.00	.....
N3546	22	15	360	30/120	700	6.30	5.25	3.50	.....

*Meg-A-Life II, military units available at slightly higher prices.

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PNP HIGH-SPEED LOW-CURRENT TYPES (Cont'd)

h_{FE} @ I_C, 10 mA, except 2N4411 (I_C, 5.0 mA).

Type No.	Case	V_{CB} V	P_D mW	h_{FE} min/max	f_T MHz (min) + (typ)	EACH 1-9	10-99	100-999	1000-Up
2N4260	20	15	200	30/150	1600	14.75	12.35	8.25	.....
2N4261	20	15	200	30/150	2000	17.50	14.60	9.75	.....
2N4411	20	15	150	40/160	400	21.60	18.00	12.00	.....
MMT3546	28	12	225	30/—	700	7.38	6.15	4.10	.....
MMT3905	28	40	200	50/150	200	2.88	2.40	1.60	.....
MMT3906	28	40	200	100/300	250	3.60	3.00	2.00	.....

NPN HIGH-SPEED MEDIUM-CURRENT TYPES

h_{FE} @ I_C, 150 mA. #Solid header.

Type No.	Case	V_{CB} V	P_D mW	h_{FE} min/max	f_T MHz (min) + (typ)	EACH 1-9	10-99	100-999	1000-Up
2N696	31		600	20/60	40	.63	.52	.46	.40
2N697	31	60	600	40/120	50	.63	.52	.46	.40
2N699	79	80	600	40/120	50	1.58	1.32	.88	.....
2N718	22	60	400	40/120	50	.55	.46	.40	.35
2N718A	22	75	500	40/120	60	.95	.79	.68	.60
2N956	22	75	500	100/300	70	1.02	.85	.74	.65
2N1420	31	60	600	100/300	50	.78	.65	.56	.50
2N1613	31	75	800	40/120	60	.95	.79	.68	.60
2N1711	31	75	800	100/300	70	1.02	.85	.74	.65
2N1959	31	40	600	40/120	100	5.35	4.45	2.95	.....
2N2224	31	40	600	40/120	250	4.50	3.75	2.50	.....
2N2410	31	40	800	30/120	200	5.40	4.50	3.00	.....
2N2476	31	20	600	20/—	250	1.98	1.65	1.14	.....
2N2477	31	20	600	40/—	250	2.47	2.06	1.35	.....
2N2537	31	60	800	50/150	250	5.94	4.95	3.30	.....
2N2538	31	60	800	100/300	250	7.00	5.85	3.90	.....
2N2845	31	30	360	30/120	250	5.94	4.95	3.30	.....
2N2846	31	30	800	30/120	250	5.94	4.95	3.30	.....
2N2847	22	20	360	40/140	250	6.12	5.10	3.40	.....
2N2848	31	20	800	40/140	250	6.12	5.10	3.40	.....
2N2895	22	65	500	40/120	120	1.69	1.41	.97	.....
2N2896	22	90	500	60/200	120	2.47	2.06	1.43	.....
2N2897	22	45	500	50/200	100	1.39	1.16	.80	.....
2N2958	31	60	600	40/120	250	2.70	2.25	1.50	.....
2N2959	31	60	600	100/300	250	3.24	2.70	1.80	.....
2N3015	31	30	800	30/120	250	2.32	1.93	1.29	.....
2N3053	79	60	1000	50/250	100	1.00	.83	.57	.50
2N3115	22	60	400	40/120	250	2.34	1.95	1.30	.....
2N3116	22	60	400	100/300	250	2.88	2.40	1.60	.....
2N3299	31	30	800	40/120	000	.90	.75	.50	.....
2N3300	31	30	800	100/300	000	1.26	1.05	.70	.....
2N3301	22	30	20	35/—	000	.90	.75	.50	.....
2N3510	27	40	360	25/150	350	1.74	1.45	.97	.87
2N3511	27	40	360	30/120	450	2.34	1.95	1.29	1.16
2N3647	26	40	400	25/150	350	2.70	2.25	1.50	.....
2N3648	26	40	400	30/120	450	3.24	2.70	1.80	.....

PNP HIGH-SPEED MEDIUM-CURRENT TYPES

h_{FE} @ I_C, 150 mA except 2N2695 (I_C, 50 mA).

Type No.	Case	V_{CB} V	P_D mW	h_{FE} min/max	f_T MHz (min) + (typ)	EACH 1-9	10-99	100-999	1000-Up
2N722	22	50	400	30/90	60	1.75	1.46	1.27	.....
2N1131**	31	50	400	20/45	50	6.72	5.60	3.75	.....
2N1132**	31	50	600	30/90	60	1.75	1.46	1.27	1.10
2N1132A	31	60	600	30/90	60	14.40	12.00	8.00	.....
2N1991	31	30	600	15/60	40	4.74	3.95	2.96	.....
2N2303	31	50	600	75/200	60	10.00	8.25	5.50	.....
2N2695	26	25	360	30/130	100	5.22	4.35	2.90	.....
2N2800	31	50	800	30/90	120	8.10	6.75	4.50	.....
2N2801	31	50	800	75/225	120	8.52	7.10	4.75	.....
2N2838	22	50	500	75/225	120	8.52	7.10	4.75	.....
2N3133	31	50	600	40/120	200	5.94	4.95	3.30	.....
2N3134	31	50	600	100/300	200	7.00	5.85	3.90	.....
2N3135	22	50	400	40/120	200	5.94	4.95	3.30	.....
2N3136	22	50	400	100/300	200	7.00	5.85	3.90	.....
2N3486	26	60	400	100/300	200	12.23	10.20	6.80	.....
2N3486A	26	60	400	100/300	200	16.20	13.50	9.00	.....
2N3671	31	50	600	70/225	200	5.40	4.50	3.00	.....
2N3672	22	50	400	70/225	200	5.40	4.50	3.00	.....
2N3673	26	50	350	70/225	200	6.24	5.20	3.40	.....

**Meg-A-Life II, military units available at slightly higher prices.

Motorola Silicon Annular Switching Transistors

SEE PAGE 93 FOR ILLUSTRATIONS AND GENERAL SPECIFICATIONS

NPN HIGH-CURRENT TYPES

h_{FE} @ Ic, *150 mA, †500 mA, ‡1.5 A., §1.0 A. #Solid Header

Type No.	Case	V_{CB} V	P_D mW	h_{FE} min/max	f_T MHz	EACH 1-9	10-99	100-Up
2N656	31#	60	1000	30/90	.....	2.44	2.03	1.35
2N657	31#	100	1000	30/90	.....	2.64	2.20	1.47
2N1893	31#	80	800	*40/120	50	1.88	1.57	1.05
2N2192	31#	60	1000	*100/300	50	5.05	4.20	2.80
2N2192A	31#	60	1000	*100/300	50	5.30	4.40	2.95
2N2193	31#	80	1000	*40/120	50	3.48	2.90	1.95
2N2193A	31#	80	1000	*40/120	50	3.78	3.15	2.10
2N2194	31#	60	1000	*20/60	50	2.62	2.18	1.45
2N2194A	31#	60	1000	*20/60	50	2.88	2.40	1.60
2N2195	31#	45	1000	*20/—	50	1.66	1.38	.92
2N2195A	31#	45	1000	*20/—	50	1.84	1.53	1.02
2N2405	79#	120	1000	*60/200	45	2.18	1.82	1.25
2N3252	31#	60	1000	†30/90	200	11.17	9.75	6.50
2N3253	31#	75	1000	†25/75	175	11.17	9.75	6.50
2N3303	94	12	600	30/120	450	16.20	13.50	9.00
2N3444	31#	80	1000	†20/60	175	14.40	12.00	8.00
2N3506	31#	60	1000	‡40/200	60	13.85	11.55	7.70
2N3507	31#	80	1000	‡30/150	60	15.80	13.20	8.80
2N3734	31#	50	1000	§30/120	250	7.20	6.00	4.00
2N3735	31#	50	1000	§30/80	250	7.20	6.00	4.00
2N3736	26	75	500	§30/120	250	7.90	6.60	4.40

PNP HIGH-CURRENT TYPES

h_{FE} @ Ic, *150 mA, †500 mA, §1.0 A. #Solid header.

Type No.	Case	V_{CB} V	P_D mW	h_{FE} min/max	f_T MHz	EACH 1-9	10-99	100-Up
2N3244	31#	40	1000	†50/150	175	18.90	15.75	10.50
2N3245	31#	50	1000	†30/90	150	18.90	15.75	10.50
2N3467	31#	40	1000	†40/120	175	11.70	9.75	6.50
2N3762	31#	40	1000	§30/120	180	9.00	7.50	5.00
2N3763	31#	60	1000	§20/80	150	9.00	7.50	5.00
2N4890	31	40	1000	*50/250	100	1.34	1.12	.75
MM3726	31#	50	1000	†30/120	200	8.10	6.75	4.50

NPN HIGH-VOLTAGE TYPES

h_{FE} @ Ic, 150 mA, except *30 mA, †10 mA. #Solid header.

Type No.	Case	V_{CB} V	P_D mW	h_{FE} min/max	f_T MHz	EACH 1-9	10-99	100-Up
2N3498	31#	100	1000	40/120	150	7.90	6.60	4.40
2N3499	31#	100	1000	100/300	150	8.90	7.40	4.95
2N3500	31#	150	1000	40/120	150	13.50	11.25	7.50
2N3501	31#	150	1000	100/300	150	15.10	12.60	8.40
2N3742	31#	300	1000	*20/200	30	15.10	12.60	8.40
MM3000	79	100	1000	†20/—	150	1.50	1.25	.83
MM3001	79	150	1000	†20/—	150	1.68	1.40	.93
MM3002	79	200	1000	†20/—	150	2.06	1.65	1.10
MM3003	79	250	1000	†20/—	150	2.28	1.90	1.25

PNP HIGH-VOLTAGE TYPES (#Solid header)

h_{FE} @ Ic, *10 mA, †50 mA, §30 mA, ‡500 mA, ††100 mA.

Type No.	Case	V_{CB} V	P_D mW	h_{FE} min/max	f_T MHz	EACH 1-9	10-99	100-Up
2N3494	22	80	600	*40/—	200	11.70	9.75	6.50
2N3495	22	120	600	*40/—	150	15.30	12.75	8.50
2N3496	22	80	400	*40/—	200	11.70	9.75	6.50
2N3634	31#	140	1000	†50/150	150	15.80	13.20	8.80
2N3635	31#	140	1000	†100/300	200	17.30	14.40	9.60
2N3636	31#	175	1000	†50/150	150	13.20	19.40	12.95
2N3637	31#	175	1000	†100/300	200	25.60	21.30	14.20
2N3743	31	300	1000	§25/250	30	35.20	29.25	19.50
2N4928	79	100	600	*25/200	100	4.86	4.05	2.70
2N4929	79	150	1000	*25/200	100	5.95	4.95	3.30
2N4930	79	200	1000	*20/200	20	7.05	5.90	3.95
2N4931	79	250	1000	*20/200	20	8.10	6.75	4.50
2N5357	39	300	30W	‡25/100	50	18.00	15.00	10.00
MM4000	79	100	600	*20/—	.....	1.49	1.24	.83
MM4001	79	150	1000	*20/—	.....	1.67	1.39	.93
MM4002	79	200	1000	*20/—	.....	1.98	1.65	1.10
MM4003	79	250	1000	*20/—	.....	2.22	1.85	1.25
MM4545	39	200	20W	††25/—	40	10.80	9.00	6.00
MM4546	39	300	20W	††25/—	40	12.60	10.50	7.00
MM4547	39	400	20W	††25/—	30	18.00	15.00	11.00

As soon as new types are released by Motorola, Allied Electronics will stock them

GERMANIUM MESA PNP SWITCHING TRANSISTORS

HIGH-SPEED LOW-CURRENT TYPES

Mfr's Type	Case	V_{EB} (V)	P_D (mW)	h_{FE}@Ic min/max	mA	f_T MHz	EACH 1-9	10-99	100-U
2N499	149	30	60	20/80	1.0	120	4.32	3.60	2.4
2N499A	149	30	60	20/80	1.0	120	5.15	4.30	2.8
2N502	31	20	60	9.01/—	2.0	....	3.90	3.25	2.1
2N502A	31	30	75	15/—	2.0	....	4.50	3.75	2.5
2N502B	31	30	75	20/80	2.0	....	5.03	4.20	2.8
2N705	22	3.5	150	25/...	10	....	1.24	1.03	.6
2N710	22	2.0	150	25/...	10	....	1.60	1.33	.8
2N711	22	1.0	150	20/...	10	....	1.06	.88	.5
2N711A	22	1.5	150	25/150	10	....	1.06	.88	.5
2N711B	22	2.0	150	30/150	10	....	1.13	.94	.6
2N779A	22	....	60	50/200	10	....	4.50	3.75	2.5
2N828	22	2.5	150	25/...	10	300	3.96	3.30	2.2
2N829	22	....	150	50/—	10	300	3.54	4.45	2.9
2N960	22	2.5	150	20/...	10	300	1.15	.96	.6
2N961	22	2.0	150	20/...	10	300	1.09	.91	.6
2N962	22	1.25	150	20/...	10	300	1.02	.85	.5
2N963	22	2.0	150	20/...	10	300	.99	.82	.5
2N964	22	2.5	150	40/...	10	300	1.19	.99	.6
2N964A	22	2.5	150	40/...	10	300	6.30	5.25	3.5
2N965	22	2.0	150	40/...	10	300	1.13	.94	.6
2N966	22	1.25	150	40/...	10	300	1.06	.88	.5
2N967	22	2.0	150	40/...	10	300	1.04	.87	.5
2N968	22	2.5	150	17/...	10	250	1.08	.90	.6
2N970	22	1.25	150	17/...	10	250	.97	.81	.5
2N985	22	3.0	150	40/...	10	300	3.50	2.88	1.9
2N1500	31	12	60	20/—	10	120	9.20	7.65	5.1
2N1742	31	....	60	.....	.....	.....	3.24	2.70	1.8
2N2258	22	7.0	150	20/—	10	250	1.44	1.12	.7
2N2259	22	7.0	150	40/—	10	250	1.52	1.27	.8
2N2955	22	3.5	150	20/...	10	200	2.98	2.48	1.6
2N2956	22	3.5	150	30/...	10	200	3.16	2.63	1.7
2N2957	22	3.5	150	60/...	10	300	4.05	3.37	2.2

HIGH-SPEED MEDIUM-CURRENT TYPES

2N1204	31	20	300	15/...	400	110	1.98	1.65	1.1
2N1204A	31	20	300	25/...	200	110	1.98	1.65	1.1
2N1494	25	20	500	15/...	400	110	2.60	2.17	1.4
2N1495	31	40	300	25/...	200	150	3.96	3.30	2.2
2N1496	25	40	500	25/...	200	150	4.56	3.80	2.5
2N2382	31	20	300	25/...	200	300	6.17	5.15	3.4
2N2635	22	30	150	30/...	100	150	1.13	.94	.6
2N3883	31	25	300	30/...	200	100	1.62	1.35	.9

PLASTIC SILICON ANNULAR SWITCHING TRANSISTORS

NPN HIGH-SPEED LOW-CURRENT TYPES (Case 29) P_D (mW), 310

Mfr's Type	V_{CEO} *V_{CER} (V)	h_{FE} @ Ic min/max	mA	f_T MHz (min)	EACH 1-9	10-99	100-999	1000-4999	500 U
2N3903	40	50/150	10	250	.90	.75	.50	.37	.3
2N3904	40	100/300	10	300	.98	.82	.55	.41	.3
2N4123	30	50/150	2.0	250	.63	.52	.35	.26	.2
2N4124	25	120/360	2.0	300	.72	.60	.40	.30	.2
2N4264	15	40/160	10	300	.58	.48	.32	.24	.2
2N4265	12	100/400	10	300	.65	.54	.36	.27	.2
2N5224	12	40/400	10	250	.29	.24	.16	.14	.1
MPS706	20*	20/...	10	200	.54	.45	.30	.22	.2
MPS706A	15	20/60	10	200	.76	.63	.42	.32	.2
MPS834	30	25/...	10	350	.63	.52	.35	.26	.2
MPS835	20	20/—	10	.....	.72	.60	.40	.30	.2
MPS2369	15	40/120	10	500	.64	.53	.35	.26	.2
MPS2713	18	30/90	2.0	250	.49	.41	.27	.23	.1
MPS2714	18	75/225	2.0	250	.52	.43	.29	.24	.2
MPS3646	15	30/120	30	350	.63	.52	.34	.31	.2

PNP HIGH-SPEED LOW-CURRENT TYPES (Case 29)

2N3905	40	50/150	10	200	.90	.75	.50	.37	.3
2N4125	30	50/150	2.0	200	.63	.52	.35	.26	.2
2N4126	25	120/360	2.0	250	.72	.60	.40	.30	.2
MPS3639	6	30/120	10	500	.49	.41	.27	.25	.2
MPS3640	12	30/120	10	500	.53	.44	.29	.26	.2

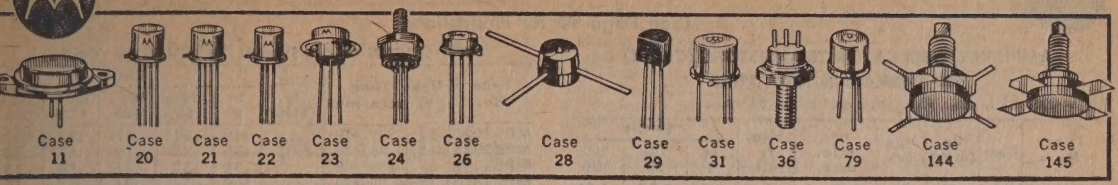
NPN HIGH-SPEED MEDIUM-CURRENT TYPES (Case 29) †PNP

2N4400	40	50/150	150	200	.72	.60	.40	.30	.2
2N4401	40	100/300	150	250	.90	.75	.50	.38	.3
2N4402†	40	50/150	150	150	.72	.60	.40	.30	.2
2N4403†	40	100/300	150	200	.90	.75	.50	.38	.3
MPS3638†	25	20/...	10	100	.54	.45	.30	.20	.1
MPS3638A†	25	100/...	10	150	.71	.59	.39	.35	.3

NPN HIGH-VOLTAGE TYPES (Case 29)

2N4409	50	60/400	1.0	60	.81	.67	.45	.34	.3
2N4410	80	60/400	1.0	60	1.15	.96	.64	.48	.4

Motorola RF Transistors



For high power output at high frequencies with consistent power gain, from either 13.6 or 28 V power supply . . . including RF amplifiers from 30 to 400 MHz and oscillators from 30 to 1500 MHz.

PNP GERMANIUM MESA TYPES

Mfr's Type No.	Case	P_D@ 25°C W(max)	V_{CB} V (max)	f_T MHz (Typ)	P_{out} @ f W (min)	MHz	EACH 1-9	10-99	100-Up
2N1692	24	3.0	25	500	0.5	160	27.00	22.50	17.00
2N1693	24	3.0	25	450	0.4	160	21.60	18.00	12.00

NPN SILICON ANNULAR TYPES

P_D at 25°C. *Solid header. TO-5 case. ‡Oscillator. #Oscillator, 3 W @ 400 MHz. †Minimum. For 1000-4999 quantity prices, see Semiconductor Directory, pages 7-40.

Mfr's Type No.	Case	P_D @ 25°C W(max)	V_{CB} V (max)	f_T MHz (Typ)	P_{out} @ f W (min)	MHz	EACH 1-9	10-99	100-Up
2N707	22	1.0	56	350	0.2	100	7.56	6.30	4.20
2N2947	11	25	60	100†	15	50	27.00	22.50	15.00
2N2949	23	6.0	60	100†	3.5	50	12.60	10.50	7.00
2N2950	24	6.0	60	100†	3.5	50	13.50	11.25	7.50
2N2951	31	3.0	60	400	0.6	50	5.40	4.50	3.00
2N3137	31*	2.0	40	600	0.4	250	4.14	3.45	2.30
2N3295	31	2.0	60	200†	0.3	30	7.20	6.00	4.00
2N3296	24	6.0	60	100†	3.0	30	18.00	15.00	10.00
2N3298	22	1.0	25	400†	0.06‡	80‡	2.88	2.40	1.60
2N3375	36	11.6	65	500	7.5#	100#	11.88	9.90	7.60
2N3553	79	7.0	65	500	2.5	175	3.90	3.25	2.50
2N3733	36	23	65	400	10	400	18.00	15.00	11.50
2N3866	79	5.0	55	800	1.0	400	1.92	1.60	1.23
2N3924	79	7.0	36	500	4.0	175	4.80	4.00	2.80
2N3925	24	10	36	500	5.0	175	7.20	6.00	4.10
2N3948	79	5.0	36	700†	1.0	400	6.28	5.15	3.42
2N3950	36	70	65	150	50	50	41.00	34.20	22.80
2N3961	24	10	65	500	4.0	175	10.42	8.70	5.80
2N4012	36	11.6	65	500†	2.5	1002	17.05	14.20	11.75
2N4072	22	0.8	40	550	0.25	175	2.70	2.25	1.50
2N4073	31*	1.5	40	550	0.5	175	3.24	2.70	1.80
2N4427	79	3.5	40	500	1.0	175	2.28	1.90	1.46
2N4924	79	5.0	100	100†	.....	.....	2.44	2.03	1.35
2N4925	79	5.0	150	100†	.....	.....	3.00	2.50	1.65
2N4926	79	5.0	200	30†	.....	.....	3.54	2.95	1.95
2N4927	79	5.0	250	30†	.....	.....	3.77	3.15	2.10
MM1941	22	0.6	30	800	0.1	175	2.34	1.95	1.30
MM1549	144	7.5	60	800	2.5	400	9.00	7.50	6.00
MM1550	144	15	60	600	7.5	400	27.40	22.80	18.20
MM1551	145	30	60	450	20	400	69.00	57.50	46.00
MM1557	144	15	65	650	7.0	175	7.68	6.40	4.28
MM1559	145	60	65	250	40	175	48.50	40.40	26.90
MM1601	144	15	36	.....	3.0	175	8.52	7.10	4.75
MM1602	145	30	36	.....	10	175	14.30	14.30	11.10
MM1603	145	70	36	.....	25	175	29.50	24.60	19.40

SMALL-SIGNAL AMPLIFIER/OSCILLATOR TRANSISTORS

NPN SILICON ANNULAR TYPES

Solid header. ‡V_{CEO}. #Military type; †JAN/JANTX; available.

Mfr's Type No.	Case	P_D (mW)	V_{CB} (V)	h_{FE} min/max	Max. C_{ob} (pF)	Min. f_T (MHz)	EACH 1-9	10-99	100-Up
2N720A	22	500	120	40/120	.....	50	1.58	1.32	.88
2N735	22	500	80	30/100	.....	.....	3.00	2.50	1.65
2N736	22	500	80	60/200	.....	.....	3.00	2.50	1.65
2N739	22	500	125	30/100	.....	.....	3.24	2.70	1.80
2N740	22	500	125	60/200	.....	.....	3.24	2.70	1.80
2N840	22	500	40	30/100	.....	1.5	4.32	3.60	2.45
2N841	22	500	40	60/400	.....	2.0	5.28	4.40	2.95
2N910	22	500	100	75/...	.....	60	2.85	2.37	1.58
2N911	22	500	100	30/...	.....	50	6.66	5.55	3.70
2N918#	20	200	30	20/...	1.7	600	3.48	3.30	2.20
2N2857	20†	200	30	.....	.....	600	4.86	4.05	2.70
2N929#	22	300	45‡	40/120	8.0	30	2.70	2.25	1.50
2N929A#	22	500	60	40/120	.....	45	5.40	4.50	3.00
2N930#	22	300	45‡	100/300	8.0	30	1.80	1.50	1.99
2N930A#	22	500	60	100/300	.....	45	2.16	1.80	1.21
2N1983	31	600	50	70/210	.....	40	3.56	2.50	1.67
2N1984	31	600	50	35/100	.....	40	2.80	2.33	1.56

SMALL-SIGNAL AMPLIFIER/OSCILLATOR TRANSISTORS (Cont'd)

Type No.	Case	P_D (mW)	V_{CB} (V)	h_{FE} min/max	Max. C_{ob} (pF)	Min. f_T (MHz)	EACH 1-9	10-99	100-Up
2N1990	79	600	100	20/...	.....	.....	2.70	2.25	1.50
2N2217	31	800	60	20/60	.....	250	4.20	3.35	2.25
2N2218#	31	800	60	40/120	.....	250	1.26	1.05	.69
2N2218A#	31	800	75	40/120	.....	250	1.80	1.50	.99
2N2219#	31	800	60	100/300	.....	250	1.38	1.15	.77
2N2219A#	31	800	75	100/300	.....	300	2.10	1.75	1.16
2N2221#	22	500	60	40/120	.....	250	1.26	1.05	.69
2N2221A#	22	500	75	40/120	.....	250	1.98	4.10	2.75
2N2222#	22	500	60	100/300	.....	250	1.14	1.05	.70
2N2222A#	22	500	75	100/300	.....	30	1.44	1.20	.79
2N3019	31*	800	140	100/300	12	.....	7.20	6.00	4.00
2N3020	31*	800	140	40/120	12	.....	6.84	5.70	3.80
2N3114	31*	800	150	40/...	9.0	40	7.20	6.00	4.00
2N3287	20	200	40	15/100	1.1	350	6.72	5.60	3.75
2N3290	20	200	30	10/150	1.5	300	4.80	4.00	2.65
2N3293	20	200	20	10/...	2.0	250	1.98	1.65	1.10
2N3294	20	200	20	10/...	2.0	250	1.80	1.50	1.00
2N5179	20	200	.....	.....	.....	.....	1.16	.97	.25
MM8000	79	3500	40	.....	.....	700	3.96	3.30	2.20
MM8001	79	3500	40	.....	.....	900	4.50	3.75	2.55
MM8002	79	3500	40	.....	.....	1200	5.52	4.60	3.10
MM8003	144	5000	40	.....	.....	1200	12.78	10.65	7.10
2N3712	31*	100	150	30/150	9.0	40	2.70	2.25	1.50
MM1812	31*	1000	175	35/200	10	50	4.50	3.75	2.50
MM2258	31*	1000	120	50/...	9.0	1.5	4.68	3.90	2.60
MM2259	31*	1000	175	25/...	8.0	1.5	5.04	4.20	2.80
MM2260	31*	1000	175	50/...	8.0	1.5	5.40	4.50	3.00
MM2483	22	360	60	40/120	6.0	60	3.78	3.15	2.10
MM2484	22	360	60	100/500	6.0	60	4.14	3.50	2.35
MMT918	28	225	30	20/...	.....	600	3.96	3.30	2.20
MMT930	28	225	60	150/...	.....	60	4.32	3.60	2.40
MMT2484	28	225	60	250/...	.....	60	7.08	5.90	3.95
MMT2857	28	225	30	30/...	.....	1000	6.54	5.45	3.65

PNP SILICON ANNULAR TYPES

T_J=200°C., except †T_J=175°C.

Type No.	Case	P_D (mW)	V_{CB} (V)	h_{FE} min/max	Max. C_{ob} (pF)	Min. f_T (MHz)	EACH 1-9	10-99	100-Up
2N721	22	400	50	20/45	.....	50	1.75	1.46	1.27
2N869	22	360	25	20/120	9.0	100	7.00	5.85	3.90
2N915	22	360	25	20/120	.....	100	5.94	4.95	3.30
2N916	22	360	70	50/200	.....	250	4.38	3.65	2.45
2N995	22	360	20	35/140	10	100	7.00	5.85	3.90
2N2604	26	400	60	40/120	.....	30	4.20	3.50	2.30
2N2605	26	400	60	100/300	.....	30	4.80	4.00	2.70
2N2904†	31	600	40	40/120	.....	200	2.34	1.95	1.29
2N2904A†	31	600	60	40/120	.....	200	3.06	2.55	1.69
2N2905†	31	600	40	100/300	.....	200	2.64	2.20	1.45
2N2905A†	31	600	60	100/300	.....	200	3.18	2.65	1.77
2N2906†	22	400	40	40/120	.....	200	2.22	1.85	1.24
2N2906A†	22	400	60	40/120	.....	200	2.88	2.40	1.60
2N2907†	22	400	40	100/300	.....	200	2.40	2.00	1.32
2N2907A	22	400	60	100/300	.....	200	2.64	2.20	1.48
2N3307	20	200	40	40/250	1.3	300	12.60	10.50	7.00
2N3308	20	200	30	25/250	1.6	300	10.80	9.00	6.00
2N3798	22	360	60	150/450	4.0	100	7.38	6.15	4.10
2N3799	22	360	60	300/900	4.0	100	8.10	6.75	4.50
2N4404	79	1250	80	40/120	.....	200	9.90	8.25	5.50
2N4405	79	1250	80	100/300	.....	200	10.70	9.75	6.50
2N4406	79	1250	80	25/100	.....	150	13.50	11.25	7.50
2N4407	79	1250	80	75/225	.....	150	16.94	12.75	8.50
2N4957	20	200	30	.....	.....	1200	18.52	15.45	11.00
2N4958	20	200	30	.....	.....	1000	12.42	10.35	6.90
2N4959	20	200	30	.....	.....	1000	8.10	6.75	4.50
2N5160	79	5.0	60	.....	.....	900	8.10	6.75	4.50
2N5161	36	20	60	.....	.....	500	22.50	18.75	12.50
2N5162	36	20	60	.....	.....	500	32.40	27.00	18.00
MMT2907	28	225	60	100/300	.....	200	4.20	3.50	2.35
MMT3798	28	225	60	150/450	.....	40	5.28	4.40	2.95
MMT3799	28	225	60	300/900	.....	40	6.65	5.55	3.70

Motorola RF Transistors

(See Page 95 for Illustrations)

AMPLIFIER/OSCILLATOR TRANSISTORS (Cont'd)

PNP GERMANIUM MESA TYPES

*Non-epitaxial. ‡h_{fe}. #Mil type available. †Typ.

Type No.	Case	P_D (mW)	V_{CB} (V)	h_{FE} min. max.	Min. f_T (MHz)	EACH 1-9	10-99	100-Up
2N700*	21	75	25	4.0/—‡	500	8.80	7.35	4.90
2N700A#	21	75	25	4.0/50‡	800	14.20	11.85	8.70
2N741	22	150	15	10/—	360	2.62	2.18	1.45
2N741A	22	150	20	10/—	360	3.95	3.30	2.20
2N1141	31	300	35	10/—	800†	5.80	4.83	3.22
2N1142#	31	300	30	10/—	700†	5.05	4.20	2.80
2N1143	31	300	25	10/—	800†	4.20	3.50	2.33
2N1195#	31	250	30	.....	800†	4.75	3.95	2.63
2N2415	20	75	15	10/200	500	7.20	6.00	4.00
2N2929	31	300	25	10/100	1100†	8.10	6.75	4.50
2N3280	20	100	30	10/70	400	4.90	4.10	2.75
2N3282	20	100	30	10/100	300	2.58	2.15	1.45
2N3283	20	100	25	10/—	400†	1.80	1.50	1.00
2N3284	20	100	25	10/—	400†	1.70	1.42	.95
2N3286	20	100	20	5.0/—	400†	1.16	.97	.65
2N3323	22	150	35	30/200	200	1.07	.90	.60
2N3324	22	150	35	30/200	200	.98	.82	.55
2N3325	22	150	35	30/200	200	.90	.75	.50
MM380	22	250	25	15/—	400	1.51	1.26	.84
MM5000	20	125	30	15/...	400	5.30	4.40	2.95
MM5001	20	150	30	30/...	800	3.77	3.15	2.10
MM5043	20	150	15	15/150	1500	11.17	9.75	6.50
MM5044	20	150	15	15/150	1200	7.20	6.00	4.00
AF139*	20	60	20	50 (typ)	500†	2.34	1.95	1.30
AF239*	20	60	20	50 (typ)	700†	2.60	2.17	1.45

LINEAR AMPLIFIERS

NPN SILICON EPITAXIAL ANNULAR TYPES

Type No.	Case	P_D (mW)	V_{CB} (V)	h_{FE} min. max.	Min. f_T (MHz)	EACH 1-9	10-99	100-Up
2N3295	31	2.0	60	20	200	7.20	6.00	4.00
2N3296	24	6.0	60	5.0	100	18.00	15.00	10.00

PLASTIC RF AND SMALL-SIGNAL TRANSISTORS (CASE 29)

Unibloc plastic silicon annular transistors offer wide selection of high-performance, high-frequency PNP and NPN switches and amplifiers. For low-cost industrial circuits and consumer applications. Rugged, one-piece Unibloc plastic encapsulation.

NPN SILICON RF TRANSISTORS

P_D is 310 mW at 25°C

Type No.	V_{CB} (V)	V_{EB} (V)	Min. f_T (MHz)	EACH 1-9	10-99	100-999	1000-4999	5000-Up
MPS6507	30	3.0	700	.63	.53	.35	.30	.26
MPS6511	30	3.0	.....	.81	.68	.45	.34	.32
MPS3693	45	4.0	.....	.53	.44	.29	.26	.25
MPS3694	45	4.0	.....	.53	.44	.29	.26	.25
MPS6540	30	4.0	.....	.75	.63	.42	.36	.32
MPS6542	30	3.0	700	1.44	1.20	.80	.60	.56
MPS6543	35	3.0	750	1.58	1.32	.88	.66	.62
MPS6544	60	4.0	.....	.65	.54	.36	.31	.27
MPS6546	35	3.0	600	1.49	1.24	.83	.62	.58
MPS6568	20	3.0	375	1.80	1.50	1.00	.75	.70
MPS6569	20	3.0	300	1.33	1.11	.74	.55	.52
MPS6570	20	3.0	300	1.15	.96	.64	.48	.45

NPN SILICON SMALL-SIGNAL TRANSISTORS

P_D 310 mW except Types MPS2923, MPS2924, MPS2925, MPS-3563 are 200 mW; Types MPS-H04, MPS-H05 are 300 mW; Type MPS-H02 is 500 mW. †Typical. (Listings continued next column)

Type No.	V_{CB} (V)	h_{FE} min/max	Min. f_T (MHz)	EACH 1-9	10-99	100-999	1000-4999	5000-Up
2N4409	80	60/400	60	.80	.67	.45	.34	.31
2N4410	120	60/400	60	1.15	.96	.64	.48	.45
2N5088	30	300/900	50	.90	.75	.50	.38	.35
2N5089	25	400/1200	50	1.18	.98	.65	.49	.46
2N5225	25	30/600	50	.32	.27	.18	.16	.13
2N5550	160	60/250	100	.82	.69	.46	.41	.....
2N5551	180	80/250	100	1.01	.84	.56	.50	.....
MPS2711	18	30/90	.....	.41	.34	.23	.19	.15
MPS2712	18	75/225	.....	.38	.32	.21	.18	.17
MPS2716	18	75/225	.....	.72	.60	.40	.30	.28
MPS2923	25	90/180	.....	.38	.32	.21	.18	.16
MPS2924	25	150/300	.....	.41	.34	.23	.19	.17

NPN SILICON SMALL-SIGNAL TRANSISTORS (Cont'd)

Type No.	V_{CB} (V)	h_{FE} min/max	Min. f_T (MHz)	EACH 1-9	10-99	100-999	1000-4999	5000-U
MPS2925	25	235/470	.....	.49	.41	.27	.23	.2
MPS2926	18	35/470	300†	.35	.29	.19	.17	.1
MPS3392	25	150/300	.....	.38	.32	.21	.18	.1
MPS3393	25	90/180	.....	.38	.32	.21	.18	.1
MPS3394	25	35/170	.....	.32	.27	.18	.15	.1
MPS3395	25	150/500	.....	.54	.45	.30	.27	.2
MPS3398	25	55/800	.....	.49	.41	.27	.23	.2
MPS3563	30	20/200	.....	.46	.38	.25	.21	.1
MPS3704	50	100/300	100	.41	.34	.29	.22	.2
MPS3705	50	50/150	100	.35	.29	.25	.23	.2
MPS3706	40	30/600	100	.32	.27	.24	.20	.1
MPS3707	30	100/400	.....	.41	.34	.29	.22	.2
MPS3708	30	45/660	.....	.32	.27	.24	.21	.1
MPS3709	30	45/165	.....	.32	.27	.24	.21	.1
MPS3710	30	90/330	.....	.35	.29	.25	.22	.2
MPS3711	30	180/660	.....	.35	.29	.25	.22	.2
MPS6512	40	50/100	330	.65	.54	.36	.27	.2
MPS6513	40	90/180	480	.68	.57	.38	.28	.2
MPS6514	40	150/300	480	.72	.60	.40	.30	.2
MPS6515	40	250/500	480	.77	.64	.43	.32	.3
MPS6520	40	200/400	480	.98	.82	.55	.41	.3
MPS6521	25	300/600	480	1.08	.90	.60	.45	.4
MPS6530	60	40/120	390†	.77	.64	.43	.32	.3
MPS6531	60	90/270	390†	.90	.75	.50	.37	.3
MPS6532	50	30/—	390†	.65	.54	.36	.27	.2
MPS6560	40	50/—	60	.57	.48	.32	.27	.2
MPS6561	40	100/—	60	.54	.45	.30	.26	.2
MPS6565	60	40/160	200	.62	.52	.35	.26	.2
MPS6566	60	100/400	200	.68	.57	.38	.28	.2
MPS6567	40	25/—	.....	1.20	1.00	.67	.50	.4
MPS6571	20	250/1000	50	.72	.60	.40	.30	.2
MPS-A05†	50	100/....	50	.63	.53	.35	.26	.2
MPS-A06†	80	100/....	50	.72	.60	.40	.30	.2
MPS-A09	50	100/600	30	.65	.54	.36	.27	.2
MPS-A10	40	40/400	20	.35	.29	.19	.14	.1
MPS-A12	20	20,000/..	.....	.80	.67	.45	.34	.3
MPS-A13	30	5,000/...	125	.56	.47	.32	.24	.2
MPS-A14	30	10,000/..	125	.65	.54	.36	.27	.2
MPS-H02	20	20/200	375	.91	.76	.51	.44	.3
MPS-H04	80	30/120	80	.46	.38	.24	.21	.2
MPS-H05	80	30/150	80	.38	.32	.21	.19	.1
MPS-H10	25	60/—	650	.59	.49	.33	.28	.2
MPS-H11	25	60/—	650	.65	.54	.36	.30	.2
MPS-H30	20	20/200	300	.61	.51	.34	.29	.2
MPS-H31	20	20/200	300	.61	.51	.34	.29	.2
MPSL-01	120	50/300	60	.71	.59	.39	.35	.3

PNP SILICON SMALL-SIGNAL TRANSISTORS

P_D 310 mW except Type MPS-A70 is 300 mW; and Types MP 6562 and MPS6563 are 500 mW. †Typical.

Type No.	V_{CB} (V)	h_{FE} min/max	Min. f_T (MHz)	EACH 1-9	10-99	100-999	1000-4999	500 U
2N5086	50	150/500	40	.90	.75	.50	.38	.3
2N5087	50	250/800	40	.97	.81	.54	.40	.3
2N5400	120	40/180	100	.90	.75	.50	.45	...
2N5401	150	60/240	150	1.09	.91	.61	.55	...
MPS3702	40	60/300	100	.44	.37	.31	.24	.2
MPS3703	50	30/150	100	.41	.34	.28	.22	.2
MPS6516	40	50/100	200	.72	.60	.40	.30	.2
MPS6517	40	90/180	200	.76	.63	.42	.31	.2
MPS6518	40	150/300	420	.80	.67	.45	.34	.3
MPS6519	25	250/500	420	.90	.75	.50	.37	.3
MPS6522	25	200/400	.....	1.08	.90	.60	.45	.4
MPS6523	25	300/600	420	1.16	.97	.65	.49	.4
MPS6533	40	40/120	260†	.85	.71	.47	.35	.3
MPS6534	40	90/270	260†	.97	.81	.54	.40	.3
MPS6535	30	30/—	260†	.72	.60	.40	.30	.2
MPS6562	20	50/200	60	.65	.54	.36	.31	.2
MPS6563	20	50/200	60	.61	.51	.34	.29	.2
MPS-A55	50	100/....	50	.70	.59	.39	.29	.2
MPS-A56	80	100/....	50	.79	.66	.44	.33	.3
MPS-A65	30	50,000/..	100	.68	.57	.38	.29	.2
MPS-A66	30	75,000/..	100	.75	.63	.42	.32	.2
MPS-A70	40	40/400	125	.45	.38	.25	.19	.1
MPSL-51	100	40/250	60	.73	.61	.42	.38	.3

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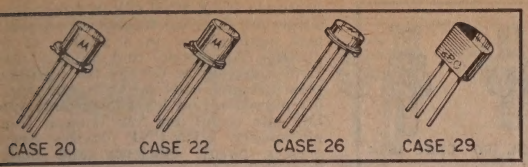


Specially designed for a wide variety of military, industrial and consumer applications. Widely diversified line of MOS and Junction-type Field-Effect-Transistors can be used for operations ranging from audio to the UHF spectrum. Includes complete line of general purpose amplifiers and switches, choppers and numerous VHF-UHF devices. Because FET's have no offset voltage they are very well suited for chopper applications. Choppers listed below are designed for low $r_{ds(on)}$, low C_{rss} and fast switching time.

GENERAL-PURPOSE AMPLIFIERS AND SWITCHES

uge selection of MOS and Junction-type Field-Effect-Transistors ecially designed for a wide variety of military, industrial and nsumer applications. Transistors meet the rigid requirements of most all industrial specifications for long reliable operation. Ideal r low current, high resistance applications. Able to withstand ldering temperatures without deformation. Stable even under gh humidity conditions.

I-CHANNEL JUNCTION & *P-CHANNEL JUNCTION FET'S

00 Hz, NF 25 dB max.

Mfr's Type No.	Case No.	BV_{GSS} (V) min	I_{DSS} (mA) min/max	I_{GSS} nA (max)	$r_{ds(on)}$ ohms (typ) *(max)	$\lvert y_{fs} \rvert$ µS min/max	EACH 1-9	10-99	100-Up
3822	20	–50	2.0/10	–0.1	.....	3000/5000	2.64	2.20	1.45
3823	20	–30	4.0/20	–0.5	.....	3500/6500	2.26	1.88	1.25
3824	20	–50	.....	–0.1	250*	.....	2.07	1.72	1.15
4220	20	–30	0.5/3.0	–0.1	500	1000/4000	1.80	1.50	1.00
4220A†	20	–30	0.5/3.0	–0.1	500	1000/4000	2.07	1.72	1.15
4221	20	–30	2.0/6.0	–0.1	400	2000/5000	1.68	1.40	.95
4221A†	20	–30	2.0/6.0	0.1	400	2000/5000	1.98	1.65	1.10
4222	20	–30	5.0/15	0.1	300	2500/6000	1.70	1.42	.95
4222A†	20	–30	5.0/15	0.1	300	2500/6000	1.98	1.65	1.10
4223	20	–30	3.0/18	–0.25	.....	3000/7000	1.80	1.50	1.00
4224	20	–30	2.0/20	0.50	.....	2000/7000	1.98	1.65	1.10
5265*	20	60	0.5/1.0	2.0	.....	900/2700	5.58	4.65	3.10
5266*	20	60	0.8/1.6	20	.....	1000/3000	4.88	3.75	2.50
5267*	20	60	1.5/3.0	2.0	.....	1500/3500	4.14	3.45	2.30
5268*	20	60	2.5/5.0	2.0	.....	2000/4000	3.84	3.30	2.20
5269*	20	60	4.0/8.0	2.0	.....	2200/4500	4.14	3.45	2.30
5270*	20	60	7.0/14	2.0	.....	2500/5000	4.50	3.75	2.50
5358	20	40	0.5/1.0	0.1	.....	1000/3000	4.74	3.95	2.65
5359	20	40	0.8/1.6	0.1	.....	1200/3600	4.14	3.45	2.30
5360	20	40	1.5/3.0	0.1	.....	1400/4200	3.60	3.00	2.00
5361	20	40	2.5/5.0	0.1	.....	1500/4500	3.13	2.65	1.76
5362	20	40	4.0/8.0	0.1	.....	2000/5000	3.60	3.00	2.00
5363	20	40	7.0/14	0.1	.....	2500/6000	4.14	3.45	2.30
5364	20	40	9.0/18	0.1	.....	2700/6500	4.74	3.95	2.65
5457	29	25	1.0/5.0	1.0	.....	1000/5000	.96	.80	.54
5458	29	25	2.0/9.0	1.0	.....	1500/5500	.88	.73	.49
5459	29	25	4.0/16	1.0	.....	2000/6000	.96	.80	.54
5460*	29	40	1.0/5.0	5.0	.....	1000/4000	1.08	.90	.60
5461*	29	40	2.0/9.0	5.0	.....	1500/5000	.81	.67	.45
5462*	29	40	4.0/16	5.0	.....	2000/6000	1.08	.90	.60
5463*	29	60	1.0/5.0	5.0	.....	1000/4000	1.62	1.35	.90
5464*	29	60	2.0/9.0	5.0	.....	1500/5000	1.30	1.08	.72
5465*	29	60	4.0/16	5.0	.....	2000/6000	1.62	1.35	.90
5471*	20	40	0.02/0.06	0.1	.....	60/180	3.06	2.55	1.70
5472*	20	40	0.05/0.12	0.1	.....	90/225	2.80	2.33	1.55
5473*	20	40	0.10/0.25	0.1	.....	120/300	2.58	2.15	1.45
5474*	20	40	0.20/0.50	0.1	.....	160/400	2.40	2.00	1.35
5475*	20	40	0.40/1.0	0.1	.....	200/500	2.16	1.80	1.20
5476*	20	40	0.80/2.0	0.1	.....	260/650	2.40	2.00	1.35
5556	20	30	0.5/2.5	0.1	.....	1500/6500	14.40	12.00	9.50
5557	20	30	2.0/5.0	0.1	.....	1500/6500	12.00	10.00	8.00
5558	20	30	4.0/10	0.1	.....	1500/6500	11.40	9.50	7.50
5716	20	–40	0.05/0.25	1.0	.....	200/1000	.96	.80	.53
5717	20	–40	0.2/1.0	1.0	.....	400/1600	.90	.75	.50
5718	20	–40	0.8/4.0	1.0	.....	500/2000	.96	.80	.53
E2006	22	30	30/...	0.2	30	.....	3.24	2.70	1.80
E2007	22	25	8.0/...	2.0	40	.....	4.38	3.65	2.45
E2008	22	25	20/...	2.0	30	.....	5.04	4.20	2.80
E2009	22	25	50/...	2.0	20	.....	5.26	4.80	3.20
E2010	22	25	15/...	3.0	25	.....	5.40	4.50	3.00
E2011	22	25	40/...	3.0	15	.....	6.42	5.25	3.50
E2012	22	25	100/..	3.0	10	.....	7.20	6.00	4.00
E4007	20	40	0.5/1.0	2.0	.....	900/2700	4.86	4.05	2.70
E4008	20	40	0.8/1.6	2.0	.....	1000/3000	3.84	3.20	2.15
E4009	20	40	1.5/3.0	2.0	.....	1500/3500	3.48	2.90	1.95
E4010	20	40	2.5/5.0	2.0	.....	2000/4000	3.30	2.75	1.85
E4011	20	40	4.0/8.0	2.0	.....	2200/4500	3.48	2.90	1.95
E4012	20	40	7.0/14	2.0	.....	2500/5000	3.84	3.20	2.15
PF109	29	25	0.5/24	1.0	.....	.....	.90	.75	.50
PF161	29	40	0.5/14	10	.....	800/6000	.81	.67	.45
N124	20	–50	0.2/2.0	–0.25	.....	500/2000	3.60	3.00	2.00
N126	20	–50	3.0/9.0	–0.25	.....	1200/3600	3.60	3.00	2.00
E2093	20	–50	0.1/0.7	–0.1	2500	250/500	2.52	2.10	1.40
E2094	20	–50	0.4/1.4	–0.1	1600	350/700	2.52	2.10	1.40
E2095	20	–50	1.0/3.0	–0.1	1300	400/800	2.52	2.10	1.40

CHOPPERS-CASE 26 P_D @ T_A 25°C 500 mW except *400 mW.

Mfr's Type No.	V_{CEO} Volts	h_{FE} @ I_C min/max	mA	f_T min MHz	EACH 1-9	10-99	100-Up
2N2944	10	80/180	1.0	10	3.32	2.76	1.84
2N2945	20	40/160	1.0	5.0	3.03	2.52	1.68
2N2946	35	30/130	1.0	3.0	3.46	2.88	1.92
2N3677*	30	40/...	1.0	5.0	3.33	2.76	1.84
2N3977*	10	40/...	5.0	1.0	4.97	3.30	2.20
2N3978*	20	30/...	5.0	1.0	3.60	3.00	2.00
2N5229	10	50/...	0.1	8.0	2.99	2.49	1.66
2N5230	20	50/...	0.1	8.0	3.60	3.00	2.00
2N5231	30	50/...	0.1	8.0	4.50	3.75	2.50

CHOPPERS AND SWITCHES

Mfr's Type No.	Case No.	$V_{(BR)GSS}$ BV_{GSS} Volts min	I_{DSS} mA min/max	$r_{ds(on)}$ ohms max	I_{GSS} nA max	EACH 1-9	10-99	100-Up
2N4091	22	40	30/...	30	..	3.78	3.15	2.10
2N4092	22	40	15/...	50	..	2.22	1.85	1.23
2N4093	22	40	8.0/..	80	..	2.59	2.15	1.45
2N4391	22	40	50/150	30	0.1	5.04	4.20	2.80
2N4392	22	40	25/75	60	0.1	3.42	2.85	1.90
2N4393	22	40	5.0/30	100	0.1	3.66	3.05	2.05
2N5555	29	25	15/..	150	1.0	1.44	1.20	.80
MFE2004	22	30	8.0/..	80	0.2	3.06	2.55	1.50
MFE2005	22	30	15/...	50	0.2	2.22	1.85	1.25
2N3970	22	–40	50/...	30	.25	5.05	4.20	2.80
2N3971	22	–40	25/...	60	.25	2.40	2.00	1.35
2N3972	22	–40	5.0/...	100	.25	3.24	2.70	1.80
2N4856	22	–40	50/...	25	.25	4.68	3.90	2.60
2N4856A	22	–40	50/...	25	.25	5.22	4.35	2.90
2N4857	22	–40	20/...	40	.25	3.96	3.30	2.20
2N4857A	22	–40	20/...	40	.25	4.68	3.90	2.60
2N4858	22	–40	8.0/..	60	.25	3.24	2.70	1.80
2N4858A	22	–40	8.0/..	60	.25	3.78	3.15	2.10
2N4859	22	–30	50/...	25	.25	4.32	3.60	2.40
2N4859A	22	–30	50/...	25	.25	4.92	4.10	2.75
2N4860	22	–30	20/...	40	.25	3.78	3.15	2.10
2N4860A	22	–30	20/	40	.25	4.32	3.60	2.40
2N4861	22	–30	8.0/..	60	.25	3.12	2.60	1.75
2N4861A	22	–30	8.0/	60	.25	3.42	2.85	1.90
2N5638	29	–30	50/...	30	1.0	1.80	1.50	1.00
2N5639	29	–30	25/...	60	1.0	1.14	.95	.63
2N5640	29	–30	5.0/...	100	1.0	1.44	1.20	.80
2N5653	29	–30	40/...	50	1.0	1.62	1.35	.90
2N5654	29	–30	15/...	100	1.0	1.44	1.20	.80

CHOPPERS AND SWITCHES (Enhancement Type) *MOS P Channel. †Low $V_{GS(th)}$, High Speed. Case 20.

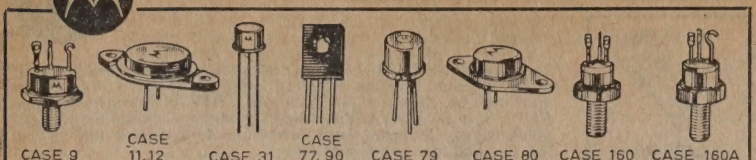
Mfr's Type No.	$V_{(BR)DSS}$ BV_{DSX} BV_{DSS} (V) min	I_{DSS} mA min/max	I_{GSS} pA max	$r_{ds(on)}$ ohms max	EACH 1-9	10-99	100-Up
2N4351	25	.../10 nA	10	300	3.42	2.85	1.90
2N4352*	25	.../10 nA	10	600	3.24	2.70	1.80
3N155*	35	.../1.0 nA	1000	600	3.96	3.30	2.20
3N155A*	35	...0.25 nA	1000	300	7.56	6.30	4.20
3N156*	35	.../1.0 nA	1000	600	3.96	3.30	2.20
3N156A*	35	.../0.25 nA	1000	300	7.56	6.30	4.20
3N169†	25	.../10 nA	10	200	7.68	6.40	4.25
3N170†	25	.../10 nA	10	200	6.60	5.50	3.65
3N171†	25	.../10 nA	10	200	5.04	4.20	2.80
MFE3002	15	.../10 nA	100	100	4.02	3.35	2.25
MFE3003*	15	.../10 nA	100	200	3.60	3.00	2.00

MOS N AND *P CHANNEL AMPLIFIERS AND SWITCHES

Case 20, except †22.

Mfr's Type No.	$V_{(BR)DSS}$ BV_{DSX} min/max (V) min	I_{DSS} mA min/max	I_{GSS} pA max	Y_{fs} µmhos min/max	EACH 1-9	10-99	100-Up
2N3796†	25	0.5/3.0	1.0	900/1800	4.15	3.45	2.30
2N3797†	20	2.0/6.0	1.0	1500/3000	4.15	3.45	2.30
3N157*	35	.../10 nA	10	1000/4000	3.96	3.30	2.20
3N157A*	50	.../10 nA	10	1000/4000	7.56	6.30	4.20
3N158*	35	.../10 nA	10	1000/4000	3.96	3.30	2.20
3N158A*	50	.../10 nA	10	1000/4000	7.56	6.30	4.20
MFE3001	20	0.5/6.0	10	700/3500	2.70	2.25	1.50

Motorola Silicon Power Transistors



CASE 9 | CASE 11,12 | CASE 31 | CASE 77, 90 | CASE 79 | CASE 80 | CASE 160 | CASE 160A

Motorola NPN-PNP silicon power transistors are designed to give exceptional high performance in a variety of industrial, commercial and military use. Wide selection of devices for high-temperature, high-level switching and amplifier purposes. Low leakage currents, high DC gain (beta) and low $V_{CE(sat)}$. Complementary NPN-PNP devices assure greater circuit efficiency and design flexibility.

NPN SILICON POWER TRANSISTORS

T_C is 25° C. †NPN Plastic type.

Type No.	Case	V_{CEO} (V)	f_t MHz min	P_D (W)	h_{FE} @ I_C min/max	(I_C)	EACH 1-9	10-99	100-Up
2N3439	80	350	.....	5.0	40/160	0.02	4.45	3.70	2.55
2N3440	80	300	.....	5.0	40/160	0.02	2.16	1.80	1.22
MJ420	31	250	30	2.5	25/250	0.03	2.16	1.80	1.20
MJ421	31	325	30	2.5	25/250	0.03	2.22	1.85	1.25
MJ2251	80	225	10	10	25/200	0.05	2.25	1.87	1.25
MJ2252	80	300	10	10	25/200	0.05	2.42	2.02	1.35
MJ400	80	325	15	6.67	30/300	0.05	1.98	1.65	1.10
MJ3201	80	225	15	15	30/200	0.05	2.17	1.72	1.15
MJ3202	80	300	15	15	30/200	0.05	2.25	1.87	1.25
MJE340†	77	300	15	20.8	30/240	0.05	1.27	1.06	.71
MJE344	77	200	15	20.8	30/300	0.05	1.29	1.07	.67
2N3738	80	225	10	20	40/200	0.1	2.70	2.25	1.50
2N3739	80	300	10	20	40/200	0.1	2.94	2.45	1.65
2N4237	31	40	3.0	5.0	30/150	0.25	2.70	2.25	1.50
2N4238	31	60	3.0	5.0	30/150	0.25	3.30	2.75	1.85
2N4239	31	80	3.0	5.0	30/150	0.25	3.66	3.05	2.05
MJ440	31	40	3.0	6.0	25/150	0.25	1.86	1.55	1.05
MJ3029	11	250	.....	125	30/...	0.4	7.20	6.00	4.44
2N4910	80	40	3.0	25	20/100	0.5	1.86	1.55	1.05
2N4911	80	60	3.0	25	10/100	0.5	2.16	1.80	1.20
2N4912	80	80	3.0	25	20/100	05.	2.52	2.10	1.40
2N4921†	77	40	3.0	30	20/100	0.5	1.60	1.33	.89
2N4922†	77	60	3.0	30	20/100	0.5	1.77	1.48	.99
2N4923†	77	80	3.0	30	20/100	0.5	2.16	1.80	1.20
MJ413	11	325	2.5	125	20/80	0.5	7.80	6.50	4.82
MJ2249	80	325	10	20	25/200	0.5	2.42	2.02	1.35
MJ2250	80	80	10	20	25/200	0.4	2.58	2.15	1.45
MJ3101	80	40	10	20	25/200	0.5	2.34	1.95	1.30
2N3766	80	60	15	20	40/160	0.5	2.52	2.10	1.40
2N3767	80	80	15	20	40/160	0.5	2.76	2.30	1.55
MJ423	11	325	2.5	125	30/90	1.0	9.60	8.00	5.93
MJ480	11	40	4.0	87.5	30/200	1.0	2.32	1.93	1.29
MJ481	11	60	4.0	87.5	30/200	1.0	2.94	2.45	1.64
MJE520†	77	30	.....	1.0	40/...	1.0	1.60	.94	.72
MJE521†	77	40	.....	1.0	40/...	1.0	2.01	1.68	1.12
2N3713	11	60	2.5	150	25/90	1.0	5.30	4.40	2.95
2N3714	11	80	2.5	150	25/90	1.0	5.65	4.70	3.15
2N3715	11	60	2.5	150	50/100	1.0	5.82	4.85	3.25
2N3716	11	80	2.5	150	50/100	1.0	8.10	6.75	4.50
2N5067	11	40	4.0	87.5	20/80	1.0	2.16	1.80	1.20
2N5068	11	60	4.0	87.5	20/80	1.0	2.70	2.25	1.50
2N5069	11	80	4.0	8.75	20/80	1.0	3.42	2.85	1.90
2N5334	79	60	60	6.0	30/150	1.0	7.55	6.30	4.20
2N5335	79	80	60	6.0	30/150	1.0	8.18	7.20	4.80
2N5190	79	40	2.0	40	25/100	1.5	1.89	1.57	1.05
2N5191	79	60	2.0	40	25/100	1.5	2.30	1.92	1.28
2N5192	79	80	2.0	40	20/80	1.5	3.00	2.50	1.67
MJE205	90	50	.....	65	25/100	2.0	2.30	1.92	1.25
2N1724	9	80	10	115	20/90	2.0	33.30	27.75	18.50
2N4231	80	40	4.0	35	50/150	2.0	2.52	2.10	1.40
2N4232	80	60	4.0	35	50/150	2.0	2.88	2.40	1.60
2N4233	80	80	4.0	35	50/150	2.0	3.84	3.20	2.15
2N5336	79	80	30	6.0	30/120	2.0	15.30	12.75	8.50
2N5337	79	80	30	6.0	60/240	2.0	17.30	14.40	9.60
2N5338	79	100	30	6.0	30/120	2.0	18.35	15.30	10.20
2N5339	79	100	30	6.0	60/240	2.0	21.45	17.85	11.90
2N5346	160	80	30	60	30/120	2.0	43.20	36.00	24.00
2N5347	160	80	30	60	60/240	2.0	49.45	41.20	26.75
2N5348	160	100	30	60	30/120	2.0	55.00	45.80	30.50
2N5349	160	100	30	60	60/240	2.0	63.00	52.50	34.95
2N5427	80	80	30	40	30/120	2.0	16.05	13.40	8.95
2N5428	80	80	30	40	60/240	2.0	18.22	15.20	10.15
2N5429	80	100	30	40	30/120	4.0	19.65	16.40	10.95
2N5430	80	100	30	40	60/240	2.0	21.90	18.75	12.50
2N5477	160A	80	30	60	30/120	2.0	39.55	33.00	22.00
2N5478	160A	80	30	60	60/240	2.0	45.50	37.10	24.75
2N5479	160A	100	30	60	30/120	2.0	51.00	42.50	28.30
2N5480	160A	100	30	60	60/240	2.0	59.30	49.40	32.95
2N4913	11	40	4.0	87.5	25/100	2.5	2.83	2.40	1.60
2N4914	11	60	4.0	87.5	25/100	2.5	3.12	2.60	1.75
2N4915	11	80	4.0	87.5	25/100	2.5	5.04	4.20	2.80
MJ2840	11	60	4.0	150	20/100	3.0	5.10	4.50	3.00
MJ3030	11	325	.....	125	3.75/..	3.0	10.80	9.00	6.67
MJE2801	90	60	.....	90	25/100	3.0	2.69	1.50	1.01

NPN SILICON POWER TRANSISTORS

T_C is 25° C.

Type No.	Case	V_{CEO} (V)	f_t MHz min	P_D (W)	h_{FE} @ I_C min/max	(I_C)	EACH 1-9	10-99	100-Up
2N3232	11	60	1.0	115	15/75	3.0	4.50	3.75	2.5
2N3445	11	60	10	115	20/60	3.0	10.80	9.00	6.0
2N3446	11	80	10	115	20/60	3.0	16.20	13.50	9.0
MJ2841	11	80	4.0	150	20/100	4.0	7.62	6.35	4.2
MJE3055	90	60	2.2	90	20/70	4.0	1.69	1.41	1.0
2N3055	11	60	1.0	115	20/70	4.0	2.46	1.82	1.3
2N3235	11	55	1.0	115	20/70	4.0	4.50	3.75	2.5
2N3447	11	60	10	115	40/120	5.0	17.25	14.40	9.6
2N3448	11	80	10	115	40/120	5.0	21.60	18.00	12.0
MJ802	11	90	.....	200	25/100	7.5	16.35	7.65	5.1
MJ2801	11	40	1.0	120	15/60	8.0	3.42	2.85	1.9
2N3772	11	60	0.8	150	15/60	10	4.50	3.75	2.5
2N3771	11	40	0.8	150	15/60	15	4.50	3.75	2.5

PNP SILICON POWER TRANSISTORS

*Solid header. #TO-3, 50-mil pin dia. §Case.

Type No.	Case	V_{CEO} (V)	f_t MHz min	P_D (W)	h_{FE} @ I_C min/max	(I_C)	EACH 1-9	10-99	100-Up
MJ2253	80	60	3.0	25	20/100	0.25	3.18	2.65	1.7
MJ2254	80	80	3.0	25	20/100	0.25	3.48	2.90	1.9
MJ3701	80	40	3.0	25	20/100	0.25	2.40	2.00	1.3
2N3740	80	60	4.0	25	30/100	0.25	3.48	2.90	1.9
2N3741	80	80	4.0	25	30/100	0.25	3.78	3.15	2.1
2N4234*	31	40	3.0	6.0	30/150	0.25	3.60	3.00	2.0
2N4235*	31	60	3.0	6.0	30/150	0.25	4.32	3.60	2.2
2N4236*	31	80	3.0	6.0	30/150	0.25	4.80	4.00	2.6
2N4898	80	40	3.0	25	20/100	0.5	2.34	1.95	1.3
2N4899	80	60	3.0	25	20/100	0.5	3.12	2.60	1.7
2N4900	80	80	3.0	25	20/100	0.5	3.48	2.90	1.9
2N4918	77	40	3.0	30	20/100	0.5	1.98	1.65	1.1
2N4919	77	60	3.0	30	20/100	0.5	2.28	1.90	1.3
2N4920	77	80	3.0	30	20/100	0.5	2.70	2.25	1.5
2N5344	80	250	60	40	25/100	0.5	21.60	18.00	12.0
2N5345	80	300	60	40	25/100	0.5	27.00	22.50	15.0
MJ490	11	40	4.0	87.5	30/200	1.0	2.52	2.10	1.4
MJ491	11	60	4.0	87.5	30/200	1.0	3.36	2.80	1.8
MJE370	77	30	.....	25	25/...	1.0	1.98	1.65	1.1
MJE371	77	40	.....	25	30/...	1.0	2.35	1.96	1.3
2N3026	11	60	60	25	50/180	1.0	54.40	49.50	33.0
2N3719*	31	40	60	6.0	25/180	1.0	11.70	9.75	6.5
2N3720*	31	60	60	6.0	25/180	1.0	13.12	10.85	7.2
2N3789	11	60	4.0	150	25/90	1.0	9.00	7.50	5.0
2N3790	11	80	4.0	150	25/90	1.0	10.67	8.90	5.9
2N3791	11	60	4.0	150	50/150	1.0	10.50	8.75	5.8
2N3792	11	80	4.0	150	50/150	1.0	11.40	9.50	6.3
2N4901	11	40	4.0	87.5	20/80	1.0	3.30	2.75	1.8
2N4902	11	60	4.0	87.5	20/80	1.0	3.96	3.30	2.2
2N4903	11	80	4.0	87.5	20/80	1.0	5.10	4.25	2.8
2N5193	77	40	2.0	40	25/100	1.5	2.40	2.00	1.3
2N5194	77	60	2.0	40	25/100	1.5	2.70	2.25	1.5
2N5195	77	80	2.0	40	20/80	1.5	3.48	2.90	1.9
MJE105	90	50	.....	65	25/100	2.0	2.79	2.33	1.5
2N4904	11	40	4.0	87.5	25/100	2.5	2.82	3.35	2.2
2N4905	11	60	4.0	87.5	25/100	2.5	5.34	4.45	2.9
2N4906	11	80	4.0	87.5	25/100	2.5	6.72	5.60	3.7
MJ431	11	325	2.5	125	15/35	2.5	45.00	17.30	11.5
MJ2840	11	60	.....	150	20/100	3.0	4.95	4.50	3.0
MJE2901	90	60	.....	90	25/100	3.0	3.53	2.95	1.9
MJ2267	11	40	3.0	150	20/100	4.0	5.94	4.95	3.3
MJ2268	11	55	3.0	150	20/100	4.0	6.54	5.45	3.6
MJ2941	11	80	4.0	150	20/100	4.0	14.22	10.85	7.2
MJE2955	90	60	2.0	90	20/70	4.0	3.48	2.90	1.9
MJ4502	12	90	.....	200	25/100	7.5	24.85	20.70	13.8
MJ2901	11	60	.....	90	15/60	8.0	4.50	3.75	2.5
MJ450#	12	40	2.0	150	20/...	10	11.40	9.50	6.3
2N5303	12	80	2.0	200	15/60	10	21.60	18.00	12.0
2N4398#	12	40	4.0	200	15/60	15	13.50	11.25	7.5
2N4399#	12	60	4.0	200	15/60	15	16.20	13.50	9.0
2N5301	12	40	2.0	200	15/60	15	8.28	6.90	4.6
2N5302	12	60	2.0	200	15/60	15	9.17	7.65	5.1

Allied Offers Best Record of Orders Filled in the Count

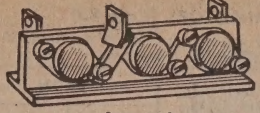
Motorola Germanium Power Transistors

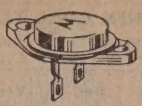
Case 3, 3A, 11, 11A

Case 5, 7

Case 8

Case 4-04


Case 118


Case 161

Case 180

Germanium PNP power transistors for high level switching and amplifier use in industrial and commercial devices. Case 3 has .42" pin length; case 3A, .61"; case 11, .44"; case 11A, .32". Case 5 has solder terminals; case 7 has straight leads. *BV_{CER} volts. †BV_{CEO} volts. § denotes case column.

AS NEW TYPES ARE RELEASED BY MOTOROLA ALLIED ELECTRONICS WILL STOCK THEM

Type No.	§	P_O (W)	BV_{CES} (V)	EACH 1-9	EACH 10-99	EACH 100-Up
MP3730	11	56	100	1.90	1.58	1.05
MP3731	11	56	320	2.52	2.10	1.40
2N307	11	106	35	1.35	1.12	.75
2N307A	11	106	35	2.25	1.87	1.25
2N176	11	90	30	1.44	1.20	.87
2N178	11	40	30*	1.32	1.10	.80
2N242	11	106	45*	1.98	1.65	1.10
2N297A	11	85	50	1.92	1.60	1.17
2N554	11	40	16*	.72	.60	.40
2N555	11	40	30*	.90	.75	.50
2N665	11	35	40†	5.28	4.40	2.95
2N669	11	90	30	1.71	1.42	.95
2N2138	11	70	45	2.52	2.10	1.40
2N2139	11	70	60	2.70	2.25	1.50
2N2140	11	70	75	4.68	3.90	2.60
2N2141	11	70	90	9.42	7.85	5.25
2N2142	11	70	30	2.76	2.30	1.55
2N2143	11	70	45	2.94	2.45	1.65
2N2144	11	70	60	3.30	3.75	2.50
2N2145	11	70	75	5.40	4.50	3.00
2N350A	11	90	40	1.98	1.65	1.10
2N351A	11	90	40	2.04	1.70	1.15
2N375	11	06	60	2.64	2.20	1.65
2N376A	11	90	40	2.22	1.85	1.25
2N618	11	106	60	2.94	2.45	1.82
2N1038	180	20	60†	3.42	2.85	1.90
2N1039	180	20	60†	4.50	3.75	2.50
2N1040	180	20	60†	6.84	5.70	3.80
2N1041	180	20	60†	9.00	7.50	5.00
2N1359	11	106	40	1.68	1.40	1.05
2N1360	11	106	40	2.04	1.70	1.25
2N1362	11	106	75	3.42	2.85	2.12
2N1363	11	106	75	3.72	3.10	2.30
2N1364	11	106	100	5.70	4.75	3.53
2N1365	11	06	100	6.00	5.00	3.70
MP110	11	106	50	2.00	1.67	1.12
MP110B	11A	106	40†	7.20	6.00	4.00
MP1613	11	85	90	1.62	1.35	1.10
2N379	11	106	40	2.28	1.90	1.39
2N459	11	106	70	5.22	4.35	2.90
2N1011	11	90	80	2.34	1.95	1.45
2N1529	11	106	30	1.74	1.45	1.08
2N1530	11	106	45	1.92	1.60	1.15
2N1531	11	106	60	2.76	2.30	1.70
2N1532	11	106	75	3.60	3.00	2.24
2N1532A	11	106	75	4.30	3.58	2.65
2N1533	11	106	90	5.22	4.35	2.35
2N1534	11	106	30	1.68	1.40	1.05
2N1534A	11	106	30	2.34	1.95	1.45
2N1535	11	106	45	1.80	1.50	1.14
2N1535A	11	106	45	2.52	2.10	1.55
2N1536	11	106	60	2.04	1.70	1.25
2N1537	11	106	75	4.68	3.90	2.90
2N1537A	11	106	75	5.34	4.45	3.30
2N1538	11	106	90	6.60	5.50	4.05
2N1539	11	106	30	1.80	1.50	1.12
2N1540	11	106	45	1.90	1.58	1.18
2N1540A	11	106	45	2.52	2.10	1.62
2N1541	11	106	60	2.22	1.85	1.38
2N1541A	11	106	60	2.82	2.35	1.75
2N1542	11	106	75	2.82	2.35	1.75
2N1543	11	106	90	4.32	3.60	2.65
2N1544	11	106	30	1.98	1.65	1.24
2N1544A	11	106	30	2.67	2.22	1.64
2N1545	11	106	45	2.22	1.85	1.35
2N1545A	11	106	45	2.82	2.35	1.75
2N1546	11	106	60	2.76	2.30	1.70
2N1546A	11	106	60	3.54	2.95	2.20
2N1547	11	106	75	3.30	2.75	2.05
2N1547A	11	106	75	4.14	3.45	2.55
2N1548	11A	106	90	4.80	4.00	2.95

Type No.	§	P_O (W)	BV_{CES} (V)	EACH 1-9	EACH 10-99	EACH 100-Up
2N2527	11	85	120	11.15	9.30	6.20
2N2528	11	85	160	17.80	14.85	9.90
2N3611	11	77	30	1.38	1.15	.78
2N3612	11	77	45	1.56	1.30	.88
2N3613	11	77	30	1.50	1.25	.85
2N3614	11	77	45	1.68	1.40	.94
2N3615	11	77	60	1.98	1.65	1.10
2N3616	11	77	75	2.52	2.10	1.39
2N3617	11	77	60	2.26	1.88	1.25
2N3618	11	77	75	2.85	2.37	1.58
MP525	11	106	35*	1.20	1.00	.75
MP2060	11	85	30	1.21	1.05	.75
MP2061	11	85	45	1.38	1.15	.85
MP2062	11	85	60	1.62	1.35	1.00
MP2063	11	85	75	1.98	1.65	1.25
2N164	5	150	.....	4.32	3.60	2.67
2N174A	5	150	.....	4.56	3.80	2.79
2N277	5	170	25†	2.70	2.25	1.66
2N278	5	170	30†	3.36	2.80	2.07
2N441	5	150	40	1.51	1.26	.84
2N442	5	150	45	1.99	1.66	1.11
2N443	5	150	50	2.28	1.90	1.39
2N456A	11	50	20†	2.16	1.80	1.20
2N457A	11	50	30†	2.64	2.20	1.45
2N458A	11	50	40†	3.13	2.65	1.75
2N1022	11	85	50†	4.32	3.60	2.40
2N1073	11A	85	40*	2.88	2.40	1.78
2N1073B	11A	85	20*	5.40	4.50	3.30
2N1099	5	170	55†	4.60	3.90	2.87
2N1100	5	150	.....	5.40	4.50	3.34
2N1358	5	150	40†	4.88	4.15	3.06
2N1412	5	150	80	5.40	4.50	3.34
2N1970	5	170	50†	2.82	2.35	1.73
2N2076	5	170	70	4.80	4.00	2.67
2N2076A	5	170	70	5.70	4.75	3.17
2N2077	5	170	50	3.84	3.20	2.12
2N2078	5	170	40	2.50	2.08	1.90
2N2079	5	170	80	9.60	8.00	5.34
2N2080	5	170	70	6.76	5.65	3.78
2N2081	5	170	50	4.20	3.50	2.32
2N2152	5	170	45	4.32	3.60	2.40
2N2152A	5	170	45	5.72	4.35	2.90
2N2153	5	170	60	6.56	5.55	3.70
2N2154	5	170	75	1.32	10.10	6.75
IN2155	5	170	90	18.40	15.35	10.25
2N2156	5	170	45	4.92	4.10	2.75
2N2157	5	170	60	7.62	6.35	4.25
2N2157A	5	170	60	8.50	7.10	4.75
2N2158	5	170	75	13.00	10.85	7.25
2N2158A	5	170	75	13.90	11.60	7.75
2N2159	5	170	90	19.50	16.25	10.85
2N2212	4-04	102	60†	10.42	8.60	5.75
2N2288	11A	70	40*	3.18	2.65	1.78
2N2289	11A	70	80*	4.80	4.00	2.65
2N2290	11A	70	120*	5.94	4.95	3.30
2N2291	11A	70	40*	3.30	2.75	1.85
2N2292	11A	70	80*	7.20	6.00	4.00
2N2293	11A	70	120*	14.22	11.85	7.90
2N2490	5	70	60	2.26	1.88	1.39
2N2492	5	70	70	4.06	3.38	2.50
2N2493	5	170	85	7.20	6.00	4.45
2N5324	11	56	150†	5.40	4.50	3.00
2N5325	11	56	200†	7.20	6.00	4.00
MP600	11A	85	50†	2.22	1.85	1.25
MP601	11A	85	60†	2.70	2.25	1.50
MP602	11A	85	70†	3.60	3.00	2.00
MP608	11A	85	80†	4.38	3.65	2.45
2N5155	11A	106	120†	4.92	4.10	2.75
MP2000A	11A	106	30†	2.10	1.75	1.15
MP2100A	11A	106	60†	2.58	2.15	1.45
MP2200A	11A	106	80†	3.30	2.75	1.85

Type No.	§	P_O (W)	BV_{CES} (V)	EACH 1-9	EACH 10-99	EACH 100-Up
MP2300A	11A	106	100†	3.96	3.30	2.20
MP2400A	11A	106	120†	4.68	3.90	2.60
2N1550	11A	106	45	3.66	3.05	2.05
2N1551	11A	106	60	5.82	4.85	3.25
2N1552	11A	106	75	6.65	5.55	3.70
2N1553	11A	160	30	2.22	1.85	1.35
2N1554	11A	106	45	2.76	2.30	1.70
2N1554A	11A	106	45	3.42	2.85	2.10
2N1555	11A	106	60	3.30	2.75	2.05
2N1555A	11A	106	60	4.14	3.45	2.55
2N1556	11A	106	75	4.80	4.00	2.95
2N1556A	11A	106	75	5.58	4.65	3.45
2N1557	11A	106	30	2.52	2.15	1.58
2N1558	11A	106	45	3.36	2.80	1.06
2N1558A	11A	106	45	4.08	3.40	2.50
2N1559	11A	106	60	3.90	3.25	2.40
2N1560	11A	106	75	5.34	4.45	3.30
2N1560A	11A	106	75	6.00	5.00	3.70
2N2832	11A	85	50†	5.40	4.50	3.00
2N2833	11A	85	75†	5.82	4.85	3.25
2N2834	11A	85	100†	6.90	5.25	3.50
2N2912	8	75	5.0†	9.72	8.10	5.40
MP1612	11A	85	50†	4.26	3.55	2.65
MP1612A	11A	85	75†	4.68	3.90	2.90
MP1612B	11A	85	100†	5.04	4.20	3.10
MP500	7	170	45	6.84	5.70	3.80
MP500A	7	170	45	8.52	7.10	4.75
MP502	6	170	75	14.40	12.00	8.00
MP504	7	170	45	7.92	6.60	4.40
MP505A	7	170	60	15.30	12.75	8.50
MP506	7	170	75	16.62	13.85	9.25
2N1751	3A	106	60†	17.10	14.25	9.50
2N1162	8	106	35	5.34	4.45	3.30
2N1164	3	106	60	7.62	6.36	4.70
2N1164A	3	106	60	8.34	6.95	5.15
2N1165	3	106	60	7.62	6.35	4.70
2N1166	3	106	75	9.05	7.55	5.60
2N1166A	3	106	75	9.72	8.10	6.00
2N1167	3	106	75	9.05	7.55	5.60
2N1651	3A	100	30†	5.82	4.85	3.25
2N1652	3A	100	60†	12.12	10.10	6.75
2N1653	3A	100	80†	17.50	14.60	9.75
2N2285	161	100	30†	5.82	4.85	3.25
2N2286	161	100	60†	12.12	10.10	6.75
2N2287	161	100	80†	17.50	14.60	9.75
2N2357	161	170	30†	8.52	7.10	4.75
2N2358	161	170	60†	17.10	14.25	9.50
2N2359	161	170	80†	21.12	17.60	11.75
2N4276	3A	170	20†	4.20	3.50	2.35
2N4048	7	170	30†	6.72	5.60	3.75
2N4049	7	170	45†	9.00	7.50	5.00
2N4050	7	170	60†	11.15	9.30	6.20
2N4051	7	170	30†	7.74	6.45	4.30
2N5435	3A	120	60†	13.00	10.85	7.25
2N5436	3A	120	90†	18.40	15.35	10.25
2N5437	3A	120	120†	21.60	18.00	12.00
2N5438	3A	120	60†	17.50	14.60	9.75
2N5439	3A	120	90†	22.00	18.35	12.25
2N5440	3A	120	120†	27.00	22.50	15.00
MP900	11	8 250	60†	132.00	110.00	100.00
MP901	11	8 250	90†	145.00	121.00	110.00
MP902	11	8 250	120†	158.20	132.00	120.00
MP800	11	8 250	60†	61.20	42.00	46.00
MP801	11	8 250	45†	50.40	42.00	37.75

Motorola Semiconductors

NPN-PNP TRANSISTORS

NPN QUAD TRANSISTORS (Case 83)

For high-speed switching where space reduction is required. V_{CEO} Volts=40. P_D @ T_A=25° C.; 500 mW, 4 devices.

Stock No.	h_{FE} @ I_C min/ max mA	$V_{CE(sat)}$ Volts max @ I_C/I_B mA max	EACH 1-9	10-99	100-Up
MQ3725	50/150 | 100	0.26 | 100/10	48.20	40.10	26.75

PNP QUAD TRANSISTORS (Case 83)

Stock No.	h_{FE} @ I_C min/ max mA	$V_{CE(sat)}$ @ I_C Volts @ I_B max. mA max	EACH 1-9	10-99	100-Up
2N5146	20/... | 1000	1.0 | 1000/100	57.20	47.60	31.75
MQ3467	20/... | 500	0.5 | 500/50	53.10	44.25	29.50
MQ3762	20/... | 1000	1.0 | 1000/100	57.20	47.60	31.75

DIFFERENTIAL AMPLIFIERS (Case 83)

Type No.	V_{CB} Volts	P_D @ T_a=25°C. 4 Devices mW	h_{FE} min/max	h_{FE1}/h_{FE2} min/max	EACH 1-9	10-99	100-Up
MQ3799	60	500	300/900	0.9/1.0	51.30	42.75	28.50
MQ3799A	60	500	300/900	0.9/1.0	95.50	79.50	53.00

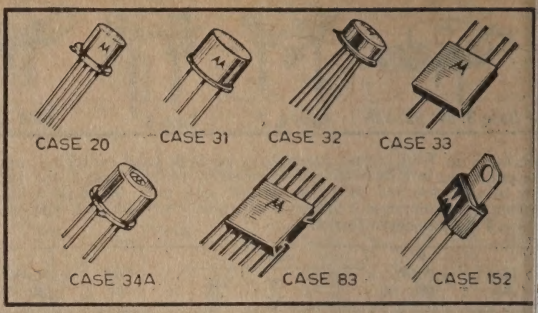
NPN UNIWATT TRANSISTORS (Case 152)

Uniwatt plastic-encapsulated transistors are designed for applications requiring higher power dissipation. Package is slightly larger than the small-signal case, and the collector is mounted on a metal tab that extends out of the plastic. Tab can be attached to a heat sink to conduct heat from the junction. Power dissipation range for Uniwatt transistors is 5 to 8 watts; without heat sink dissipation is 1 watt @ T_A=25° C.

Type No.	V_{CEO} Volts	P_D @ T_C=25°C Watts	f_T @ I_C MHz min	mA	EACH 1-9	10-99	100-999	1000-Up
MPS-U01	30	8.0	50	50	1.33	1.15	.77	.58
MPS-U02	40	6.0	150	20	1.19	.99	.66	.49
MPS-U03	120	5.0	100	50	1.69	1.41	.94	.70
MPS-U04	180	5.0	100	50	1.94	1.62	1.08	.81
MPS-U05	60	5.0	50	250	1.39	1.16	.77	.58
MPS-U06	80	5.0	50	250	1.61	1.34	.89	.67

PNP UNIWATT TRANSISTORS (Case 152)

Type No.	V_{CEO} Volts	P_D @ T_C=25°C Watts	f_T @ I_C MHz min	mA	EACH 1-9	10-99	100-999	1000-Up
MPS-U51	30	8.0	50	50	1.60	1.33	.89	.67
MPS-U52	40	6.0	150	20	1.39	1.15	.77	.58
MPS-U55	60	5.0	50	250	1.61	1.34	.89	.67
MPS-U56	80	5.0	50	250	1.80	1.50	1.00	.75



MULTIPLE DEVICES

Complementary epitaxial star transistors for high-speed switchir circuits, DC to UHF applications and space saving consideration Complementary pairs NPN/PNP. Two-in-one transistors for spac reduction. Maximum T_J=200° C.

Type No.	Case	P_D @ T_A=25°C Both Sides mW	V_{CE} Volts	EACH 1-9	10-99	100-Up
2N3838	33	350	40	32.70	27.75	18.5
MD985	32	600	30	10.80	9.00	6.0
MD985F	33	350	30	17.56	13.50	9.0
MD986	32	600	15	22.70	18.90	12.6
MD986F	33	350	15	36.20	30.15	20.1
MD6001	32	600	30	12.95	10.80	7.2
MD6002	32	600	30	16.20	13.50	9.0
MD6100	32	600	45	17.82	14.85	9.9

DARLINGTON AMPLIFIER TRANSISTORS—NPN

Darlington amplifier transistors are compound-connected for e tremely high DC current gain. Maximum T_J=200° C.

Type No.	Case No.	P_D @ T_A=25° C Both Sides mW	V_{CE} Volts	EACH 1-9	10-99	100-Up
2N998	20	500	60	16.20	13.50	9.0
2N999	20	500	60	17.80	14.85	9.9
2N2725	20	500	45	25.20	21.00	14.0
2N2785	20	500	40	13.50	11.25	7.5

DARLINGTON AMPLIFIER TRANSISTORS—PNP

Type No.	Case No.	P_D @ T_A=25° C Both Sides mW	V_{CE} Volts	EACH 1-9	10-99	100-Up
2N4974	34A	2500	30	10.80	9.00	6.0
2N4975	34A	2500	30	9.00	7.50	5.0

GERMANIUM PNP MILLIWATT TRANSISTORS (Case 31)

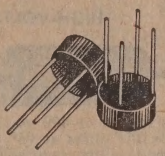
Milliwatt power transistors suitable for audio, switching and control uses requiring moderate power levels and current gains to 500—at frequencies to 3 MHz. ‡"Meg-A-Life," tested to military standards. *Mil. prices slightly higher. I_C, mA max.; Type 2N398, 1(Types 2N331 to 2N2043, 200; 2N653-2N655, 250; 2N1008-2 N1008 300; 2N381 to 2N2171, 400; 2N464 to 2N1926, 500.

Type No.	BV_{CES} BV_{CER}* BV_{CEO}‡ R=10kΩ Volts	P_D mW	EACH 1-9	10-99	100-Up
2N398	105‡	50	1.44	1.20	.80
2N331	12V_{EB}	75	2.26	1.88	1.25
2N398A	105‡	150	1.54	1.28	.85
2N508A	25*	200	1.08	.90	.60
2N1191	25*	200	1.68	1.40	.95
2N1192	25*	200	1.68	1.40	.95
2N1193	25*	200	2.24	1.87	1.25
2N1194	25*	200	2.44	2.03	1.35
2N2042	105‡	200	3.42	2.85	1.90
2N2043	105‡	200	3.84	3.20	2.15
2N653	25*	200	3.00	2.50	1.65
2N654	25*	200	3.12	2.60	1.75
2N655	25*	200	3.36	2.80	1.85
2N1008	20‡	200	1.32	1.10	.75
2N1008A	40‡	200	1.44	1.20	.80
2N1008B	60‡	200	1.56	1.30	.85
2N381	25*	225	1.54	1.28	.85
2N382	25*	225	2.08	1.73	1.15
2N383	25*	225	2.62	2.18	1.45
2N460	.....	225	2.70	2.25	1.50
2N461	.....	225	2.70	2.25	1.50
2N1707	25	200	1.00	.83	.55
2N2171	25*	225	2.34	1.95	1.30
2N464	40*	200	2.26	1.88	1.25
2N465	30*	200	2.26	1.88	1.25
2N466	20*	200	2.52	2.10	1.40
2N467	15*	200	3.06	2.55	1.70
2N650	30*	200	2.44	2.03	1.35
2N651	30*	200	2.44	2.03	1.35
2N652	30*	200	2.82	2.30	1.55
2N1185	30*	200	4.32	3.60	2.40
2N1186	45*	200	4.56	3.80	2.55
2N1187	45*	200	4.56	3.80	2.55
2N1188	45*	200	5.64	4.70	3.15
2N1189	30*	200	2.70	2.25	1.50
2N3427	30*	200	2.34	1.95	1.30
2N3428	30*	200	2.70	2.25	1.5
2N320	20‡	225	.90	.75	.5
2N321	20‡	225	1.00	.83	.5
2N322	18‡	225	.64	.53	.3
2N323	18‡	225	.90	.75	.5
2N324	18‡	225	.90	.75	.5
2N508	18‡	225	.90	.72	.5
2N524	30‡	225	1.44	1.20	.8
2N525	30‡	225	1.44	1.20	.8
2N526	30‡	225	1.44	1.20	.8
2N527	30‡	225	1.72	1.43	.9
2N1175	25‡	225	1.34	1.12	.7
2N1413	25	225	1.00	.83	.5
2N1414	25	225	1.08	.90	.5
2N1415	25	225	1.26	1.05	.7
2N1924	40‡	225	2.16	1.80	1.2
2N1925	40‡	225	2.44	2.03	1.3
2N1926	40‡	225	2.88	2.40	1.6

EXPLANATION OF COLUMN HEADINGS

V_{BR}, avalanche voltage. V_R, DC blocking voltage. V_{RM}, working peak reverse voltage. PIV, peak inverse voltage. Io, average output, rectified current. V_F, forward voltage. t_{rr}, reverse recovery time.

-AMP EPOXY BRIDGE RECTIFIERS



pes W110, W111, VE18, VE28, VE48, d VE68 are for use in non-controlled ava- che applications. Types VE27, VE47, d VE67 are controlled avalanche recti- rs. All units have .025" diameter leads. tings: peak surge current, 4 amps maxi- m, 1 second at 60 Hz, ambient tempera- re of 25° C. Peak one-cycle surge current 60 Hz, 25 amps maximum (non-recurrent). Continuous power sipation: 1 watt. Operating and storage temperature range, 50° to +150° C.

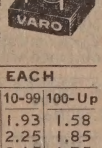
Type No.	$V_{(BR)}$ (V) min.	$V_{(BR)}$ (V) max.	V_R VDC	V_R rms	V_{RM} (wkg)	EACH 1-9	EACH 10-99	EACH 100-Up
110	.....	.....	25	17	25	1.08	.91	.81
111	.....	.....	50	35	50	1.14	.95	.85
118	.....	.....	100	70	100	1.20	1.00	.90
127	250	700	200	140	200	1.44	1.20	1.10
128	.....	.....	200	140	200	1.32	1.10	1.00
147	450	900	400	280	400	1.56	1.30	1.20
148	.....	.....	400	280	400	1.44	1.20	1.10
167	650	1100	600	420	600	1.91	1.59	1.45
168	.....	.....	600	420	600	1.79	1.49	1.35

2-AMP EPOXY BRIDGE RECTIFIERS

ntinuous power dissipation, 1 watt. Operating and rage temperature, −50° to +150° C. Types VS-247, 7, and 647 are for use in controlled avalanche applica- ns; types VS-248, 448, and 648 are for non-controlled. ak surge current: 8 amps max. (1 second at 60 Hz; bient temperature 25° C). Peak 1-cycle surge cur- t at 60 Hz: 50 amps max (non-recurrent). Types -X are not-controlled avalanche; have 200 nano- ond reverse recovery time. Peak 1-cycle surge current at 60 Hz: amps max (non-recurrent). Peak surge current: 6 amps max (1 ond at 60 Hz). All units have .040" D. leads.

Type No.	BV_R(V) (min)	BV_R(V) (max)	V_R (VDC)	V_R (rms)	V_{RM} (wkg)	EACH 1-9	EACH 10-99	EACH 100-Up
S 247	250	700	200	140	200	1.44	1.20	1.10
S 447	450	900	400	280	400	1.56	1.30	1.20
S 248	.....	.....	200	140	200	1.32	1.10	1.00
S 448	.....	.....	400	280	400	1.44	1.20	1.10
S 647	650	1100	600	420	600	1.92	1.60	1.50
S 648	.....	.....	600	420	600	1.80	1.50	1.40
S 148X	.....	.....	100	70	100	1.98	1.65	1.50
S 248X	.....	.....	200	140	200	2.17	1.81	1.65
S 448X	.....	.....	400	280	400	2.38	1.98	1.81

6-AMP EPOXY BRIDGE RECTIFIERS

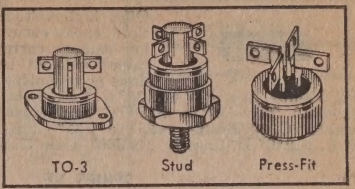


pes VH148, VH248, VH448 and VH648 are for non- ntrolled avalanche applications; Types VH247, VH447 d VH667 are controlled avalanche rectifiers. All units ve .040" diameter leads. Ratings: peak surge current, amps max., 1 second at 60 Hz, ambient temperature 25° C. Peak 1-cycle surge current at 60 Hz, 100 amps ax. (non-recurrent). Continuous reverse power dissi- tion, 2 watts. Operating and storage temperature ge, −50 to +150° C.

Type No.	$V_{(BR)}$ min.	(V) max.	V_R VDC	V_R rms	V_{RM} (wkg)	EACH 1-9	EACH 10-99	EACH 100-Up
H148	.....	.....	100	70	100	2.31	1.93	1.58
H247	250	700	200	140	200	2.70	2.25	1.85
H248	.....	.....	200	140	200	2.58	2.15	1.75
H447	450	900	400	280	400	3.11	2.59	2.13
H448	.....	.....	400	280	400	2.99	2.49	2.03
H647	650	1100	600	420	600	3.57	2.98	2.45
H648	.....	.....	600	420	600	3.46	2.88	2.35

Make Allied your "One-Stop" Headquarters for all your industrial needs. Pay OEM factory prices, slash handling expenses and reduce paperwork in purchasing and receiving. You place one order, receive one shipment, and make one disbursement. Allied has the world's largest stock of electronic components for industry.

INTEGRATED BRIDGE RECTIFIERS



Single-phase integrated full-wave bridge rectifiers in compact, welded packages. Available in choice of TO-3, stud and press-fit mounts.

10- and 25-Amp. Avalanche Series. Specified maximum/minimum characteristics permit selection of decreased PRV safety factors in design considerations without greatly reduced transient voltage vulnerability.

10-Amp Fast Recovery Series. Not controlled avalanche, has 200 nanoseconds recovery time to permit reliable operation in high frequency and low RF interference applications.

10-AMP FAST RECOVERY SERIES

Average forward current, 10 amps max. at 100° C case temperature. Forward current (surge), 75 amps/leg. Reverse recovery time, 200 nanoseconds max. Junction temp. range, −65° to +150°C.

Type No.	Mount	V_{RM} (V)	Max V_R (V)	t_{rr} nanosec (max)	EACH 1-9	EACH 10-99	EACH 100-Up
VR100X/F	Press-fit	100	100	200	7.56	6.30	5.05
VR100X/T/F	TO-3	100	100	200	7.86	6.55	5.25
VR100X/S/F	Stud	100	100	200	8.04	6.70	5.35
VR200X/F	Press-fit	200	200	200	8.94	7.45	5.95
VR200X/T/F	TO-3	200	200	200	9.24	7.70	6.15
VR200X/S/F	Stud	200	200	200	9.42	7.85	6.25
VR400X/F	Press-fit	400	400	200	13.08	10.90	8.00
VR400X/T/F	TO-3	400	400	200	13.38	11.15	8.20
VR400X/S/F	Stud	400	400	200	13.56	11.30	8.30

25-AMP FAST RECOVERY SERIES

Average forward current, 25 amps maximum at 100° C case temperature. Forward current (surge) 150 amps/leg. Reverse recovery time, 200 nanoseconds max. Junction temperature range, −65° to +150° C.

Type No.	Mount	V_{RM} (V)	Max V_R (V)	t_{rr} nanosec (max)	EACH 1-9	EACH 10-99	EACH 100-Up
VY100X	Press-fit	100	100	200	9.79	8.16	6.54
VY100X/T	TO-3	100	100	200	10.09	8.41	6.74
VY100X/S	Stud	100	100	200	10.27	8.56	6.84
VY200X	Press-fit	200	200	200	11.52	9.60	7.70
VY200X/T	TO-3	200	200	200	11.82	9.85	7.90
VY200X/S	Stud	200	200	200	12.00	10.00	8.00
VY400X	Press-fit	400	400	200	16.80	14.00	10.60
VY400X/T	TO-3	400	400	200	17.10	14.25	10.80
VY400X/S	Stud	400	400	200	17.28	14.40	10.95

10-AMP CONTROLLED AVALANCHE SERIES

Forward current (surge), 100 amps/leg. Continuous power dissipation in V_{BR} region, 4 watts at case temperature of 50°C. Junction temperature range, −65°C to +160°C.

Type No.	Mount	V_{RM} (V)	V_{BR} (V) Min.	V_{BR} (V) Max.	Max. V_R (V)	EACH 1-9	EACH 10-99	EACH 100-Up
1N4436/F	Press-fit	200	250	500	250	4.98	4.15	3.05
1N4436/T/F	TO-3	200	250	500	250	5.28	4.40	3.25
1N4436/S/F	Stud	200	250	500	250	5.46	4.55	3.35
1N4437/F	Press-fit	400	450	700	450	6.84	5.45	4.00
1N4437/T/F	TO-3	400	450	700	450	6.84	5.70	4.20
1N4437/S/F	Stud	400	450	700	450	7.02	5.85	4.30
1N4438/F	Press-fit	600	650	900	650	8.94	7.45	5.45
1N4438/T/F	TO-3	600	650	900	650	9.24	7.70	5.65
1N4438/S/F	Stud	600	650	900	650	9.42	7.85	5.75

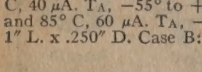
25-AMP CONTROLLED AVALANCHE SERIES

Forward current (surge), 250 amps/leg. Continuous power dissipation in V_{BR} region, 4 watts at case temperature of 50°C. Junction temperature range, −65°C to +180°C.

Type No.	Mount	V_{RM} (V)	V_{BR} (V) Min.	V_{BR} (V) Max.	Max. V_R (V)	EACH 1-9	EACH 10-99	EACH 100-Up
VT200	Press-fit	200	250	700	200	6.42	5.35	3.95
VT200/T	TO-3	200	250	700	200	6.72	5.60	4.15
VT200/S	Stud	200	250	700	200	6.90	5.75	4.25
VT400	Press-fit	400	450	900	400	8.40	7.00	5.30
VT400/T	TO-3	400	450	900	400	8.70	7.25	5.50
VT400/S	Stud	400	450	900	400	8.88	7.40	5.60
VT600	Press-fit	600	650	1100	600	11.82	9.85	7.10
VT600/T	TO-3	600	650	1100	600	12.12	10.10	7.30
VT600/S	Stud	600	650	1100	600	12.30	10.25	7.40

Varo Rectifiers

HIGH VOLTAGE DIFFUSED POWER RECTIFIERS



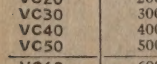
Offer high voltage ranges in minimum-sized epoxy-encapsulated packages with low leakage current. All ratings are obtained without the use of special heat sinks or mounting techniques. I_{FM} at 60 Hz, 3 amps. I_R at PIV and 25° C, 1 μA. **Series VF:** I_R at PIV and 100° C, 40 μA. T_A, −55° to +150° C. **Fast Recovery Series VFX:** I_R at PIV and 85° C, 60 μA. T_A, −55° to +85° C. t_{rr}, 250 nanosecs. Case A: 1″ L. x .250″ D. Case B: 2″x.300″. Case C: 3″x.300″.

SERIES VF

Type No.	I_c mA	PIV kV	V_F V	Case	EACH 1-9	10-99	100 Up
VF5-5	5	5	12	A	1.92	1.60	1.36
VF5-7	5	7	12	A	2.05	1.71	1.45
VF5-10	5	10	18	A	2.35	1.96	1.66
VF5-12	5	12	18	A	2.65	2.22	1.88
VF5-15	5	15	35	B	2.76	2.30	1.95
VF5-20	5	20	35	B	3.57	2.97	2.52
VF5-25	5	25	35	B	4.47	3.72	3.15
VF5-30	5	30	50	C	5.35	4.46	3.78
VF5-40	5	40	50	C	7.14	5.95	5.04
VF10-5	10	5	12	A	2.13	1.77	1.50
VF10-7	10	7	12	A	2.27	1.89	1.60
VF10-10	10	10	18	A	2.59	2.16	1.83
VF10-12	10	12	18	A	2.93	2.44	2.07
VF10-15	10	15	35	B	3.05	2.54	2.15
VF10-20	10	20	35	B	3.93	3.27	2.77
VF10-25	10	25	35	B	4.91	4.09	3.47
VF10-30	10	30	50	C	5.89	4.91	4.16
VF10-40	10	40	50	C	7.85	6.54	5.54
VF25-5	25	5	12	A	2.34	1.95	1.65
VF25-7	25	7	12	A	2.50	2.08	1.76
VF25-10	25	10	18	A	2.86	2.38	2.02
VF25-12	25	12	18	A	3.22	2.68	2.27
VF25-15	25	15	35	B	3.36	2.80	2.37
VF25-20	25	20	35	B	4.32	3.60	3.05
VF25-25	25	25	35	B	5.42	4.51	3.82
VF25-30	25	30	50	C	6.47	5.39	4.57
VF25-40	25	40	50	C	8.64	7.20	6.10

SERIES VFX (FAST RECOVERY)

VF5-5X	5	5	15	A	2.15	1.77	1.50
VF5-7X	5	7	15	A	2.27	1.89	1.60
VF5-10X	5	10	30	A	2.59	2.16	1.83
VF5-12X	5	12	30	A	2.93	2.44	2.07
VF5-15X	5	15	60	B	3.48	2.54	2.15
VF5-20X	5	20	60	B	3.92	3.27	2.77
VF5-25X	5	25	60	B	4.91	4.09	3.47
VF5-30X	5	30	90	C	5.89	4.91	4.16
VF5-40X	5	40	90	C	7.85	6.54	5.54
VF10-5X	10	5	15	A	2.34	1.95	1.65
VF10-7X	10	7	15	A	2.50	2.08	1.76
VF10-10X	10	10	30	A	2.86	2.38	2.02
VF10-12X	10	12	30	A	3.22	2.68	2.27
VF10-15X	10	15	60	B	3.36	2.80	2.37
VF10-20X	10	20	60	B	4.32	3.60	3.05
VF10-25X	10	25	60	B	5.42	4.51	3.82
VF10-30X	10	30	90	C	6.47	5.39	4.57
VF10-40X	10	40	90	C	8.64	7.20	6.10
VF25-5X	25	5	15	A	2.57	2.14	1.81
VF25-7X	25	7	15	A	2.75	2.29	1.94
VF25-10X	25	10	30	A	3.15	2.62	2.22
VF25-12X	25	12	30	A	3.53	2.94	2.49
VF25-15X	25	15	60	B	3.97	3.08	2.61
VF25-20X	25	20	60	B	4.74	3.95	3.35
VF25-25X	25	25	60	B	5.95	4.96	4.20
VF25-30X	25	30	90	C	7.13	5.94	5.03
VF25-40X	25	40	90	C	9.49	7.91	6.70



HIGH-VOLTAGE/CURRENT RECTIFIERS

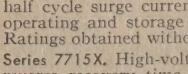
Diffused high voltage, high current silicon rectifiers for industrial and commercial uses. Epoxy encapsulated package. ¼″ spade terminals. Max. DC reverse current at 25° C and rated PIV is 1.0 μA; at 125° C, 1 mA. Peak 1-cycle surge current at 60 Hz, 50 amps (non-recurrent). Ambient operating and storage temperature range, −50 to +125° C. Overall size, 3x¾x¾″.

Type No.	PIV (V)	I_o (A)	V_F (V)	EACH 1-9	10-99	100 Up
VC20	2000	2	4	6.24	5.20	4.00
VC30	3000	2	6	6.63	5.52	4.25
VC40	4000	2	8	7.02	5.85	4.50
VC50	5000	1.5	10	7.42	6.18	4.75
VC60	6000	1.5	12	7.80	6.50	5.00
VC70	7000	1.5	12	8.19	6.82	5.25
VC80	8000	1	14	8.58	7.15	5.50

EXPLANATION OF COLUMN HEADINGS

I_{FM}, maximum one-half cycle surge current. I_o, average output, rectified current. I_R, maximum DC reverse current. PIV, peak inverse voltage. T_A, ambient operating temperature range. t_{rr}, reverse recovery time. V_F, forward voltage.

HIGH-VOLTAGE DIFFUSED SILICON RECTIFIERS



Series 7715. High-voltage diffused silicon rectifiers designed for industrial and commercial applications requiring high reliability at an economical cost. Epoxy encapsulated package provides a dielectric strength of 400 volts/mil and an electrical insulation resistance of $3x10^{12}$ ohms at 95° C and 95% relative humidity. Tinned copper leads allow easy soldering with high electrical and thermal conductance. Withstand 500g shock, vibration of 100 cycles, and peak acceleration of 10g. Maximum DC reverse current at 25° C and rated V_R, I_R, 1.0 μA. DC reverse current at 125° C, 100.0 μA. Peak one-half cycle surge current, at 25° C and 60 Hz, 1.5 amps. Ambient operating and storage temperature range, −55° C to +125° C. Ratings obtained without special heat sinks or mountings.

Series 7715X. High-voltage diffused silicon rectifiers featuring fast reverse recovery time for critical applications. Reverse recovery time at I_F and I_R of 2 mA, 300 nsec max.; at I_F of 20 mA, I_R of 1 mA, 1000 nsec max. Other specifications and characteristics same as series 7715, except reverse current at 125° C, 150.0 μA, and peak one-half cycle surge current, 1.0 amp.

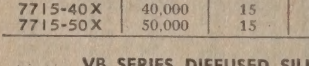
SERIES 7715

Type No.	PRV (V)	I_o (mA)	V_F (V)	EACH 1-9	10-99	100-U
7715-3	3000	75	6.0	2.64	2.20	1.8
7715-5	5000	50	10.0	3.30	2.75	2.2
7715-6	6000	50	12.0	3.64	3.03	2.4
7715-7	7000	50	14.0	3.96	3.30	2.7
7715-10	10,000	25	20.0	5.28	4.40	3.6
7715-15	15,000	25	30.0	7.92	6.60	5.4
7715-20	20,000	25	40.0	9.24	7.70	6.3
7715-30	30,000	25	60.0	11.88	9.90	8.1
7715-40	40,000	25	80.0	14.52	12.10	9.9
7715-50	50,000	25	100.0	18.48	15.40	12.6

SERIES 7715X

7715-3X	3000	50	8.0	4.87	4.06	3.3
7715-5X	5000	30	12.0	6.09	5.07	4.1
7715-7X	7000	30	18.0	7.30	6.08	5.0
7715-10X	10,000	20	24.0	9.72	8.10	6.6
7715-15X	15,000	20	36.0	14.64	12.20	9.9
7715-20X	20,000	20	52.0	17.04	14.20	11.6
7715-30X	30,000	15	75.0	21.93	18.27	11.9
7715-40X	40,000	15	100.0	26.78	22.32	18.2
7715-50X	50,000	15	125.0	34.09	28.41	23.2

VB SERIES DIFFUSED SILICON RECTIFIERS



High-voltage diffused silicon rectifiers featuring small size for high-density packaging. Suffix X to Type No. and Type 1N 4441 are *fast recovery series. Max. reverse recovery time at I_F and I_R of 2 mA, 300 nsec. Electrical characteristics: Max. DC reverse current at PIV and 25° C, .05 μA, *0.3 μA; at PIV and 100° C, 5 μA, *60 μA. Ambient operating temperature range, −55° to +150° C. Max. one-half cycle surge current at 60 Hz, 3 amps. All withstand 500g shock, vibration of 100 cycles, and peak acceleration of 10. Epoxy encapsulated packages. 0.4″ long by .100″ diameter. Ratings obtained without special heat sinks or mounting.

Type No.	PIV (V)	I_o @ 40° C (mA)	V_F — 25°C and I_o (V)	EACH 1-9	10-99	100 U
VB 10	1000	100	5	1.69	1.41	1.0
VB 15	1500	100	5	1.81	1.51	1.1
VB 20	2000	100	5	1.91	1.59	1.2
VB 25	2500	100	5	2.07	1.72	1.3
VB 30	3000	50	10	2.26	1.88	1.4
VB 40	4000	50	10	2.46	2.05	1.5
VB 50	5000	50	10	2.88	2.40	1.8
VB 60	6000	50	10	3.15	2.62	1.9
VB 10X	1000*	50	6	2.26	1.88	1.4
VB 15X	1500*	50	6	2.41	2.01	1.5
VB 20X	2000*	50	6	2.55	2.12	1.6
VB 25X	2500*	25	12	2.76	2.30	1.7
VB 30X	3000*	25	12	3.00	2.50	1.9
VB 40X	4000*	25	12	3.29	2.74	2.0
VB 50X	5000*	25	12	3.84	3.20	2.4
1N4441	1500*	25	4	2.41	2.01	1.5

Sarkes Tarzian Avalanche Rectifiers

LOW AND MEDIUM CURRENT TYPES

Ⓐ M SERIES (1.0 AMP)

Type No.	S-T No.	Max. PIV	Max. rms Volts	EACH 1-9	10-24	25-99	100-Up
1N1081	10M	100	70	.72	.60	55	.51
1N1082	20M	200	140	.88	.65	.57	.53
1N1084	40M or M500	400	280	.90	.75	.63	.59
.....	60M	600	420	1.02	.85	.70	.66

E 0050. Single Mounting Clip for 1N1084. Each .12
E 0051. Double Mounting Clip for 1N1084. Each .24

Ⓑ F SERIES (1.0 AMP)

1N2482	F-2	200	140	.38	.33	.29	.27
1N2483	F-4	400	280	.42	.35	.30	.28
1N2484	F-6	600	420	.45	.37	.32	.29
.....	F-8	800	560	.63	.52	.44	.41

Ⓒ C SERIES (1.0 AMP)

1N2610	10C	100	70	.42	.35	.30	.28
1N2611	20C	200	140	.45	.37	.32	.29
1N2613	40C	400	280	.52	.43	.37	.35
1N2615	60C	600	420	.52	.47	.30	.37

Ⓓ LA SERIES (2 AMPS)

1N1085A	10LA	100	70	4.00	3.34	2.86	2.66
1N1086A	20LA	200	140	4.80	4.00	3.43	3.20
1N1088A	40LA	400	280	6.42	5.35	4.67	4.27

Ⓔ HIGH-VOLTAGE SERIES (.325 to .45 AMP)

1N1108	80SM	800	560	3.78	3.15	2.71	2.54
1N1109	120SM	1200	840	4.80	4.00	3.43	3.20
1N1110	160SM	1600	1120	5.70	4.75	4.15	3.86
1N1111	200SM	2000	1400	6.79	5.65	4.86	4.53
1N1113	280SM	2800	1960	8.82	7.35	6.30	5.87

MEDIUM CURRENT TYPES

Ⓕ H3 SERIES (6 AMPS)

All are positive base types.

Type No.	S-T No.	Max. PIV	Max. rms Volts	EACH 1-9	10-24	25-99	100-Up
1N1341	10H3P	100	70	1.43	1.19	.96	.89
1N1343	20H3P	200	140	1.44	1.20	1.03	.96
1N1346	40H3P	400	280	1.80	1.50	1.29	1.20

Ⓖ ST2 SERIES (12 AMPS)

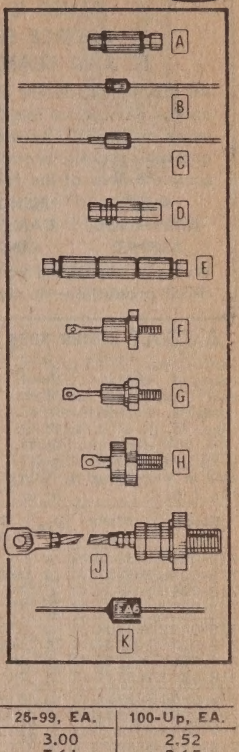
Type No.	S-T No.	Max. PIV	Max. rms Volts	EACH 1-9	10-24	25-99	100-Up
1N1202	ST220P	200	140	1.50	1.25	1.07	1.00
1N1204	ST240P	400	280	2.01	1.67	1.43	1.33
1N1206	ST260P	600	420	2.81	2.34	2.00	1.86

Ⓗ ST4 SERIES (35 AMPS)

Type No.	S-T No.	Max. PIV	Max. rms Volts	EACH 1-9	10-24	25-99	100-Up
1N1190	ST460P	600	420	5.59	4.89	4.19	3.90

Ⓙ ST9 SERIES (250 AMPS)

Type No.	S-T No.	Max. PIV	Max. rms Volts	EACH 1-9	10-24	25-99	100-Up
1N3161	ST910P	100	70	17.10	14.20	12.19	11.36
2N3163	ST920P	200	140	18.95	15.80	13.50	12.60



PLUG-IN TUBE-REPLACEMENT SILICON RECTIFIERS (Not illus.)

Type Nos.	Max. PIV	Replaces	1-9, EA.	10-24, EA.	25-99, EA.	100-Up, EA.
5991	1600	5AU4, 5AW4, 5AZ4, 5T4, 5U4, 5Y3	4.20	3.50	3.00	2.52
N2490 (S5207)	1600	6X4	14.40	12.00	7.61	8.65
N2389 (S5251)	1600	5U4, 5AU4, 5AW4, 5AZ4, 5T4, 5Y3	7.32	6.10	5.23	4.40
5343	7000	816, 836, 3B28	26.60	18.00	13.44	13.00
5130	10,400	866, 866A, 3B28	27.00	22.50	14.25	16.20

TYPE HVC HIGH-VOLTAGE AXIAL-LEAD CARTRIDGE-TYPE SILICON RECTIFIERS

ype VC	Max. PIV	I_F(av) mA	Max. V_F	EACH 1-9	10-24	25-99	100-Up
80	1800	250	4	4.02	3.35	2.86	2.66
40	2400	250	5	4.33	3.60	3.08	2.87
00	3000	200	6	4.62	3.85	3.28	3.07
00	4000	200	8	4.80	4.00	3.44	3.20
00	5000	200	10	4.98	4.15	3.67	3.34
00	6000	150	12	5.46	4.55	3.92	3.66
50	6500	150	13	6.00	5.00	4.29	4.00
50	7500	150	15	6.48	5.40	4.64	4.34
40	8400	100	16	7.10	5.85	5.00	4.66

Type HVC	Max. PIV	I_F(av) mA	Max. V_F	EACH 1-9	10-24	25-99	100-Up
960	9600	100	18	7.98	6.65	5.72	5.34
1000	10,000	100	20	7.82	7.10	6.07	5.66
1200	12,000	75	22	10.00	8.35	7.15	6.66
1500	15,000	75	25	12.48	10.40	8.94	8.34
1800	18,000	75	30	15.00	12.50	10.70	10.00
2100	21,000	50	35	17.50	14.60	12.50	11.67
2500	25,000	50	40	21.00	17.50	15.00	14.00
3000	30,000	50	50	25.00	20.80	17.90	16.70
.....	.....	.....	.....	.....	.....	.....	.....

Quality high-voltage avalanche rectifiers available in a wide range of ratings. Use in high-voltage power supplies in TV sets, oscilloscopes and test equipment. All are .375" in diameter. Body length ranges from .362" to ¼". Lead length is a minimum of 2".

Ⓚ VR SERIES LOW-COST ZENER RECTIFIERS

-watt zeners in rugged lastic case. For use in 4, .4, ½ and 1-watt pplications. V_Z is ava- nche voltage. Std. tol- rance ±10%; for ±5% dd suffix A.

Type	Vz	Type	Vz	Type	Vz	Type	Vz	Type	Vz
VR6	6	VR14	14	VR33	33	VR80	80	VR130	130
VR7	7	VR18	18	VR39	39	VR90	90	VR150	150
VR8.5	8.5	VR20	20	VR47	47	VR105	105	VR160	160
VR10	10	VR24	24	VR55	56	VR110	110	VR200	200
VR12	12	VR28	28	VR67	67	VR120	120	.....	...

Type No.	Tolerance	EACH 1-9	10-24	25-99	100-Up
VR6 to VR90	Suffix "A" ±5%	.80	.67	.57	.53
	No Suffix ±10%	.75	.62	.53	.49
VR105 to VR200	Suffix "A" ±5%	1.05	.87	.73	.69
	No Suffix ±10%	.99	.82	.70	.65

AVALANCHE SILICON BRIDGE RECTIFIERS

Compact efficient assemblies for easy installation n single phase full wave bridge applications. All ffer the inherent transient protection of avalanche haracteristics. Use in power supplies for communi- ation equipment, computers, control systems, etc.

Ⓛ 2.0 AMPS SINGLE PHASE

Type No.	Max. PIV	Max. rms Volts	EACH 1-9	10-24	25-99	100-Up
S6211	200	140	2.55	2.12	1.82	1.69
S6211-1	400	280	2.81	2.34	2.00	1.86
S6211-2	600	420	3.07	2.56	2.19	2.04

Ⓜ 6.0 AMPS SINGLE PHASE

S6121	100	.....	4.81	4.01	3.43	3.19
S6121-1	200	.....	5.05	4.21	3.60	3.35
S6121-2	300	.....	5.24	4.36	3.73	3.47

Ⓝ 2 AMP MINIATURE SINGLE PHASE

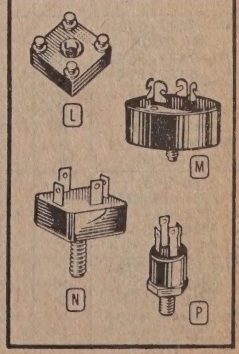
Compact bridge rectifiers are only 9/16" square and ¼" high. DC load amps, 2.0.

Type No.	Max. PIV	Max. rms Volts	EACH 1-9	10-24	25-99	100-Up
S6230	200	140	1.72	1.47	1.26	1.19
S6230-1	400	280	2.13	1.77	1.52	1.41
S6230-2	600	420	2.53	2.11	1.80	1.68

Ⓟ MINIATURE 12 AMP FULL WAVE BRIDGES

Miniature rectifiers, only a fraction of the size of conventional equipment. 5/8"x1½" (with lugs).

S6240	200	140	4.52	3.76	3.22	3.00
S6240-1	400	280	6.18	5.15	4.40	4.00
S6240-2	600	420	8.32	6.93	5.93	5.40



IC Sockets, Neon-Glow Readout Tubes

ALLIED IS YOUR COMPLETE SOURCE FOR THE LATEST IN IC AND TRANSISTOR CONNECTORS

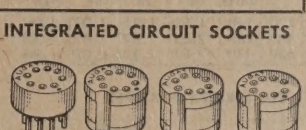
All the manufacturers of today's ultra-reliable interconnection devices are listed in this catalog. See the connector index on page 273—use it as your guide to IC, transistor and tube sockets, breadboards and hardware. We stock complete lines of the following manufacturers:

A-MP	BISHOP	EBY	VECTOR
AMPHENOL	CAMBION	ELCO	VERO
AUGAT	CINCH	TRIAD	

We have everything you need for virtually any electronic circuit production—in stock and ready for fast shipment.

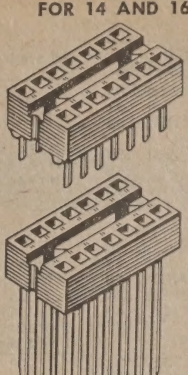
AUGAT SERIES 8058 INTEGRATED CIRCUIT SOCKETS

For use with TO-5 type integrated circuits. Closed entry machined beryllium contacts. Teflon insulated. Figs. H, J, K push-fit in .366-.369" dia. hole. Fig. G. is PC mtg. Chamfered holes. Sold in Multiples of 5. *Pin. Wt. 2 oz.



Stock No.	Mfr's Type	Fig.	Con Term.	*Dia.	Con-tacts	EACH 5-95	100-495	500-Up
718-0301	8058-1G48	A	PC	.200"	6	1.04	.91	.79
718-0296	8058-1G43	B	Solder	.200"	6	1.04	.91	.79
718-0295	8058-1G42	C	PC	.200"	6	1.04	.91	.79
718-0302	8058-1G49	A	PC	.200"	8	1.34	1.18	1.02
718-0292	8058-1G37	D	Turret	.200"	8	1.34	1.18	1.02
718-0279	8058-1G19	B	Solder	.200"	8	1.34	1.18	1.02
718-0289	8058-1G32	C	PC	.200"	8	1.34	1.18	1.02
718-0303	8058-1G50	A	PC	.230"	8	1.34	1.18	1.02
718-0300	8058-1G47	D	Turret	.230"	8	1.34	1.18	1.02
718-0299	8058-1G46	B	Solder	.230"	8	1.34	1.18	1.02
718-0298	8058-1G45	C	PC	.230"	8	1.34	1.18	1.02
718-0291	8058-1G34	A	PC	.230"	10	1.65	1.44	1.26
718-0309	8058-24G1	...	PC	.230"	10	1.68	1.47	1.28
718-0280	8058-1G22	B	Solder	.230"	10	1.65	1.44	1.26
718-0288	8058-1G31	C	PC	.230"	10	1.65	1.44	1.26
718-0304	8058-1G51	A	PC	.280"	12	1.94	1.69	1.48
718-0285	8058-1G28	B	Solder	.280"	12	1.94	1.69	1.48

AMERICAN PAMCOR DUAL-IN-LINE SOCKETS FOR 14 AND 16-LEAD INTEGRATED CIRCUITS



- Accommodate Full Range of Lead Sizes for Versatile Use
- Wide Lead-In for Easy Insertion of Integrated Circuits
- One-Piece Phosphorous-Bronze Contacts with Anti-Over-Stress Design

Quality-made dual-in-line integrated circuit sockets feature one-piece phosphorous-bronze contacts with special anti-over-stress design. Glass-filled nylon housings withstand temperature extremes and severe environments. Wide lead-in provides fast and easy insertion for a variety of integrated circuits. Available for AMP Termipoint wiring technique, wrap-type wiring devices, and wave or dip soldering methods. *Explanation of contact type: S, solder tails; W, wrap-type formed posts; WS, wrap-type solid posts; TP, AMP Termipoint posts. Av. shpg. wt. 3 oz.

Mfr's Type	Con-tacts	*	Contact Plating	Mfr's Type	Con-tacts	*	Contact Plating
1-380859-1	14	S	Tin	1-380860-1	16	S	Tin
1-380859-2	14	S	Gold	1-380860-2	16	S	Gold
1-380846-0	14	W	Tin	1-380851-0	16	W	Tin
1-380846-1	14	W	Gold	1-380851-1	16	W	Gold
1-380863-1	14	WS	Gold	1-380882-1	16	WS	Gold
1-380845-0	14	TP	Gold	1-380852-0	16	TP	Gold

Stock No.	Mfr's Type	EACH 1-99	100-249	250-999	1000-Up
729-1300	1-380859-1	.50	.47	.45	.30
729-1301	1-380859-2	.79	.76	.72	.48
729-1302	1-380846-0	.56	.54	.51	.34
729-1303	1-380846-1	.88	.84	.80	.53
729-1304	1-380863-1	1.07	1.02	.97	.65
729-1305	1-380845-0	1.07	1.02	.97	.65
729-1306	1-380860-1	.53	.51	.48	.32
729-1307	1-380860-2	.87	.83	.79	.53
729-1308	1-380851-0	.62	.59	.56	.37
729-1309	1-380851-1	.97	.93	.88	.59
729-1310	1-380882-1	1.19	1.13	1.08	.72
729-1311	1-380852-0	1.19	1.13	1.08	.72

In-Line Digital Readouts

NUMERICAL NEON-GLOW READOUT TUBES

NATIONAL ELECTRONICS, INC.

NL-900 NL-8422/5991

- Economy, plus long-life
- Built-in uniformity
- Simple, rugged construction
- Will not fade with age

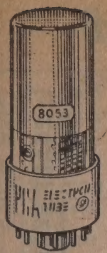
Visible display is a red-orange neon glow in the form of desired character. Can easily be read even under high ambient light. Careful manufacturing techniques assure no variation of color or intensity. Under most difficult conditions, as display of one number only, life is in excess of four year With different numbers life is much greate Regular types have 5,000-8,000 hours. *20 000 hours or 20 year life. †Wide angl ‡rectangular; §left hand decimal point. A wt., 4 oz.

SOCKETS FOR READOUT TUBES

Stock No.	Type	EACH	Stock No.	Type	EACH	Stock No.	Type	EACH
766-5004	RTS-2	.75	766-5006	RTS-4	.90	766-5016	RTS-14	.40
766-5005	RTS-3	1.00	766-5007	RTS-5	1.25	766-5019	RTS-17	.40

Tube Type	Fig.	Description	Max. DC Ion V.	Min. DC Supp. V.	Cathode mA Peak	Cathode mA Av. Max.	Cathode mA Av. Min.	Pre-Bias V. Limits	Numerical Char. Ht.	Max. Tube Size Ht.	Max. Tube Size Dia.	Max. View Distance	Fits Socket	EACH
*NL-7977/4032	F	End View (0-9)	170	170	2.0	1.4	0.7	50-120	.310"	.940"	.680"	14'	RTS-3	19.00
NL-7009	F	End View (0-9)	170	170	2.0	1.2	0.7	50-75	.310"	.925"	.650"	14'	RTS-3	19.00
*NL-8421/5092	F	†End View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.125"	1.080"	30'	RTS-2	15.75
*NL-8422/5991	F	‡End View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	.862"	1.020"	30'	RTS-4	15.75
NL-6844A	F	End View (0-9)	170	170	4.0	3.0	1.5	50-120	.610"	1.125"	1.080"	30'	RTS-2	11.00
*NL-8091	F	†End View (0-9)	170	170	6.5	6.0	3.0	65-120	1.375"	1.980"	2.060"	65'	RTS-5	22.50
*NL-7037	E	Side View (0-9)	200	200	10	10	6	65-120	2.000"	3.625"	2.030"	100'	RTS-5	26.00
NL-8502/4021	F	End View (0-9)	120	120	2.0	1.4	0.7	50-75	.310"	.925"	.650"	14'	RTS-3	33.00
*NL-809	F	§‡End View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	.862"	1.020"	30'	RTS-4	17.35
*NL-803	E	Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.937"	.875"	30'	RTS-17	9.00
*NL-840/8754	E	Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.800"	.750"	30'	RTS-14	8.00
*NL-841	E	§Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.800"	.750"	30'	RTS-14	8.40
*NL-900	E	Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.375"	.750"	30'	RTS-14	9.00
*NL-901	E	§Side View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.375"	.750"	30'	RTS-14	9.75
*NL-8037/5031	F	End View (0-9)	170	170	3.5	3.0	1.5	50-120	.610"	1.125"	1.080"	30'	RTS-2	15.75
*NL-5992	F	‡End View (±)	170	170	3.5	3.0	1.5	50-120	.610"	.862"	1.020"	30'	RTS-4	15.75
*NL-5091I	F	†End View (±)	170	170	3.5	3.0	1.5	50-120	.610"	1.125"	1.080"	30'	RTS-2	15.75
*NL-8423/6091	F	†End View (0-9)	170	170	4.5	4.0	1.5	65-120	.808"	1.212"	1.350"	38'	RTS-2	19.00
NL-7153	F	End View (0-9)	250	250	5.0	3.0	2.0	65-120	.808"	1.212"	1.350"	38'	RTS-2	14.50

Allied Electronics Has Best Record of Orders Filled in the Country

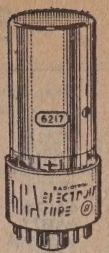


Over 800 Types
14 Manufacturers

Special-Purpose Tube Directory

GUIDE TO MANUFACTURERS

Amperex Elect. Corp.	National Union
Bomac	Radio Corp. of America
Dumont	Raytheon Mfg. Co.
Eimac (Div. of Varian)	Sylvania Electric
Electrons, Inc.	Thermosen, Inc.
Machlett Lab.	Varian
National Electronics, Inc.	Victoreen Instrument



• Dependable
• Highest Quality

Complete selection of high-reliability tubes for almost every purpose. Suffix "MP" in tube type no. indicates matched pair.

Purchases of tube types are always billed at lowest current OEM price.

Tube Type	EACH 1-4	5-18	19-49	50-Up
OA2	1.39	1.32	1.25	1.19
OA2WA		See 6626/OA2WA		
OA3	1.67	1.59	1.51	1.43
OA3A	1.67	1.59	1.51	1.43
OA4G	2.21	2.10	2.00	1.90
OB2	1.50	1.43	1.36	1.29
OB2WA	2.59	2.46	2.34	2.22
OB3	2.80	2.66	2.53	.....
OC2	1.70	1.62	1.54	1.46
OC3	1.58	1.50	1.43	1.35
OC3A	1.58	1.50	1.43	1.35
OD3	1.57	1.49	1.42	1.34
OD3A	1.57	1.49	1.42	1.34
1AD4	3.48	3.30	3.14	.....
1AG4	8.00	7.60	7.22	6.86
ELC1A	13.95	12.14	11.17	.....
ELC1B	17.80	16.91	.....	.....
1B85	16.30	13.75	11.20	8.70
EL1C	12.15	11.54	.....	.....
1C21	4.55	4.32	4.10	3.90
1D21/SN4	10.65	10.12	9.61	.....
1EP1	31.50	29.93	28.43	27.00
1EP2	14.00	13.30	12.64	12.00
1EP11	32.90	31.25	29.69	28.20
C1K/6014	12.30	11.68	11.10	10.54
1L4	1.50	1.43	1.36	1.29
1M3/DM70	2.30	2.19	2.08	1.98
1P21	56.70	53.87	51.18	48.62
1P22	18.65	17.72	16.83	.....
1P28	22.50	21.38	20.31	.....
1P28V1	30.10	28.60	27.17	.....
1P28A	28.70	27.27	25.91	24.61
1P28AV1	46.20	43.89	41.70	39.62
1P29	9.00	8.55	8.12	7.71
1P37	7.20	6.84	6.50	6.18
1P39	3.95	3.75	3.56	3.38
1P40	5.90	5.61	5.33	5.06
1P41	6.50	6.18	5.87	5.58
1P42	17.15	16.63	15.80	15.01
2-01C	20.00	19.00	.....	.....
2AP1A	21.85	20.76	19.72	18.73
2AS15A	11.00	9.00	8.25	7.17
2BP1	15.50	14.73	13.99	.....
2C39A	20.75	19.71	.....	.....
2C39A/V1	28.00	26.60	.....	.....
2C39WA	28.00	26.60	.....	.....
2C43	25.80	24.51	.....	.....
2C51	4.05	3.85	3.66	.....
2C53 (COM)	9.15	8.85	8.40	.....
2C53 (JAN)	9.45	9.00	8.65	.....
2D21	1.43	1.36	1.29	1.23
2D21W		Use 5727		
2E24	8.00	7.60	7.22	6.86
2E26	4.35	4.13	3.92	3.72
2J42	127.50	121.13	115.08	109.33
2J51	675.00	641.25	609.19	578.78
2J55	298.50	283.58	269.40	255.93
2K25	43.00	.....	.....	.....
2K26	68.00	64.60	61.37	58.30
2SM15	12.00	11.00	9.60	8.80
2X2A	4.60	4.37	4.15	3.94
DH3-91	29.00	26.00	.....	.....
3-400Z/8163	34.00	.....	.....	.....
3-500Z	34.00	32.30	30.60	.....
3A4	2.05	1.95	1.85	1.76
3A5	2.23	2.12	2.01	1.91
3AP1A	43.55	41.37	39.30	37.34
3AQP1	34.35	32.63	31.00	29.45
3B4WA	5.85	5.56	5.28	5.02
RK3B24W	10.55	10.03	.....	.....

Tube Type	EACH 1-4	5-18	19-49	50-Up
3B24WB	10.95	10.50	9.87	.....
3B28	9.55	9.07	8.62	8.19
3BP1A	33.90	32.20	30.59	29.06
EL3C	15.05	14.30	.....	.....
EL3C/L	16.40	15.58	.....	.....
3C23	11.98	11.38	10.78	10.18
3C45		(See 6130/3C45)		
3CX100A5	26.00	24.70	.....	.....
3CX2500F3	205.00	.....	.....	.....
3CX3000A1/8238	238.00	.....	.....	.....
3CX3000A7	278.00	.....	.....	.....
3CX10000A7	580.00	.....	.....	.....
3D22A	41.00	38.95	37.00	35.15
3E29	23.20	22.04	20.94	.....
C3J/5632	12.70	12.06	11.45	.....
C3J-A/5684	13.10	12.45	11.83	.....
C3J/L	14.20	13.49	12.82	12.18
3JP1	25.40	24.13	22.92	21.77
3JP7	27.65	26.27	24.96	23.71
3KP1	32.20	30.59	29.06	27.61
3RP1	19.70	18.72	17.78	16.89
3RP1A	30.80	29.26	.....	.....
3RP7A	35.00	.....	.....	.....
3WP1	39.20	37.24	.....	.....
3WP7	41.00	38.95	.....	.....
4-65A		Use 8165/4-65A		
4-65A/8165	29.50	28.03	.....	.....
4-125A	36.00	.....	.....	.....
4-125A/4D21	36.00	34.20	32.49	26.00
4-250A/5D22	48.00	45.60	43.32	41.15
4-400A/8438	48.00	45.60	.....	.....
4-1000A/8166	135.00	.....	.....	.....
4B32	19.50	.....	.....	.....
4CX250B	35.60	33.82	32.12	30.51
4CX250B/7203	35.60	33.82	.....	.....
4CX250F/7204	38.00	.....	.....	.....
4CX250K/8245	70.00	66.50	.....	.....
4CX250R/7580W	44.50	42.28	.....	.....
4CX300A/8167	54.00	51.30	.....	.....
4CX350A/8321	48.50	46.08	.....	.....
4CX1500B/8660	205.00	.....	.....	.....
4CX5000A/8170	495.00	.....	.....	.....
4CX10000D/8171	575.00	.....	.....	.....
4CX15000A/8281	695.00	.....	.....	.....
4D32	74.30	61.58	.....	.....
4E27A/5-125B	50.00	47.50	45.13	42.88
ELC4H-2	25.00	23.75	.....	.....
ELC4H-3	25.00	23.75	.....	.....
4PR60B/8252	115.00	.....	.....	.....
4X150A/7034	23.15	21.99	.....	.....
4X500A	128.50	.....	.....	.....
5ABP1	51.05	.....	.....	.....
5ABP7	49.70	47.22	.....	.....
5ADP1	48.00	45.60	.....	.....
5ADP2	48.00	45.60	.....	.....
5ADP7	48.00	45.60	.....	.....
5ADP31	51.05	48.50	.....	.....
5AQP1A	61.00	52.40	.....	.....
5BHP2AM	83.50	.....	.....	.....
5BP1A	43.05	.....	.....	.....
5CP1A	40.60	.....	.....	.....
5CP7A	52.40	.....	.....	.....
5FP7A	40.95	38.90	.....	.....
5LP1A	55.00	.....	.....	.....
5R4GYA	2.28	2.17	2.06	1.96
5R4GYB	2.28	2.17	2.06	1.96
5R4WGA	10.55	10.02	9.52	9.04
5R4WGB	15.50	14.73	13.99	13.29
5UP1	21.10	.....	.....	.....
5UP7	28.00	26.60	25.27	24.01

Special-Purpose Tube Directory (Cont'd)

Tube Type	EACH 1-4	5-18	19-49	50-Up
5UP11	23.50	22.33	21.21	.....
5UP31	23.10	21.95	20.85	.....
5WP11	23.10	21.95	20.85	.....
GB5Y3WGTA	4.05	3.85	3.66	.....
5ZP16	110.00	104.50	99.28	94.32
6AC7W	5.45	.....	.....	.....
6AG7Y	2.80	2.66	2.53	2.41
6AH6WA	7.60	7.22	6.90	6.56
6AK6	1.40	1.33	1.26	1.01
6AN5	4.20	3.99	3.79	3.60
6AR6	6.00	5.70	.....	.....
6AS6	3.77	3.58	3.40	3.23
6AS7G	5.25	4.99	4.74	4.50
6AS7GA	5.25	4.99	4.74	4.50
6AU6WB	3.11	2.95	2.80	2.66
EL6B	16.50	15.68	.....	.....
EL6B/L	17.75	16.85	.....	.....
ELC6C	58.90	.....	.....	.....
EL6C	24.05	22.85	.....	.....
6D4	3.30	3.14	2.98	2.83
6DJ8/ECC88	1.89	1.80	1.71	1.62
6EH7/EF183	2.31	2.19	2.08	1.98
6EJ7/EF184	2.13	2.02	1.92	1.82
EL6F	18.60	17.67	.....	.....
6F4	14.40	13.68	13.00	10.40
ELC6H-1	29.10	27.65	.....	.....
ELC6H-2	30.25	28.74	.....	.....
ELC6H-3	30.25	28.74	.....	.....
ELC6J	28.10	26.70	.....	.....
C6J/5C21	28.10	26.70	.....	.....
ELC6J/A	28.30	26.39	.....	.....
ELC6J/F	30.00	28.50	.....	.....
ELC6J/K	29.10	27.65	.....	.....
ELC6J/KL	30.25	28.74	.....	.....
ELC6J/L	29.40	27.93	.....	.....
6J4	4.51	3.82	3.63	3.45
6J6WA	5.35	5.08	4.83	3.87
6Q5G	10.50	.....	.....	.....
6SJ7Y	2.65	2.52	2.39	2.27
6SL7WGT	3.15	2.99	.....	.....
6X4W	1.60	1.52	1.40	1.12
7JP1/7VP1	51.30	.....	.....	.....
7TP4	73.15	.....	.....	.....
7VP1	30.80	.....	.....	.....
7VP31	30.80	29.26	27.80	26.41
8HP4	52.50	49.88	47.39	45.02
8NP4	59.50	56.53	53.70	.....
8QP4	63.00	59.85	56.86	54.02
10SP4	99.35	94.38	.....	.....
12A6	3.60	3.42	3.25	3.09
12AT7WA	2.86	2.72	2.58	2.45
12AT7WB	2.86	2.72	2.58	2.45
12AU7WA/6189	4.00	3.80	3.61	3.43
12SW7	1.78	1.69	1.61	1.53
X-13	335.00	.....	.....	.....
ELC16H	62.00	58.90	.....	.....
ELC16J	52.50	49.88	.....	.....
C16J/5665	52.50	49.88	.....	.....
17DWP4	31.00	29.45	.....	.....
NLKY21A	32.10	30.50	28.98	.....
RX21A	30.90	29.36	.....	.....
21EYP4	44.60	42.37	40.25	38.24
25T	43.00	40.85	.....	.....
26A6	3.70	3.52	3.35	3.19
26A7GT	7.70	7.32	6.95	6.60
26C6	3.05	.....	.....	.....
26D6	3.05	.....	.....	.....
27GB5	1.85	.....	.....	.....
28D7	4.95	4.70	4.47	3.58
EL34(6CA7)	2.68	2.55	2.41	.....
EL34/6CA7 MP	5.60	.....	.....	.....
GZ34/5AR4	2.62	2.49	2.37	2.25
EL37	5.43	5.16	4.90	4.66
EF40	3.80	3.61	3.43	3.26
58AVP	555.00	.....	.....	.....
V-58	404.00	.....	.....	.....
DM70(1M3)	See 1M3/DM70			
Z70U/7710	1.95	.....	.....	.....
75C1	5.65	.....	.....	.....
E80CC	Use 6085			
E80CF	Use 7643			
EABC80(6AK8)	1.88	1.79	1.70	1.62
EBF80(6N8)	2.45	2.33	2.21	2.10
ECF90(6BL8)	1.35	1.28	1.22	1.16
EF80(6BX6)	2.28	2.17	2.06	1.96
EZ80(6V4)	.75	.71	.67	.64
ECC81(12AT7)	1.93	1.83	1.74	1.65
ECH81(6AJ8)	1.38	1.31	1.24	1.18
EZ81/6CA4	1.48	1.41	1.34	1.27

Tube Type	EACH 1-4	5-18	19-49	50-
ECC82(12AU7A)	1.28	1.22	1.16	1
ECF82	3.83	3.64	3.46	3
ECL82(6BM8)	1.45	1.38	1.31	1
UCL82(50BM8)	2.18	2.07	1.97	1
83	2.21	2.10	2.00	1
ECC83(12AX7A)	1.40	1.33	1.26	1
EL84(6BQ5)	1.63	1.55	1.47	1
EL84MP(6BQ5)	4.55	4.32	4.10	3
EM84(6FG6)	1.65	1.57	1.49	1
UL84(45B-5)	1.40	1.33	1.26	1
85A1/OE3	7.25	6.96	6.67	6
85A2/OG3	2.30	2.19	2.07	1
ECC85(6AQ8)	1.50	1.43	1.35	1
EF85(6BY7)	1.68	1.60	1.52	1
ECL86	1.53	1.45	1.38	1
EF86(6267)	1.40	1.33	1.26	1
EL86(6CW5)	1.38	1.31	1.24	1
UF86	2.65	2.52	2.39	2
E88CC	Use 6922			
ECC88(6DJ8)	See 6DJ8/ECC88			
EBF89(6DC8)	1.53	1.46	1.38	1
EF89(6DA6)	2.10	2.00	1.90	1
90C1	2.42	2.30	2.19	2
90NB3	32.00	30.40	28.88	27
EZ90(6X4)	1.10	1.05	1.00	
EF91	3.53	3.35	3.18	3
EF95(6AK5)	2.25	2.14	2.03	1
EL95(6DL5)	1.48	1.41	1.34	1
100TH	26.00	24.70	.....	.....
102A	174.00	.....	.....	.....
105	59.00	56.05	52.25	49
AX105/FG105	81.00	76.95	73.10	.....
FG105	59.00	56.05	.....	.....
175A	60.00	57.00	.....	.....
E180F	Use 6688			
VA218	201.00	.....	.....	.....
VA218B	189.00	.....	.....	.....
VA220C	195.00	.....	.....	.....
VA221C	201.00	.....	.....	.....
VA221E	201.00	.....	.....	.....
VA222E	201.00	.....	.....	.....
VA222F	201.00	.....	.....	.....
254W	46.00	43.70	.....	.....
264/8576	420.00	.....	.....	.....
290	470.00	.....	.....	.....
HF300	45.50	.....	.....	.....
304TL	83.00	78.90	.....	.....
SA309	20.40	.....	.....	.....
356/5771	700.00	.....	.....	.....
NL393A	14.00	13.30	.....	.....
407A	5.90	5.61	5.33	5.
GB407A	5.90	5.61	5.31	5.
408A	4.95	4.71	4.48	4.
GB408A	4.95	4.70	4.45	4.
417A	See 5842/417A			
Z502S	21.00	19.95	.....	.....
CK510AX	5.70	5.42	5.15	4.
CK512AX	4.75	4.51	4.28	4.
CK526AX	8.00	7.60	7.22	.....
QKK531	75.00	.....	.....	.....
CK533AX	4.80	4.56	4.33	.....
QKK549	75.00	.....	.....	.....
Z550M	See 2M1050/8453			
575A	23.40	22.23	21.18	.....
579B	20.50	19.48	18.45	.....
592/3-200A3	63.00	59.83	.....	.....
NL604	11.80	11.21	.....	.....
604/7014	11.80	11.21	10.65	10.
NL604L	16.40	15.58	.....	.....
NL606	24.05	22.85	.....	.....
NL606L	27.50	26.13	.....	.....
NL615	10.05	9.55	9.05	8.
615/7018	10.05	9.55	9.07	8.
NL616	13.25	12.59	.....	.....
NL623	15.20	14.40	.....	.....
627	27.50	.....	.....	.....
632B	33.00	31.35	29.70	28.
NL635L/7020	14.90	14.16	.....	.....
NL635P/6930	16.50	15.68	.....	.....
NL649/5834	12.40	11.80	11.21	.....
NL660L/7786	18.85	17.91	.....	.....
NL664L	34.50	32.78	31.14	.....
672A	39.85	37.86	.....	.....
673	22.75	21.61	.....	.....
676	63.80	.....	.....	.....
677	63.80	.....	.....	.....
NL678	50.20	47.69	45.31	.....
NL710/6011	13.15	12.49	11.87	.....
710/6011	12.00	11.40	10.83	10.

Contact Nearest Branch for Prices in Larger Quantiti

Special-Purpose Tube Directory (Cont'd)

Tube Type	EACH 1-4	5-18	19-49	50-Up
NL710L/7518	15.05	14.30	13.59	12.91
NL714	10.00	9.50	.....	.....
714/7021	10.00	9.50	9.03	8.56
NL716	12.50	11.88	.....	.....
NL740L/7022	25.00	23.75	.....	.....
NL740P/6857	25.00	23.75	22.56	.....
NL760	28.10	26.70	.....	.....
760/6858	28.10	26.70	25.37	24.10
NL760L	29.40	27.93	.....	.....
NL760P	29.80	27.93	.....	.....
NL770L	49.80	47.31	.....	.....
NL803	9.00	8.55	.....	.....
807	5.15	4.89	4.65	4.42
NL809	17.35	16.48	.....	.....
810	33.60	31.92	.....	.....
811A	8.60	.....	.....	.....
812A	7.20	.....	.....	.....
813	25.85	24.56	23.33	.....
816	4.50	.....	.....	.....
828	37.00	35.15	.....	.....
829B	20.80	19.76	18.77	.....
832A	17.70	16.82	15.98	.....
833A	71.70	68.12	64.71	61.47
836	14.75	14.01	13.31	12.65
NL840/8754	8.00	7.60	.....	.....
NL841	8.40	7.98	.....	.....
845	35.20	33.44	31.77	.....
866A	4.05	3.85	3.66	.....
868	7.20	6.84	6.50	6.18
869B	138.00	.....	.....	.....
869BL	138.00	.....	.....	.....
872A	11.70	.....	.....	.....
884	2.77	2.63	2.50	2.38
891R	430.00	408.50	388.08	.....
NL900	9.00	8.55	.....	.....
NL901	9.75	9.26	.....	.....
902A	22.40	.....	.....	.....
917	10.10	9.60	9.12	8.66
918	7.20	6.84	6.50	6.18
919	10.80	10.26	.....	.....
920	11.15	10.59	10.06	9.56
921	6.15	5.84	.....	.....
922	3.75	.....	.....	.....
923	5.80	5.51	.....	.....
925	6.35	6.03	.....	.....
926	6.05	5.74	.....	.....
927	7.60	7.22	.....	.....
929	3.90	3.71	.....	.....
930	5.90	5.61	5.33	5.06
931A	12.50	11.88	.....	.....
931VA	13.10	12.45	.....	.....
934	7.40	7.03	.....	.....
935	14.70	13.97	.....	.....
955	7.05	6.70	.....	.....
959	13.85	13.16	12.51	11.89
991	1.62	1.54	1.47	1.41
1000T	172.00	.....	.....	.....
XP1010	135.00	.....	.....	.....
CK1020	20.69	19.65	18.67	17.47
CK1021	20.69	19.65	18.67	17.47
CK1026	4.80	4.56	4.32	4.08
XP1030	135.00	.....	.....	.....
ZM1030	9.95	9.95	9.95	8.00
ZM1050/8453	14.50	13.77	.....	.....
XP1110	135.00	.....	.....	.....
R1131C	21.60	20.52	19.44	.....
1236C	13.00	12.50	10.40	9.50
GB1252/6U8A	2.00	1.90	.....	.....
1612	6.52	6.19	.....	.....
1613	3.30	3.14	2.99	2.84
1614	5.40	5.13	4.87	4.63
1616	17.85	16.96	.....	.....
1619	6.89	6.55	.....	.....
1620	8.26	7.85	7.46	7.09
1621	3.85	3.66	.....	.....
1622	6.00	5.70	5.42	5.15
1624	12.50	11.88	11.29	10.73
1625	6.30	5.99	5.69	5.41
1629	2.55	2.42	2.30	2.19
1635	4.76	4.52	.....	.....
1946	16.15	.....	.....	.....
1947	47.00	44.65	42.42	40.30
1949	23.75	22.56	21.43	.....
2022	5.80	.....	.....	.....
2050	2.48	2.36	2.24	2.13
2050A	2.21	2.10	2.00	1.90
2050W	8.10	7.70	7.32	6.95
2076/5R4GYB	2.30	2.19	2.08	1.98
ZB3200	835.00	.....	.....	.....

Tube Type	EACH 1-4	5-18	19-49	50-Up
NL-4021	See NL8052/4021			
4028A	32.35	30.73	29.19	27.73
4055	32.90	31.26	29.70	28.22
4058	17.60	16.72	15.89	15.10
4065	31.50	29.90	28.30	.....
4152	9.20	8.74	.....	.....
CT4251/8035	See 8035/CT4251			
4409	5.60	5.32	5.05	4.80
4471	19.00	18.05	17.15	16.29
4472	24.60	23.37	22.20	21.09
4473	63.00	59.85	56.86	.....
4478	36.00	34.20	.....	.....
4490	36.05	34.25	32.54	30.92
4491	39.85	37.86	.....	.....
4499	28.00	26.60	.....	.....
4510	35.70	33.92	32.23	30.62
4526	400.00	.....	.....	.....
4604	9.80	.....	.....	.....
4621	125.00	118.75	112.82	107.18
4652/8042	11.65	11.07	10.52	9.99
4654	7.75	7.37	.....	.....
4654/5762	430.00	408.50	.....	.....
4662	5.00	4.75	4.22	.....
4699	8.20	7.79	7.40	.....
5544	63.00	.....	.....	.....
5545	72.00	.....	.....	.....
5550	49.00	.....	.....	.....
5551A	65.00	.....	.....	.....
5552A	99.00	.....	.....	.....
5553B	254.00	.....	.....	.....
5556	67.00	63.65	60.47	57.45
5557	9.50	9.02	8.55	.....
5558	17.50	16.12	.....	.....
5559	23.00	.....	.....	.....
5560	33.00	31.35	29.70	.....
5561	59.00	.....	.....	.....
5563A	53.90	.....	.....	.....
5575/100	225.00	.....	.....	.....
5581	6.60	6.27	5.96	5.66
5582	7.90	7.51	7.13	6.77
5583	9.85	9.36	8.89	.....
5604	570.00	.....	.....	.....
5606	288.00	.....	.....	.....
5636	6.10	5.80	5.51	5.23
5639	5.25	4.99	4.74	4.50
5642	3.53	3.38	.....	.....
5651	1.95	1.85	1.76	1.67
5651A	1.95	1.85	1.76	1.67
5651WA	3.95	3.75	3.56	.....
5652	9.15	8.69	8.26	7.85
5653	5.65	5.37	5.10	4.85
5654	2.73	2.59	2.46	2.34
CK5656	16.65	15.82	.....	.....
5663	2.40	2.28	2.17	2.06
5665/C16J	52.50	49.88	.....	.....
5667	370.00	.....	.....	.....
5670	2.73	2.59	2.46	2.34
5671	2540.00	.....	.....	.....
CK5672	2.70	2.57	.....	.....
5672	2.48	2.36	2.24	2.13
5675	7.10	6.75	6.41	6.09
CK5676	3.45	3.28	.....	.....
5678	2.48	2.36	2.24	2.13
NL5684/C3J/A	17.85	16.96	16.11	.....
5685/C6JA	36.00	.....	.....	.....
5686	3.55	3.37	3.20	3.04
5687	4.28	4.07	3.87	3.68
CK5687WA	6.15	5.84	5.55	5.27
5691	9.15	8.69	8.26	7.85
5692	8.75	8.31	7.89	7.50
5693	7.10	6.75	6.41	6.09
5696	2.25	2.14	2.03	1.93
CK5702	4.56	4.33	.....	.....
CK5702WA	7.10	6.75	.....	.....
CK5703	3.48	3.31	.....	.....
CK5703WA	7.75	7.36	.....	.....
5718	3.65	3.47	.....	.....
5719	3.15	2.99	2.84	2.70
RK5721	120.00	.....	.....	.....
5725	3.40	3.23	3.07	2.92
5725/6AS6W	3.40	3.23	3.07	2.92
5726	2.02	1.92	1.82	1.73
5727	3.05	2.90	2.76	2.62
5734	22.05	20.95	19.91	18.92
5736	202.00	.....	.....	.....
5749	2.86	2.72	2.58	2.45
5750	3.45	3.28	3.11	2.93
5751	2.83	2.69	2.56	2.43
5751WA	2.83	2.69	2.56	2.43

Special-Purpose Tube Directory (Cont'd)

Tube Type	EACH			
	1-4	5-18	19-49	50-Up
CK5755	10.20	9.69	.....	.....
5762	255.00	.....	.....	.....
5763	2.69	2.56	2.43	2.31
5771	700.00	665.00	.....	.....
5783	4.19	3.98	3.78	3.59
CK5784	5.47	5.20	.....	.....
5814A	2.66	2.53	2.40	2.28
5819	85.55	81.27	.....	.....
5823	1.78	1.69	1.61	1.53
5824	3.80	3.61	3.43	3.26
5825	33.00	.....	.....	.....
RK5837	90.00	.....	.....	.....
5840	5.35	5.08	4.82	4.55
5841	12.00	.....	.....	.....
5842	8.00	7.60	7.22	6.86
5842/417A	8.00	7.60	7.22	6.86
5844	2.40	2.28	2.16	2.05
5845	9.95	9.45	8.96	.....
5847	10.50	9.98	9.48	.....
5847/404A	10.50	9.98	9.48	.....
5855	111.65	.....	.....	.....
5861/EC55	37.50	.....	.....	.....
5866A	Use 7986/5866A			
5867A	32.00	.....	.....	.....
5868	67.00	.....	.....	.....
5869	36.00	.....	.....	.....
5870	130.50	.....	.....	.....
5876A	7.60	7.22	6.86	6.52
CK5879	1.95	1.85	1.76	.....
5881	3.10	2.95	2.80	2.66
CK5886	5.80	5.51	.....	.....
CK5889	21.50	20.43	19.41	18.44
5893	18.45	17.53	16.65	15.82
5894	28.25	.....	.....	.....
5894B/8737	30.00	28.50	.....	.....
5896	3.80	3.61	3.43	3.26
5899	5.55	5.27	5.00	4.72
5902	4.80	4.56	4.32	4.08
5915	1.85	1.76	1.67	1.59
5924A	348.00	330.60	.....	.....
GB-5933	12.35	11.73	.....	.....
5946	145.00	.....	.....	.....
5963	1.48	1.41	1.34	1.27
5964	1.86	1.77	1.68	1.60
5965	2.11	2.00	1.90	1.81
CK5965A	2.11	2.00	1.90	1.81
RK5976	75.00	.....	.....	.....
NL5992	15.75	14.96	.....	.....
6005	3.57	3.39	3.22	3.06
6007	2.40	2.28	2.17	2.06
6008	3.20	.....	.....	.....
6012	8.00	7.60	7.22	6.86
6014	(Use C1K/6014)			
6021	3.50	3.33	3.15	2.98
6072	4.24	4.03	3.83	3.64
CK6072A	4.24	4.03	3.83	3.64
6073	3.25	3.09	.....	.....
6073/OA2	3.60	3.42	3.25	3.09
6074	3.70	3.52	3.34	.....
6074/OB2	3.85	3.66	3.48	3.31
6076	338.00	.....	.....	.....
6080	5.50	5.23	4.97	4.72
6080WA	10.80	.....	.....	.....
6082	5.60	5.32	.....	.....
6083	25.00	.....	.....	.....
6084	3.85	.....	.....	.....
6085	3.85	.....	.....	.....
CK6087/5Y3WGTB	6.25	5.94	5.64	5.36
CK6088	3.79	3.60	3.42	3.25
6095	(Use 6005/5W/6095)			
6101	5.75	5.46	.....	.....
6111	3.70	3.52	3.33	3.15
6112	4.15	3.94	3.74	3.53
6130/3C45	25.75	.....	.....	.....
6136	3.08	2.93	2.78	.....
6146A	4.35	4.13	3.92	3.70
6146B/8298A	5.15	4.89	4.65	4.42
6146W	6.60	6.27	5.96	5.66
6155	41.75	39.66	.....	.....
6155U	47.00	44.65	.....	.....
6156	45.25	.....	.....	.....
6159B	5.05	4.80	4.56	4.33
6159W	9.00	8.55	8.12	7.71
6161	150.00	142.50	.....	.....
6166	910.00	.....	.....	.....
6166A/7007	1055.00	.....	.....	.....
6173	15.20	.....	.....	.....
6181	1390.00	.....	.....	.....
6186/6AG5WA	4.35	4.13	.....	.....

Tube Type	EACH			
	1-4	5-18	19-49	50-U
6189	4.00	.....	.....	.....
6197	2.59	2.46	2.34	2.2
6199	53.20	50.54	.....	.....
6201	3.15	2.99	2.84	2.7
6202	2.19	2.56	2.43	2.3
6211	2.50	2.38	2.26	2.1
6211A	3.40	3.23	3.06	2.8
6216	4.15	3.94	3.74	3.5
6217	85.55	.....	.....	.....
6227	4.35	.....	.....	.....
6252	30.00	28.50	27.08	25.7
6263A	13.55	12.87	12.23	11.6
6264A	14.35	13.64	12.96	12.3
CK6265	4.10	3.90	3.69	3.4
6267/EF86	1.30	1.23	1.17	1.1
6279	89.00	.....	.....	.....
6291	63.00	.....	.....	.....
6292	63.00	.....	.....	.....
6293	5.85	5.56	5.28	5.0
6312	166.00	.....	.....	.....
6328	14.45	13.73	13.04	12.3
6336A	19.04	18.08	17.14	16.1
6342A	66.50	.....	.....	.....
6350	2.20	2.09	1.99	1.8
6354	2.55	.....	.....	.....
6360A	6.25	5.94	5.65	5.3
6362	133.00	.....	.....	.....
6363	123.50	.....	.....	.....
6375/DC70	8.40	.....	.....	.....
6386	8.00	7.60	7.22	6.8
6397	8.30	7.89	6.64	6.2
6405/1640	9.55	9.07	8.62	8.1
6417	3.33	3.16	.....	.....
CK6418	3.90	3.71	3.52	3.3
6442	39.00	.....	.....	.....
6463	2.75	2.61	2.48	2.3
6467	63.00	.....	.....	.....
6472	11.55	.....	.....	.....
6476A	14.95	.....	.....	.....
CK6485	2.05	.....	.....	.....
6508	138.50	.....	.....	.....
6521	725.00	.....	.....	.....
6521/R	725.00	.....	.....	.....
6524	28.70	27.27	25.91	24.6
CK6528	20.50	19.48	18.50	17.5
6550	4.59	4.36	4.13	3.9
6550V1	9.25	.....	.....	.....
6569	49.00	46.55	.....	.....
6570	12.90	12.26	11.65	11.0
6626/OA2WA	3.50	3.33	3.16	3.0
6655A	66.50	63.18	.....	.....
6660/6BA6	1.08	.....	.....	.....
6661/6BH6	1.43	1.36	1.29	1.2
6662/6BJ6	1.30	1.24	1.18	1.1
6663/6AL5	.99	.94	.....	.....
6664/6AB4	1.25	1.19	1.13	1.0
6669/6AQ5A	1.12	1.06	1.01	.9
6676/6CB6A	1.13	1.07	1.02	.9
6677/6CL6	1.86	1.77	1.68	1.6
6678/6U8A	1.58	1.50	1.43	1.3
6679/12AT7	1.58	1.50	1.43	1.3
6680/12AU7A	1.26	1.20	1.14	1.0
6681/12AX7A	1.34	1.27	1.21	1.1
6686	6.00	.....	.....	.....
6688	8.75	8.31	7.89	.....
6688A	6.80	6.46	6.14	5.8
6688B	12.50	.....	.....	.....
6689	4.30	.....	.....	.....
6696A	1105.00	.....	.....	.....
6697A	1200.00	.....	.....	.....
ML-6771	71.90	.....	.....	.....
6773	60.00	57.00	.....	.....
6802	11.43	.....	.....	.....
6807	36.40	.....	.....	.....
6810A	225.00	.....	.....	.....
6816	56.00	.....	.....	.....
6842 (USAF)	15.00	.....	.....	.....
6842 (COM)	14.30	14.00	13.65	.....
6842	17.60	15.85	.....	.....
NL6844A	11.00	.....	.....	.....
6850	25.90	.....	.....	.....
6883	4.70	4.47	4.25	4.0
6883B/8032A/8552	5.60	5.32	5.05	4.7
6884	39.20	.....	.....	.....
6887	1.40	1.33	1.27	1.2
6894	25.90	24.60	.....	.....
6895	25.90	24.60	.....	.....
NL6895	26.05	24.75	23.51	22.3
6897	35.36	34.53	.....	.....

Contact Nearest Branch for Prices in Larger Quantities

Special-Purpose Tube Directory (Cont'd)

Tube Type	EACH 1-4	5-18	19-49	50-Up
6907	30.00	28.50	27.08	25.73
CK6909	16.35	.....	.....	.....
6910	13.37	.....	.....	.....
6922/E88CC	4.87	4.25	4.00	3.73
6939	11.37	10.80	10.23	9.66
6953	9.15	8.69	8.26	7.85
6960	186.00	.....	.....	.....
6977	2.50	2.38	2.26	2.15
6979	46.00	.....	.....	.....
NL6989/C6J/KL	30.25	28.74	.....	.....
NL6989-NE	35.50	33.73	.....	.....
7007	1020.00	.....	.....	.....
NL7009	19.00	.....	.....	.....
7025	1.40	1.33	1.26	1.19
NL7037	26.00	24.70	.....	.....
7038	175.00	.....	.....	.....
7043	8.65	8.22	7.81	7.42
7044	2.95	2.80	2.66	2.53
7054	1.68	1.60	1.52	1.44
7055	1.09	1.04	.....	.....
7056	1.02	.97	.92	.87
7057	2.02	1.92	1.82	1.73
7058	1.50	1.43	1.36	1.29
7059	1.65	1.57	1.49	1.42
7060	1.96	1.86	1.77	1.68
7061	1.54	1.46	1.39	.....
7062	3.10	2.95	.....	.....
7094	44.00	.....	.....	.....
NL7094	45.00	.....	.....	.....
7102	115.00	.....	.....	.....
7117	13.65	12.97	.....	.....
7119	4.50	4.28	4.07	3.87
7136	40.75	38.71	36.77	34.93
NL7153	14.50	13.78	.....	.....
7167	1.61	1.53	1.45	1.38
7189	1.55	1.47	1.40	1.33
7213	430.00	408.50	.....	.....
7234	15.65	14.87	.....	.....
7235	10.00	9.80	9.65	.....
7258	2.28	2.17	2.06	1.96
7262A	190.00	.....	.....	.....
7263A	475.00	.....	.....	.....
7265	390.00	.....	.....	.....
7271	44.80	.....	.....	.....
7289/3CX100A5	(See 3CX100A5)			
7308	5.20	4.94	4.70	4.47
7325	170.00	.....	.....	.....
7326	370.00	.....	.....	.....
7360	3.42	3.25	3.09	2.94
7377	30.00	.....	.....	.....
7457	63.90	60.71	57.67	54.79
7459	325.00	308.75	.....	.....
7534	25.00	.....	.....	.....
7551	3.67	3.49	3.32	.....
7554	39.20	37.24	.....	.....
7558	3.49	3.32	3.14	3.27
7580W/4CX250R	44.50	42.28	40.17	38.17
7586	3.65	3.47	3.30	3.14
7587	5.50	5.23	4.97	4.72
7609	31.50	29.93	28.43	.....
7643	6.00	.....	.....	.....
7649	130.00	.....	.....	.....
7650	265.00	.....	.....	.....
7651	270.00	.....	.....	.....
7693	4.95	.....	.....	.....
7694	3.95	.....	.....	.....
7698	88.50	.....	.....	.....
7699	16.50	.....	.....	.....
7717/6CY5	1.39	1.32	1.25	1.19
7722/E280F	8.75	.....	.....	.....
NL7723-NE	14.85	14.11	.....	.....
7724/14GTB	1.48	1.41	1.34	1.28
7735	110.00	.....	.....	.....
7735A	150.00	.....	.....	.....
7735B	175.00	.....	.....	.....
7737	8.35	.....	.....	.....
7767	130.00	.....	.....	.....
NL7786-NE	21.00	.....	.....	.....
7815/3CPN10A5	25.50	.....	.....	.....

Tube Type	EACH 1-4	5-18	19-49	50-Up
7788	11.25	10.69	10.16	9.65
7843	35.00	33.25	31.59	30.01
7854	36.75	.....	.....	.....
7895	3.70	3.52	3.34	3.17
7898	1.50	1.43	1.36	1.29
7900	360.00	.....	.....	.....
7905	3.85	3.68	3.47	3.27
7963	9.50	9.03	.....	.....
NL7977/4032	19.00	.....	.....	.....
7984	5.35	5.08	4.82	4.54
7986/5866A	30.50	.....	.....	.....
8000	26.25	24.94	23.69	22.51
8005	21.00	.....	.....	.....
8008	12.40	11.78	11.19	10.63
8008A	12.40	11.78	11.19	.....
8013A	21.45	20.38	19.36	18.39
8020	23.50	22.33	.....	.....
8020AX	26.50	.....	.....	.....
8032	4.90	4.66	4.43	4.21
8035	11.10	.....	.....	.....
NL8037/5031	15.75	14.96	.....	.....
8042	13.25	.....	.....	.....
8055	155.00	147.25	.....	.....
8056	5.15	4.89	4.65	4.42
8058	15.80	15.01	14.26	13.55
8072	21.65	.....	.....	.....
8077/7054	1.54	1.46	1.39	1.32
NL8091	22.50	.....	.....	.....
8117A	38.75	.....	.....	.....
8121	33.60	.....	.....	.....
8122	35.00	.....	.....	.....
8134	200.00	.....	.....	.....
8134/V1	370.00	.....	.....	.....
8163	34.00	.....	.....	.....
8164/3-1000Z	88.00	.....	.....	.....
8165/4-65A	29.50	28.02	26.63	.....
8166/4-1000A	See 4-1000A/8166			
8167/4CX300A	54.00	51.30	48.74	46.30
8168/4CX1000A	200.00	190.00	180.50	171.48
8170/4CX5000A	495.00	470.25	.....	.....
8171/4CX10000D	575.00	546.25	.....	.....
8203	3.90	3.71	3.52	3.34
8223	5.25	.....	.....	.....
8226	80.05	76.05	72.25	68.64
8228	2.90	2.68	2.44	2.15
8223	16.25	15.44	14.67	.....
8239/3X3000F1	245.00	.....	.....	.....
8254/EC1000	21.75	.....	.....	.....
8255/E88C	5.80	5.51	5.23	.....
8270	97.50	.....	.....	.....
8281/4CX15000A	695.00	660.25	627.24	.....
8295A	195.00	.....	.....	.....
8353	11.10	.....	.....	.....
8393	3.60	3.42	3.25	3.09
NL8421/5092	15.75	.....	.....	.....
NL8422/5991	15.75	.....	.....	.....
NL8423/6091	19.00	18.05	.....	.....
8432	180.00	.....	.....	.....
8436/EC158	375.00	.....	.....	.....
8438/4-400A	48.00	.....	.....	.....
8458	10.50	.....	.....	.....
8462	53.90	.....	.....	.....
8480	760.00	.....	.....	.....
8480/V1	1140.00	.....	.....	.....
NL8502/4021	33.00	31.35	.....	.....
8507A	190.00	.....	.....	.....
8560A	46.50	44.21	42.00	39.90
8572A	215.00	204.25	.....	.....
8621/4CX250FG	38.00	.....	.....	.....
8627A	57.90	.....	.....	.....
8632	20.00	19.00	18.05	17.15
8673/S	1800.00	.....	.....	.....
9001	5.38	5.11	4.84	4.57
9002	4.14	3.93	3.73	3.25
9003	5.38	5.11	4.84	4.57
9005	8.05	7.65	7.27	6.91
9006	2.70	2.57	2.45	2.33
NL50911	15.75	14.96	.....	.....

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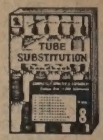

TUBE SUBSTITUTIO HANDBOOK. B Howard Sam Eng'g. Staff. List over 10,000 direc substitutions. Eu opean tube sectio 128 pp. 5½x8½ 949-0150. 5 oz. 1.7

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
OZ4	2.31	2.08	1.73	1.54
OZ4A	2.04	1.84	1.53	1.36
1A3	3.99	3.59	2.99	2.66
1A5GT	2.40	2.16	1.80	1.60
1AD2	2.31	2.08	1.73	1.54
1AY2	2.13	1.92	1.60	1.42
1B3GT		Use 1G3GT/1B3GT		
1BC2	1.95	1.76	1.46	1.30
1BH2	1.83	1.65	1.37	1.22
1G3GT/1B3GT	2.37	2.13	1.78	1.58
1K3/1J3	2.37	2.13	1.78	1.58
1L6	7.53	6.78	5.65	5.02
1N5GT	2.94	2.65	2.21	1.96
1R5	2.67	2.40	2.00	1.78
1RK23		Use 152A/DY87		
1S2A/DY87	1.53	1.38	1.15	1.02
1S4	2.46	2.21	1.85	1.64
1S5	2.04	1.84	1.53	1.36
1T4	2.31	2.08	1.73	1.54
1U4	2.31	2.08	1.73	1.54
1U5	2.04	1.84	1.53	1.36
1V2	1.53	1.38	1.15	1.02
1X2A		Use 1X2B/1X2A		
1X2B/1X2A	2.46	2.21	1.85	1.64
2A3	5.94	5.35	4.46	3.96
2AF4B/2DZ4	2.46	2.21	1.85	1.64
2AH2	2.31	2.08	1.73	1.54
2AS2	2.22	2.00	1.67	1.48
2AS2		Use 2BU2/2AS2A		
2AV2	1.86	1.67	1.40	1.24
2BJ2	2.52	2.27	1.89	1.68
2BN4A	2.13	1.92	1.60	1.42
2BU2/2A52A	2.34	2.11	1.76	1.56
2CN3A	2.46	2.21	1.85	1.64
2CW4	2.94	2.65	2.21	1.96
2CY5	2.64	2.38	1.98	1.76
2DS4	2.94	2.65	2.21	1.96
2DV4	3.87	3.48	2.90	2.58
2DZ4		Use 2AF4B/2DZ4		
2EG4	2.94	2.65	2.21	1.96
2EN5	1.92	1.73	1.44	1.28
2ER5	2.22	2.00	1.85	1.48
2FH5	2.22	2.00	1.85	1.48
2FQ5A		Use 2GK5/2F 5A		
2FS5	2.91	2.62	2.18	1.94
2GK5/2FQ5A	2.31	2.08	1.73	1.68
2GU5	2.70	2.43	2.03	1.80
2HA5	2.31	2.08	1.73	1.54
2HQ5	2.31	2.08	1.73	1.54
3A2	3.30	2.97	2.48	2.20
3A3B	2.04	1.84	1.53	1.36
3AF4A/3DZ4	2.46	2.21	1.85	1.64
3AL5	1.62	1.46	1.85	1.08
3AT2	2.22	2.00	1.67	1.48
3AU6	1.77	1.59	1.33	1.18
3AV6	1.77	1.59	1.33	1.18
3AW2A	2.43	2.19	1.82	1.62
3AW3		Use 3A3B		
3B2		Use 3A3B		
3BA6	1.41	1.27	1.06	.94
3BC5/3CE5	1.77	1.59	1.33	1.18
3BL2		(Use 3BL2A)		
3BL2A	2.13	1.92	1.60	1.42
3BM2	2.16	1.94	1.80	1.44
3BN2	2.40	2.16	1.80	1.60
3BN4A	2.04	1.84	1.53	1.36
3BN6	2.85	2.56	2.14	1.90
3BS2A		Use 3BW2/3BS2B/3BT2		
3AT2		Use 3BW2/3BS2A/3BT2		
3BW2/3BS2A/3BT2	2.94	2.65	2.21	1.96
3BU8/3GS8	2.52	2.27	1.89	1.68
3BY6	1.80	1.62	1.35	1.20
3BZ6	2.22	2.00	1.67	1.48
3CA3	2.22	2.00	1.67	1.48
3CB6/3CF6	1.77	1.59	1.33	1.18
3CE5		Use 3BC5/3CE5		

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Ass 100-Up,
3CF6		Use 3CB6/3CF6		
3CN3A	2.10	1.89	1.58	1.40
3CS6	2.22	2.00	1.67	1.48
3CU3A	2.94	2.65	2.21	1.96
3CX3	2.10	1.89	1.58	1.40
3CY3		Use 3DB3/3CY3		
3CY5	2.34	2.11	1.76	1.56
3CZ3	2.61	2.35	1.96	1.74
3DB3/3CY3	2.70	2.43	2.25	1.80
3DC3	2.79	2.51	2.09	1.86
3DF3	2.52	2.27	1.89	1.68
3DG4	3.54	3.19	2.66	2.36
3DJ3	2.55	2.29	1.91	1.70
3DK6	1.77	1.59	1.33	1.18
3DT6A	1.95	1.75	1.46	1.30
3DZ4		Use 3AF4A/3DZ4		
3EH7/XF183	1.53	1.38	1.15	1.02
3EJ7/XF184	1.53	1.38	1.15	1.02
3ER5	2.67	2.40	2.00	1.78
3FH5	1.95	1.75	1.46	1.30
3FS5	2.58	2.32	1.94	1.72
3GK5	2.52	2.27	1.89	1.68
3GS8		Use 3BU8/3GS8		
3HM5/3HA5	2.31	2.08	1.73	1.54
3HQ5	3.39	3.05	2.54	2.26
3JC6A	2.64	2.38	1.98	1.76
3KT6	2.28	2.05	1.71	1.52
3Q4	2.01	1.81	1.51	1.34
3Q5GT	3.51	3.16	2.63	2.34
3S4	2.04	1.84	1.53	1.36
3V4	2.25	2.02	1.69	1.50
4AU6	2.04	1.84	1.53	1.36
4AV6	1.77	1.59	1.33	1.18
4BC8	2.40	2.16	1.80	1.60
4BL8/XCF80	1.44	1.30	1.08	.96
4BN6	2.43	2.19	1.82	1.62
4BQ7A	2.94	2.65	2.45	1.96
4BS8	2.55	2.29	1.91	1.70
4BU8/4GS8	2.67	2.40	2.00	1.78
4BZ6	2.22	2.00	1.67	1.48
4BZ7	2.94	2.65	2.21	1.96
4CB6	1.71	1.54	1.28	1.14
4CS6	2.04	1.84	1.53	1.36
4DE6	1.77	1.59	1.33	1.18
4DK6	2.04	1.84	1.53	1.36
4DT6A	1.95	1.75	1.46	1.30
4EH7/LF183	2.13	1.92	1.60	1.42
4EJ7/LF184	2.13	1.92	1.60	1.42
4ES8/XCC189	3.30	2.97	2.48	2.20
4EW6	1.74	1.57	1.31	1.16
4GK5	2.34	2.11	1.76	1.56
4GM6	1.32	1.19	.99	.88
4GS8		Use 4BU8/4GS8		
4GX7	2.76	2.48	2.07	1.84
4HA5/PC900	1.41	1.27	1.06	.94
4HA7	2.55	2.29	1.91	1.70
4HC7	2.55	2.29	1.91	1.70
4HM6	1.86	1.67	1.40	1.24
4HQ5	2.76	2.48	2.07	1.84
4HS8	2.22	2.00	1.67	1.48
4JC6A	3.03	2.73	2.27	2.02
4JD6	2.76	2.48	2.07	1.84
4JH6	2.04	1.84	1.53	1.36
4KE8	3.63	3.27	2.72	2.42
4KN8/4RHH8	4.44	4.00	3.33	2.96
4KT6	2.49	2.24	1.87	1.66
4LJ8	2.64	2.38	1.98	1.76
4RHH2		Use 4BQ7A		
5AM8	2.94	2.65	2.21	1.96
5AN8	3.12	2.81	2.34	2.08
5AQ5	2.22	2.00	1.67	1.48
5AR4/GZ34	2.55	2.29	1.91	1.70
5AS4A	2.07	1.86	1.55	1.38
5AS8	2.64	2.38	1.98	1.76
5AT8	2.67	2.40	2.00	1.78
5AU4		Use 5V3A/5AU4		
5AV8	2.43	2.19	1.82	1.62
5AZ4	3.18	2.86	2.39	2.12

ALLIED and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
3	3.30	2.97	2.48	2.20
C3A	2.04	1.84	1.53	1.36
E8	1.86	1.67	1.40	1.24
K7A	2.49	2.24	1.87	1.66
Q7A	2.58	2.32	1.94	1.72
R8	2.94	2.65	2.21	1.96
T8	1.86	1.67	1.40	1.24
W8	2.31	2.08	1.73	1.54
G8	2.40	2.16	1.80	1.60
L8A	3.30	2.97	2.48	1.96
Q8	2.46	2.21	1.85	1.64
Z5	2.67	2.40	2.00	1.78
J4	2.13	1.92	1.60	1.42
A8	3.03	2.73	2.27	2.02
S8/YCC189	3.30	2.97	2.48	2.20
U8	2.40	2.16	1.80	1.60
W6	2.04	1.84	1.53	1.36
G7	2.43	2.19	1.82	1.62
V8	1.95	1.75	1.46	1.30
H8A	2.94	2.65	2.21	1.96
J7		Use 5GJ7/LCF801		
J7/LCF801	1.77	1.59	1.33	1.18
M6	1.95	1.75	1.46	1.30
S7	2.19	1.97	1.64	1.46
X6	1.47	1.32	1.10	.98
X7	2.76	2.48	2.07	1.84
A7	2.55	2.29	1.91	1.70
B7	2.04	1.84	1.53	1.36
G8/LCF86	2.22	2.00	1.67	1.48
Z6	1.95	1.75	1.46	1.30
6	2.22	2.00	1.67	1.48
K6	2.31	2.08	1.73	1.54
L6	2.31	2.08	1.73	1.54
D8	1.50	1.35	1.13	1.00
E8	3.63	3.27	2.72	2.42
Z8	2.13	1.92	1.60	1.42
J8	2.64	2.38	1.98	1.76
1B8	2.19	1.97	1.64	1.46
1HH3		Use 5J6		
8	2.67	2.40	2.00	1.78
4G	1.65	1.49	1.24	1.10
4GB	1.83	1.65	1.37	1.22
8	2.82	2.54	2.12	1.88
9/LCF201	1.77	1.59	1.33	1.18
3A/5AC4	2.28	2.05	1.71	1.52
4GA	2.58	2.32	1.94	1.72
6GT	2.22	2.00	1.67	1.48
8	2.49	2.24	1.87	1.66
3GT	1.77	1.59	1.33	1.18
4GA	1.47	1.32	1.10	.98
4GT	2.04	1.84	1.53	1.36
3	2.67	2.40	2.00	1.78
4		Use 5Y3GT		
7	4.80	4.32	3.60	3.20
8	4.26	3.83	3.20	2.84
B4	2.16	1.94	1.62	1.44
C7	3.45	3.10	2.59	2.30
C10	2.55	2.29	1.91	1.70
D10	4.89	4.40	3.67	3.26
F3	2.13	1.92	1.60	1.42
F4	2.94	2.65	2.21	1.96
F4A	2.94	2.65	2.21	1.96
F8G	3.78	3.40	2.84	2.52
F9	2.13	1.92	1.60	1.42
F11	3.12	2.81	2.34	2.08
G5	2.28	2.05	1.71	1.52
G7	4.11	3.70	3.08	2.74
G9	3.69	3.32	2.77	2.46
G11	3.42	3.08	2.57	2.28
H4GT	1.95	1.75	1.46	1.30
H6	3.12	2.81	2.34	2.08
H9	2.85	2.57	2.14	1.90
K5/EF95	2.85	2.57	2.14	1.90
K8/EABC80	1.98	1.78	1.49	1.32
L3/EY88	1.56	1.40	1.17	1.04
L5	1.77	1.59	1.33	1.18
L7GT	4.17	3.75	3.13	2.78
L11	3.42	3.08	2.57	2.28
M4	4.32	3.89	3.24	2.88
M8A	2.76	2.48	2.07	1.84
N4	3.69	3.32	2.77	2.46
N8A	3.12	2.81	2.34	2.08
Q5A	2.04	1.84	1.53	1.36
Q6	1.95	1.75	1.46	1.30
Q7GT	2.82	2.54	2.12	1.88
Q8/ECC85	1.80	1.62	1.35	1.20
R5	1.47	1.32	1.10	.98
R8	3.54	3.19	2.66	2.36
R11	3.21	2.89	2.41	2.14
S5	2.40	2.16	1.80	1.60
S8	2.91	2.62	2.18	1.94
S11	3.51	3.16	2.63	2.34

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
6AT6	1.44	1.30	1.08	.96
6AT8A	3.12	2.81	2.34	2.08
6AU4GTA	2.91	2.62	2.18	1.94
6AU5GT	3.12	2.81	2.34	2.08
6AU6A	1.77	1.59	1.33	1.18
6AU8A	3.39	3.05	2.54	2.26
6AV5GA	3.12	2.81	2.34	2.08
6AV6	1.62	1.46	1.22	1.08
8AV11	2.64	2.38	1.98	1.76
6AW8A	2.67	2.40	2.00	1.78
6AX3	2.04	2.84	1.53	1.36
6AX4GTB	2.22	2.00	1.67	1.48
6AX5GT	2.31	2.08	1.73	1.54
6AX8	2.10	1.89	1.58	1.40
6AY3B	2.22	2.00	1.67	1.48
6AY11	3.42	3.08	2.57	2.28
6AZ8	3.30	2.97	2.48	2.20
6B8	4.11	3.70	3.08	2.74
6B10	2.67	2.40	2.00	1.78
6BA3	1.83	1.65	1.37	1.22
6BA6/EF93	1.95	1.75	1.46	1.30
6BA7	3.51	3.16	2.63	2.34
6BA8A	2.79	2.51	2.09	1.86
6BA11	2.94	2.65	2.21	1.96
6BC4	3.30	2.97	2.48	2.20
6BC5/6CE5	1.95	1.75	1.46	1.30
6BC7	2.16	1.94	1.62	1.44
6BC8/6BZ8	2.94	2.65	2.21	1.96
6BD6	1.41	1.27	1.06	.94
6BD11	3.51	3.16	2.53	2.34
6BE3/6BZ3	2.67	2.40	2.00	1.78
6BE6	2.04	1.84	1.53	1.36
6BF5	2.01	1.81	1.51	1.34
6BF6	1.71	1.54	1.28	1.14
6BF11	3.03	2.73	2.27	2.02
6BG8G	3.87	3.48	2.90	2.58
6BH3A	1.68	1.51	1.26	1.12
6BH6	2.40	2.16	1.80	1.60
6BH8	2.76	2.48	2.07	1.84
6BH11	2.82	2.54	2.12	1.88
6BJ3	1.95	1.75	1.46	1.30
6BJ6	2.43	2.19	1.82	1.62
6BJ7	1.77	1.59	1.33	1.18
6BJ8	2.67	2.40	2.00	1.78
6BK4B		Use 6BK4C/6EL4A		
6BKLC/6EL4A	4.62	4.16	3.47	3.08
6BK5	2.10	1.89	1.58	1.40
6BK7B	2.94	2.65	2.21	1.96
6BL7GTA	3.36	3.02	2.52	2.24
6BL8/ECF80	1.62	1.46	1.22	1.08
6BM8/ECL82	1.74	1.57	1.31	1.16
6BN4A	2.40	2.16	1.80	1.60
6BN6/6KS6	2.70	2.43	2.03	1.80
6BN8	2.22	2.00	1.67	1.48
6BN11	3.21	2.89	2.41	2.14
6BQ5/EL84	2.34	2.11	1.76	1.56
6BQ6GTB/6CU6	3.24	2.92	2.43	2.16
6BQ7A/6BZ7/6BSA	3.00	2.70	2.25	2.00
6BR3/6RK19	2.73	2.46	2.05	1.82
6BR8A	2.82	2.54	2.12	1.88
6BS3A	2.22	2.00	1.67	1.48
6BS8		Use 6BQ7A/6BZ7/6BS8		
6BU8	3.03	2.73	2.27	2.02
6BV8	1.98	1.78	1.49	1.32
6BV11	2.97	2.67	2.23	1.98
6BW4	1.65	1.48	1.24	1.10
6BW8	2.70	2.43	2.03	1.80
6BW11	3.21	2.89	2.41	2.14
6BX7GT	3.54	3.19	2.66	2.36
6BY5GA	2.88	2.59	2.16	1.92
6BY6	2.04	1.84	1.53	1.36
6BY8	1.62	1.46	1.22	1.08
6BZ6	1.86	1.67	1.40	1.24
6BZ7		Use 6BQ7A/6BZ7/6BS8		
6BZ8		Use 6C8/6BZ8		
6C4	2.22	2.00	1.67	1.48
6C5	3.21	2.89	2.41	2.14
6C6	4.71	4.24	3.53	3.14
6C9	3.30	2.97	2.48	2.20
6C10	2.22	2.10	1.67	1.48
6CA4	1.95	1.75	1.46	1.30
6CA5	1.80	1.62	1.35	1.20
6CA7/EL34	3.21	2.89	2.41	2.14
6CB5A	5.61	5.05	4.21	3.74
6CB6A/6CF6	1.95	1.75	1.46	1.30
6CD6GA	3.99	3.59	2.99	2.66
6CE3		Use 6CG3/6CE3/6CD3/6BW3		
6CE5		Use 6BC5/6CE5		
6CF6		Use 6CB6A/6CF6		

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ALLIED and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
6CG3/6CE3/6CD3/6BW3	2.34	2.11	1.76	1.56
6CG7		Use 6FQ7/6CG7		
6CG8A	2.58	2.32	1.94	1.72
6CH8A	3.36	3.02	2.52	2.24
6CJ3/6CH3	2.22	2.00	1.67	1.48
6CK3	2.22	2.00	1.67	1.48
6CK4	2.13	1.92	1.60	1.42
6CL3	2.22	2.00	1.67	1.48
6CL6	2.85	2.56	2.14	1.90
6GL8A	2.76	2.48	2.07	1.84
6CM3	2.94	2.65	2.21	1.96
6CM6	2.31	2.08	1.73	1.54
6CM7	2.49	2.24	1.87	1.66
6CM8	2.43	2.19	1.82	1.62
6CN7	2.67	2.40	2.00	1.78
6CQ4	2.13	1.92	1.60	1.42
6CQ8	2.46	2.21	1.85	1.64
6CR6	1.77	1.59	1.33	1.18
6CS6	1.98	1.78	1.49	1.32
6CS7	2.25	2.02	1.69	1.50
6CU5	2.40	2.16	1.80	1.60
6CU6		Use 6BQ6GTB/6CU6		
6CU8	2.76	2.48	2.07	1.84
6CW4	3.39	3.05	2.54	2.26
6CW5/EL86	1.65	1.48	1.24	1.10
6CX8	3.12	2.81	2.34	2.08
6CY5	2.55	2.29	1.91	1.70
6CY7	1.83	1.65	1.37	1.22
6CZ5	2.85	2.56	2.14	1.90
6D10	2.79	2.51	2.09	1.86
6DA4		Use 6DM4A/6DA4		
6DB5	3.00	2.70	2.25	2.00
6DC6	2.31	2.08	1.73	1.54
6DC8/EBF89	1.83	1.65	1.37	1.22
6DE4	2.13	1.92	1.60	1.42
6DE6	1.95	1.75	1.46	1.30
6DE7	2.67	2.40	2.00	1.78
6DG6GT	2.31	2.08	1.73	1.54
6DK6	1.77	1.59	1.33	1.18
6DL4/EC88	4.77	4.29	3.58	3.18
6DL5/EL95	1.77	1.59	1.33	1.18
6DM4A/6DA4	2.22	2.00	1.67	1.48
6DN3	2.46	2.21	1.85	1.64
6DN6	4.20	3.78	3.15	2.80
6DN7	2.76	2.48	2.07	1.84
6DQ5	4.89	4.40	3.67	3.26
6DQ6B		Use 6GW6/6DQ6B		
6DR7	3.03	2.73	2.27	2.02
6DS4	3.39	3.05	2.54	2.26
6DS5	2.19	1.97	1.64	1.46
6DT5	2.13	1.92	1.60	1.42
6DT6A	1.95	1.75	1.46	1.30
6DT8	2.25	2.02	1.69	1.50
6DV4	3.87	3.48	2.90	2.58
6DW4B	2.22	2.00	1.67	1.48
6DX8/ECL84	1.74	1.57	1.31	1.16
6DZ4	2.67	2.40	2.00	1.78
6E5	3.39	3.05	2.54	2.26
6EA5		Use 6CY5		
6EA7		Use 6EM7/6EA7		
6EA8	2.34	2.11	1.76	1.56
6EB8	3.03	2.73	2.27	2.02
6EH4A	4.92	4.43	3.69	3.28
6EH5	2.13	1.92	1.60	1.42
6EH7/EF183	2.31	2.08	1.73	1.54
6EH8	2.10	1.89	1.58	1.40
6EJ4A	5.61	5.05	4.21	3.74
6EJ7/EF184	2.13	1.92	1.60	1.42
6EL4		Use 6BK4C/6EL4A		
6EM5	2.67	2.40	2.00	1.78
6EM7/6EA7	3.42	3.08	2.57	2.28
6EQ7	1.77	1.59	1.33	1.18
6ER5	2.52	2.27	1.89	1.68
6ES5	1.71	1.54	1.28	1.14
6ES8/ECC189	3.27	2.94	2.45	2.18
6ET7	2.40	2.16	1.80	1.60
6EU7	2.37	2.13	1.78	1.58
6EU8	2.22	2.00	1.67	1.48
6EV5	2.13	1.92	1.60	1.42
6EV7	1.95	1.75	1.46	1.30
6EW6	2.13	1.92	1.60	1.42
6EW7	3.60	3.24	2.70	2.40
6EZ5	3.03	2.73	2.27	2.02
6EZ8	2.13	1.92	1.60	1.42
6F5	3.51	3.16	2.63	2.34
6F6	3.69	3.32	2.77	2.46
6F6GT	3.48	3.13	2.61	2.32
6F8G	5.07	4.56	3.80	3.38
6FA7	1.77	1.59	1.33	1.18
6FD7	3.42	3.08	2.57	2.28
6FE5	2.04	1.84	1.53	1.36
6FG6/EM84	2.01	1.81	1.51	1.34
6FG7	2.76	2.48	2.07	1.84
6FH5	2.73	2.46	2.05	1.82
6FH8	2.64	2.38	1.98	1.76
6FJ7	2.49	2.24	1.87	1.66
6FM7	2.76	2.48	2.07	1.84
6FM8	2.13	1.92	1.60	1.42
6FQ5A		Use 6GK5/6FQ5A		
6FQ7/6CG7	1.77	1.59	1.33	1.18
6FS5	2.46	2.21	1.85	1.64
6FV6	2.67	2.40	2.00	1.78
6FV8A	2.82	2.54	2.12	1.88
6FW5	2.79	2.51	2.09	1.86
6FY5/EC97	1.65	1.48	1.24	1.10
6FY7	2.10	1.89	1.58	1.40
6G11	3.18	2.86	2.39	2.12
6GB5/EL500	2.28	2.05	1.71	1.52
6GC5	3.00	2.70	2.25	2.00
6GE5	3.42	3.08	2.57	2.28
6GF5	2.28	2.05	1.71	1.52
6GF7A	3.21	2.89	2.41	2.14
6GH8A	1.92	1.73	1.44	1.28
6GJ5A	3.69	3.32	2.77	2.46
6GJ7/ECF801	1.86	1.67	1.40	1.24
6GK5/6FQ5A	2.76	2.48	2.07	1.84
6GK6	2.22	2.00	1.67	1.48
6GL7	3.48	3.13	2.61	2.32
6GM5	1.83	1.65	1.37	1.22
6GM6	2.31	2.08	1.73	1.54
6GN8	3.03	2.73	2.27	2.02
6GQ7	2.25	2.02	1.69	1.50
6GS7	2.25	2.02	1.69	1.50
6GT5A	3.81	3.43	2.86	2.54
6GU5	2.46	2.21	1.85	1.64
6GU7	2.49	2.24	1.87	1.66
6GV5	2.49	2.24	1.87	1.66
6GV8/ECL85	2.76	2.48	2.07	1.84
6GW6/6DQ6B	2.79	2.51	2.09	1.86
6GW8/ECL86	1.83	1.65	1.37	1.22
6GX6	1.92	1.73	1.44	1.28
6GX7	2.76	2.48	2.07	1.84
6GY5	2.76	2.48	2.07	1.84
6GY6	1.92	1.73	1.44	1.28
6GY8	2.82	2.54	2.12	1.88
6H6	3.18	2.86	2.39	2.12
6HA5		Use 6HM5/6HA5		
6HA6		Use 6HB6/6NA6		
6HB5	2.76	2.48	2.07	1.84
6HB6/6HA6	2.67	2.40	2.00	1.78
6HB7	2.58	2.32	1.94	1.72
6HE5	2.79	2.51	2.09	1.86
6HF5	5.22	4.70	3.92	3.48
6HF8	3.18	2.86	2.39	2.12
6HG5	2.04	1.84	1.53	1.36
6HL8/ECF86	2.22	2.00	1.67	1.48
6HJ8	1.86	1.67	1.40	1.24
6HK5	2.34	2.11	1.76	1.56
6HL8	1.83	1.65	1.37	1.22
6HM5/6HA5	2.31	2.08	1.73	1.54
6HM6	1.77	1.59	1.33	1.18
6HQ5	3.03	2.73	2.27	2.02
6HR5	1.53	1.38	1.15	1.02
6HR6	2.22	2.00	1.67	1.48
6HS5	4.65	4.19	3.49	3.10
6HS6	2.22	2.00	1.67	1.48
6HS8	2.85	2.56	2.14	1.90
6HU6/EM87	2.91	2.62	2.18	1.94
6HU8/ELL80	3.24	2.92	2.43	2.16
6HV5	4.65	4.19	3.49	3.10
6HZ6	1.80	1.62	1.35	1.20
6J5	2.76	2.48	2.07	1.84
6J5GT	2.46	2.21	1.85	1.64
6J6A	2.67	2.40	2.00	1.78
6J7	3.48	3.10	2.61	2.32
6J10		Use 6Z10/6J10		
6J11	3.45	3.09	2.59	2.30
6JB6A	3.81	3.43	2.86	2.54
6JC6A	2.67	2.40	2.00	1.78
6JC8	2.01	1.81	1.51	1.34
6JD6	2.13	1.92	1.60	1.42
6JE6A		Use 6LQ6/6JE6C		
6JE8	2.22	2.00	1.67	1.48
6JF6	4.35	3.92	3.26	2.90
6JG6A	3.90	3.51	2.93	2.60
6JH6	2.16	1.94	1.62	1.44
6JH8	3.30	2.97	2.48	2.20
6JK6	2.31	2.08	1.76	1.54
6JK8	2.43	2.19	1.82	1.62
6JM6A	3.42	3.08	2.57	2.28
6JN6	3.21	2.89	2.41	2.14
6JN8	2.19	1.97	1.64	1.46

ALLIED and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
6	2.31	2.08	1.73	1.54
R6	3.81	3.43	2.86	2.54
6C	4.50	4.05	3.38	3.00
T6A	3.24	2.92	2.43	2.16
T8	2.67	2.40	2.00	1.78
6	3.81	3.43	2.86	2.54
8A	2.64	2.38	1.98	1.76
8	2.64	2.38	1.98	1.76
V8/ECF802	1.86	1.67	1.60	1.24
6	2.79	2.51	2.09	1.86
8	2.13	1.92	1.60	1.42
6GT	2.10	1.89	1.58	1.40
7	3.54	3.19	2.66	2.36
8	4.62	4.16	3.47	3.08
11/6Q11	2.28	2.05	1.71	1.52
A8	2.94	2.65	2.21	1.96
D6	5.31	4.78	3.98	3.54
D8		Use 6U8A/6KD8		
E8	3.63	3.27	2.72	2.42
L8	1.77	1.59	1.33	1.18
M6	5.31	4.78	3.98	3.54
M8	2.07	1.86	1.55	1.38
N8	4.32	3.89	3.24	2.88
N8/6RHH8	4.44	4.00	3.33	2.96
R8	2.55	2.29	1.91	1.70
S6		Use 6BN6/6KS6		
T6	1.98	1.78	1.49	1.32
T8	3.24	2.92	2.43	2.16
U8	2.88	2.59	2.16	1.92
V6A	4.38	3.94	3.29	2.92
V8	3.51	3.16	2.63	2.34
Y8A	4.62	4.16	3.47	3.08
Z8	2.43	2.19	1.82	1.62
6	5.79	5.21	4.35	3.86
6GC	3.54	3.19	2.66	2.36
7	4.17	3.75	3.13	2.78
B6	5.31	4.78	3.98	3.54
B8	2.82	2.54	2.12	1.88
C8	2.85	2.56	2.14	1.90
E8	3.72	3.35	2.79	2.48
F6	5.07	4.56	3.80	3.38
F8	3.06	2.75	2.30	2.04
H6A		Use 6LJ6A/6LN6A		
J6		Use 6LJ6A/6LN6A		
J6A/6LN6A	4.62	4.16	3.47	3.08
J8	2.64	2.38	1.98	1.76
M8	2.94	2.65	2.21	1.96
N8/LCF80	1.44	1.30	1.08	.96
Q6/6JE6C	5.19	4.67	3.89	3.46
Q8	3.33	3.00	2.50	2.22
R6	4.89	4.40	3.67	3.26
R8	2.85	2.56	2.14	1.90
T8	2.40	2.16	1.80	1.60
U8	2.85	2.57	2.14	1.90
X8/LCF802	1.56	1.40	1.17	1.04
Y8	2.34	2.11	1.76	1.56
11	3.21	2.89	2.41	2.14
B8	2.19	1.97	1.64	1.46
D8	3.21	2.89	2.41	2.14
E8	3.39	3.05	2.54	2.26
F8	2.85	2.56	2.14	1.90
G8	1.47	1.32	1.10	.98
J8	2.79	2.51	2.09	1.86
K8	2.58	2.32	1.94	1.72
N8	2.85	2.56	2.14	1.90
Q8	2.28	2.05	1.71	1.52
U8	3.12	2.81	2.34	2.08
7	3.03	2.73	2.27	2.02
7GT	3.54	3.19	2.66	2.36
7	3.54	3.19	2.66	2.36
K19	2.73	2.46	2.05	1.82
4A	2.22	2.00	1.67	1.48
A7	3.54	3.19	2.68	2.36
A7GT	2.64	2.38	1.98	1.76
B7Y	3.57	3.21	2.68	2.38
C7	3.21	2.89	2.41	2.14
F5	3.00	2.70	2.25	2.00
F7	3.78	3.40	2.84	2.52
G7	3.36	3.02	2.52	2.24
H7	3.69	3.32	2.77	2.46
J7	3.21	2.89	2.41	2.14
K7	3.00	2.70	2.25	2.00
K7GT	3.30	2.97	2.48	2.20
L7GT	2.94	2.65	2.21	1.96
N7GTB	2.40	2.16	1.80	1.60
Q7	2.97	2.67	2.23	1.98
R7	2.94	2.65	2.21	1.96
T4	3.09	2.78	2.23	2.06
T8A	2.82	2.54	2.12	1.88
T9	2.64	2.38	1.98	1.76
T10	3.33	3.00	2.50	2.22
U5	4.44	4.00	3.33	2.96

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
6U8A/6KD8	2.34	2.11	1.76	1.56
6U9/ECF201	1.74	1.57	1.31	1.16
6U10	2.43	2.19	1.85	1.62
6V3A	2.73	2.46	2.05	1.82
6V6	4.08	3.67	3.06	2.72
6V6GTA	2.67	2.40	2.00	1.78
6W4GT	1.98	1.78	1.49	1.32
6W6GT	2.76	2.48	2.07	1.84
6X4	2.04	1.84	1.53	1.30
6X5GT	2.13	1.92	1.60	1.42
6X8A	2.67	2.40	2.00	1.78
6X9/ECF200	1.74	1.57	1.31	1.16
6Y6GA/6Y6G	2.97	2.67	2.23	1.98
6Y6GT		Use 6Y6GA/6Y6G		
6Y9/ELF200	1.77	1.59	1.33	1.18
6Z4		See 84/6Z4		
6Z10/6J10	3.72	3.35	2.79	2.48
7AU7	1.86	1.67	1.40	1.24
7C5	2.01	1.81	1.51	1.34
7C7	2.04	1.84	1.53	1.36
7EY6	2.22	2.00	1.67	1.48
7F7	4.50	4.05	3.38	3.00
7F8	4.95	4.45	3.71	3.30
7GS7	2.82	2.54	2.12	1.88
7HG8/PCF86	1.65	1.48	1.24	1.10
7KY6	2.58	2.32	1.94	1.72
7N7	4.26	3.83	3.20	2.84
8AC10	3.03	2.73	2.27	2.02
8AR11	3.21	2.89	2.41	2.14
8AU8	2.31	2.08	1.73	1.54
8AW8A	3.21	2.89	2.41	2.14
8B8	3.27	2.94	2.46	2.18
8B10	2.64	2.38	1.98	1.76
8BA8A	2.07	1.86	1.55	1.38
8BA11	3.30	2.97	2.48	2.20
8BH8	2.01	1.81	1.51	1.34
8BM11	2.82	2.54	2.12	1.88
8BN8	2.22	2.00	1.67	1.48
8BN11	2.61	2.35	1.96	1.74
8BQ5	2.25	2.02	1.69	1.50
8BQ11	2.58	2.32	1.94	1.72
8BU11	3.00	2.70	2.25	2.00
8CG7		Use 8FQ7/8CG7		
8CM7	1.62	1.46	1.22	1.08
8CN7	1.83	1.65	1.37	1.22
8CS7	2.40	2.16	1.80	1.60
8CW5/XL86	1.53	1.38	1.15	1.02
8CX8	2.64	2.38	1.98	1.76
8EB8		Use 8GN8/8EA8		
8EM5	2.46	2.21	1.85	1.64
8ET7	2.49	2.24	1.87	1.66
8FQ7/8CG7	1.77	1.59	1.33	1.18
8GJ7/PCF801	1.74	1.57	1.31	1.16
8GN8/8EB8	2.49	2.24	1.87	1.66
8GU7	1.92	1.73	1.44	1.28
8JU8A	2.01	1.81	1.51	1.34
8JV8	2.58	2.32	1.94	1.72
8KA8	2.79	2.51	2.09	1.86
8LC8	2.85	2.56	2.14	1.90
8LT8	2.40	2.16	1.80	1.60
9A8/PCF80	1.59	1.43	1.19	1.06
9AH9	2.85	2.56	2.14	1.90
9AU7	1.77	1.59	1.33	1.18
9BJ11	3.21	2.89	2.41	2.14
9BR7	1.89	1.70	1.42	1.26
9GH8A	2.46	2.21	1.85	1.64
9GV8/XCL85	2.04	1.84	1.53	1.36
9KC6	2.61	2.35	1.96	1.74
9KX6	2.49	2.24	1.87	1.66
9KZ8	1.77	1.59	1.33	1.18
9LA6	2.52	2.27	1.89	1.68
9U8A	1.86	1.67	1.40	1.24
10AL11	2.73	2.46	2.05	1.82
10BQ5	1.65	1.48	1.24	1.10
10C8	3.09	2.78	2.32	2.06
10CW5/LL86	1.53	1.38	1.15	1.02
10DE7	2.94	2.65	2.21	1.96
10DR7	2.67	2.40	2.00	1.78
10DX8/LCL84	1.65	1.48	1.24	1.10
10EG7	2.61	2.35	1.96	1.74
10EM7	2.94	2.65	2.21	1.96
10EW7	3.18	2.86	2.39	2.12
10GF7A	2.85	2.56	2.14	1.90
10GK6	2.07	1.86	1.55	1.38
10GN8	2.94	2.65	2.21	1.96
10HF8	3.21	2.89	2.41	2.14
10JA8/10LZ8	2.49	2.24	1.87	1.66
10JT8	2.43	2.19	1.82	1.62
10JY8	2.19	1.97	1.64	1.46

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ALLIED and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
10KR8	2.55	2.29	1.91	1.70
10KU8	2.91	2.62	2.18	1.94
10LB8	2.82	2.54	2.12	1.88
10LE8	3.54	3.19	2.66	2.36
10LW8	2.55	2.29	1.91	1.70
10LZ8	Use 10JA8/10LZ8			
10Z10	3.30	2.97	2.48	2.20
11AF9	3.69	3.32	2.77	2.46
11AR11	3.21	2.89	2.41	2.14
11BM8	3.51	3.16	2.63	2.34
11BQ11	2.76	2.48	2.07	1.84
11BT11	3.21	2.89	2.41	2.14
11CA11	3.90	3.51	2.93	2.60
11CY7	4.17	3.75	3.13	2.78
11DS5	2.79	2.51	2.09	1.86
11FY7	2.22	2.00	1.67	1.48
11HM7	3.15	2.83	2.36	2.10
11JE8	2.31	2.08	1.73	1.54
11KV8	3.90	3.51	2.93	2.60
11LQ8	3.54	3.19	2.66	2.36
11LT8	2.40	2.16	1.80	1.60
11Y9/LFL200	2.22	2.00	1.67	1.48
12AB5	2.31	2.08	1.73	1.54
12AC6	1.26	1.13	.95	.84
12AC10A	3.03	2.73	2.27	2.02
12AD6	2.10	1.89	1.58	1.40
12AE6A	1.86	1.67	1.40	1.24
12AE10	3.21	2.89	2.41	2.14
12AF3/BR3/RK19	2.55	2.29	1.91	1.70
12AF6	1.89	1.70	1.42	1.26
12AL5	1.65	1.48	1.24	1.10
12AL8	3.69	3.32	2.77	2.46
12AL11	3.39	3.05	2.54	2.26
12AQ5	2.10	1.89	1.58	1.40
12AT6	1.65	1.48	1.24	1.10
12AT7/ECC81	2.13	1.92	1.60	1.42
12AU6	2.13	1.92	1.60	1.42
12AU7A/ECC82	1.86	1.67	1.40	1.24
12AV5GA	3.27	2.94	2.45	2.18
12AV6	1.41	1.27	1.06	.94
12AV7	2.76	2.48	2.07	1.84
12AW6	2.13	1.92	1.60	1.42
12AX3	1.80	1.62	1.35	1.20
12AX4GTB	2.01	1.81	1.51	1.34
12AX7A/ECC83	1.68	1.51	1.26	1.12
12AY3A	1.74	1.57	1.31	1.16
12AY7	3.42	3.08	2.57	2.28
12AZ7A	2.40	2.16	1.80	1.60
12B4A	2.40	2.16	1.80	1.60
12BA6	1.71	1.54	1.28	1.14
12BA7	3.54	3.19	2.66	2.36
12BD6	1.41	1.27	1.06	.94
12BE3	2.07	1.86	1.55	1.38
12BE6	1.83	1.65	1.37	1.22
12BF6	1.41	1.27	1.06	.94
12BF11	3.48	3.13	2.61	2.32
12BH7A	2.31	2.08	1.73	1.54
12BK5	2.25	2.02	1.69	1.50
12BL6	2.22	2.00	1.67	1.48
12BN6	2.19	1.97	1.64	1.46
12BQ6GTB/12CU6	2.67	2.40	2.00	1.78
12BR7	1.83	1.65	1.37	1.22
12BS3A/12DW4A	2.22	2.00	1.67	1.48
12BT3	2.07	1.86	1.55	1.38
12BV7	Use 12BY7A/12BV7/12DQ7			
12BV11	2.88	2.59	2.16	1.92
12BW4	2.01	1.81	1.51	1.34
12BY7A/12BV7/12DQ7	2.13	1.92	1.60	1.42
12BZ6	1.44	1.30	1.08	.96
12BZ7	2.49	2.24	1.87	1.66
12C5	See 12CU5/12C5			
12CA5	2.37	2.13	1.78	1.58
12CL3	2.10	1.89	1.58	1.40
12CN5	1.95	1.75	1.46	1.30
12CR6	1.77	1.59	1.33	1.18
12CT3	1.95	1.75	1.46	1.30
12CU5/12C5	2.58	2.32	1.94	1.72
12CU6	Use 12B 6GTB/12CU6			
12CX6	1.65	1.48	1.24	1.10
12D4	1.83	1.65	1.37	1.22
12DB5	1.56	1.40	1.17	1.04
12DK6	1.38	1.24	1.04	.92
12DQ6B	Use 12GW6/12DQ6B			
12DQ7	Use 12BY7A/12BV7/12DQ7			
12DS7	3.24	2.92	2.43	2.16
12DT5	1.86	2.67	1.40	1.24
12DT8	2.40	2.16	1.80	1.60
12DW4A	Use 12BS3A/12DW4A			
12DW7	1.83	1.65	1.37	1.22
12DY8	4.77	4.29	3.58	3.18
12DZ6	2.16	1.94	1.62	1.44

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not As 100-Up,
12ED5	1.62	1.46	1.22	1.08
12EK6	2.13	1.92	1.60	1.42
12EQ7	1.65	1.48	1.24	1.10
12F8	1.95	1.75	1.46	1.30
12FK6	1.53	1.38	1.15	1.02
12FM6	1.56	1.40	1.17	1.04
12FQ7	1.47	1.32	1.10	.98
12FQ8	3.12	2.81	2.34	2.08
12FV7	2.04	1.84	1.53	1.36
12FX5	1.95	1.75	1.46	1.30
12GC6	2.61	2.35	1.96	1.74
12GE5	3.12	2.81	2.34	2.08
12GJ5A	2.94	2.65	2.21	1.96
12GN7A	3.39	3.05	2.54	2.26
12GT5	3.21	2.89	2.41	2.14
12GW6/12DQ6B	2.97	2.67	2.23	1.98
12H6	2.67	2.40	2.00	1.78
12HE7	4.08	3.67	3.06	2.72
12HG7	3.39	3.05	2.54	2.26
12HL7	2.94	2.65	2.21	1.96
12J5GT	2.88	2.59	2.16	1.92
12J8	2.61	2.35	1.96	1.74
12JB6A	3.72	3.35	2.79	2.48
12JN6	2.34	2.11	1.76	1.56
12JN8	2.22	2.00	1.67	1.48
12JQ6	2.67	2.40	2.00	1.78
12JT6A	2.97	2.67	2.23	1.98
12K5	2.07	1.86	1.55	1.38
12KL8	1.47	1.32	1.10	.98
12L6GT	2.13	1.92	1.60	1.42
12MD8	2.91	2.62	2.18	1.94
12R5	2.01	1.81	1.51	1.34
12SA7	3.54	3.19	2.66	2.36
12SC7	3.12	2.81	2.34	2.08
12SF5	2.31	2.08	1.73	1.54
12SF7	3.72	3.35	2.79	2.48
12SG7	2.82	2.54	2.12	1.88
12SH7	3.24	2.92	2.43	2.16
12SJ7	2.58	2.32	1.94	1.72
12SK7	3.18	2.86	2.39	2.12
12SK7GT	2.67	2.40	2.00	1.78
12SL7GT	2.97	2.67	2.23	1.98
12SN7GTA	2.58	2.32	1.94	1.72
12SQ7	2.97	2.67	2.23	1.98
12T10	2.79	2.51	2.09	1.86
12V6GT	2.67	2.40	2.00	1.78
12W6GT	2.94	2.65	2.21	1.96
12X4	1.35	1.21	1.01	.90
13CW4	3.03	2.73	2.27	2.02
13DE7	2.85	2.56	2.14	1.90
13DR7	3.18	2.86	2.39	2.12
13EM7/15EA7	3.51	3.16	2.63	2.34
13FD7	3.18	2.86	2.39	2.12
13FM7/15FM7	2.40	2.16	1.80	1.60
13GB5/XL500	2.22	2.00	1.67	1.48
13GF7A	3.12	2.81	2.34	2.08
13J10	Use 13Z10/13J10			
13JZ8	3.03	2.73	2.27	2.02
13V10	3.54	3.19	2.66	2.36
13Z10/13J10	3.72	3.35	2.79	2.48
14BL11	4.17	3.75	3.19	2.78
14BR11	3.48	3.13	2.61	2.32
14GT8	2.07	1.86	1.55	1.38
14JG8	1.86	1.67	1.40	1.24
15AF11	2.85	2.56	2.14	1.90
15BD11A	3.30	2.97	2.48	2.20
15CW5/PL84	1.47	1.32	1.10	.98
15DQ8/PCL84	2.04	1.84	1.53	1.36
15FM7	Use 13FM7/15FM7			
15FY7	2.34	2.11	1.76	1.56
15KY8A	3.81	3.43	2.86	2.54
15LE8	4.59	4.13	3.44	3.06
15MF8	2.85	2.56	2.14	1.90
16A8/PCL82	2.04	1.84	1.53	1.36
16AK9	3.84	3.46	2.88	2.56
16AQ3/XY88	1.62	2.46	1.22	1.08
16BQ11	3.21	2.89	2.41	2.14
16BX11	3.51	3.16	2.63	2.34
16GK6	1.83	1.65	1.37	1.22
16GY5	2.91	2.62	2.18	1.94
17AB10/17X10	3.30	2.97	2.48	2.20
17AX3	1.56	1.40	1.17	1.04
17AX4GTA	2.22	2.00	1.67	1.48
17AY3A	2.22	2.00	1.67	1.48
17BB14	6.27	5.64	4.71	4.18
17BE3/17BZ3	2.22	2.00	1.67	1.48
17BF11	3.54	3.19	2.66	2.36
17BH3	1.71	1.54	1.28	1.14
17BQ6GTB	3.12	2.81	2.34	2.08
17BR3/17RK19	2.01	1.81	1.51	1.34
17BS3A/17DW4A	2.22	2.00	1.67	1.48
17BZ3	Use 17BE3/17BZ3			
17BW3	1.92	1.73	1.44	1.28
17C5	Use 17CU5/17C5			
17C9	4.29	3.86	3.22	2.86

ALLIED® and RCA Receiving Tubes (Cont'd)

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
K3	2.13	1.92	1.60	1.42
*3	1.77	1.59	1.33	1.18
15/17C5	1.86	1.67	1.40	1.24
(	2.43	2.19	1.82	1.62
E4	2.19	1.97	1.64	1.46
W4A	2.43	2.19	1.82	1.62
Q6B		Use 17GW6/17DQ6B		
W4A		Use 17BS3A/17DW4A		
V8/HCC85	1.65	1.48	1.24	1.10
E5	2.61	2.35	1.96	1.74
J5A	3.63	3.27	2.72	2.42
T5A	3.33	3.00	2.50	2.22
V5	2.52	2.27	1.89	1.68
W6/17DQ6B	3.15	2.83	2.36	2.10
B25	4.92	4.43	3.69	3.28
6A	3.51	3.16	2.63	2.34
*6	4.11	3.70	3.09	2.74
G6A	3.78	3.40	2.84	2.52
M6A	3.54	3.19	2.66	2.36
N6	3.21	2.89	2.41	2.14
Q6	2.67	2.40	2.00	1.78
T6A	3.36	3.02	2.52	2.24
*8	2.13	1.92	1.60	1.42
V6A	4.71	4.24	3.53	3.14
D8		Use 15KY8A		
10		Use 17AB10/17X10		
/PY81	2.64	2.38	1.98	1.76
J10	3.21	2.89	2.41	2.14
W6A	1.47	1.32	1.10	.98
X6A	1.77	1.59	1.33	1.18
Y6A	1.77	1.59	1.33	1.18
B5/LL50	3.09	2.78	2.32	2.06
D6A	1.77	1.59	1.33	1.18
UB/PCL85	2.79	2.51	2.09	1.86
U4GTA	2.61	2.35	1.96	1.74
G6GA	3.99	3.59	2.99	2.66
G3	2.16	1.94	1.62	1.44
L8A		Use 19JNB/19CL8A		
A8	2.67	2.40	2.00	1.78
Z8	2.70	2.43	2.03	1.80
X5	2.13	1.92	1.60	1.42
Q7	2.28	2.05	1.71	1.52
R6	1.47	1.32	1.10	.98
S6	1.44	1.30	1.08	.96
V8	2.49	2.24	1.87	1.66
6	2.22	2.00	1.67	1.48
N8/19CLBA	1.92	1.73	1.44	1.28
G8	1.86	1.67	1.40	1.24
1R9		Use 18GD6A		
8	2.94	2.65	2.21	1.96
8	2.46	2.21	1.85	1.64
Q3/LY88	2.46	2.21	1.85	1.64
Z7	2.04	1.84	1.53	1.36
F6	5.10	4.59	3.83	3.40
Y5	2.79	2.51	2.09	1.86
B5A	2.85	2.56	2.14	1.90
S6A		Use 23JS6A		
V6	2.79	2.51	2.09	1.86
Z6	2.91	2.62	2.18	1.94
A6	2.67	2.40	2.00	1.78
G6A	5.37	4.83	4.03	3.58
R8	2.85	2.56	2.14	1.90
U8	2.85	2.56	2.14	1.90
H3A	1.86	1.67	1.40	1.24
W3	2.49	2.24	1.87	1.66
E4	2.52	2.27	1.89	1.68
F6	4.35	3.92	3.26	2.90
G6A	3.72	3.35	2.79	2.48
R6	3.72	3.35	2.79	2.48
U6	3.81	3.43	2.86	2.54
M6	4.92	4.43	3.69	3.28
V6A	4.38	3.94	3.29	2.92
S6A	8.01	7.21	6.01	5.34
9	3.82	2.54	2.12	1.88
F11	3.12	2.81	2.34	2.08
E6A		Use 24LQ6/24JE6C		
Z8	2.70	2.43	2.03	1.80
Q6/24JE6C	5.19	4.67	3.89	3.46
V5GA	3.39	3.05	2.54	2.26
X4GT	1.83	1.65	1.37	1.22
K5	2.04	1.84	1.53	1.36
Q6GTB/25CU6	2.64	2.38	1.98	1.76
5	2.22	2.00	1.67	1.48
A5	2.16	1.94	1.62	1.44

Tube Type	EACH—MAY BE ASSORTED 1-9	10-49	50-Up	Not Asst'd 100-Up, EA.
25CD6GB	3.84	3.46	2.88	2.56
25CG3;25CK3	2.04	1.84	1.53	1.36
25CT3	1.77	1.59	1.33	1.18
25CU6		Use 25B 6GTB/25CU6		
25DN6	3.96	3.56	2.97	2.64
25E5/PL36	3.99	3.59	2.99	2.66
25EC6	3.69	3.32	2.77	2.46
25EH5	2.22	2.00	1.67	1.48
25F5A	2.31	2.08	1.73	1.54
25JZ8	3.48	3.13	2.61	2.32
25L6GT/25W6GT	2.22	2.00	1.67	1.48
25W4GT	2.22	2.00	1.67	1.48
25 W6GT		Use 25LGT/25W6GT		
25Z6GT	2.31	2.08	1.23	1.54
26HU5	7.23	6.51	5.42	4.82
27GB5/PL500	2.22	2.00	1.67	1.48
29KQ6/PL521	7.05	6.35	5.29	4.70
30AE3/PYBB	1.95	1.75	1.46	1.30
30JC6	3.69	3.32	2.77	2.46
30KD6	4.86	4.35	3.65	3.24
31AL10	3.51	3.16	2.63	2.34
31JS6C	4.38	3.94	3.29	2.92
31LQ6	5.10	4.59	3.83	3.40
32ET5A	1.44	1.30	1.08	.96
32HQ7	4.62	4.16	3.47	3.08
33GT7	4.17	3.75	3.13	2.78
33GY7A	3.87	3.48	2.90	2.58
33JV6	2.79	2.51	2.09	1.86
34CE3	2.34	2.11	1.76	1.56
34GD5A	1.77	1.59	1.33	1.18
34R3	4.20	3.78	3.15	2.80
35B5	1.92	1.73	1.44	1.28
35C5	1.92	1.73	1.44	1.28
35EH5	2.04	1.84	1.53	1.36
35L6GT	2.31	2.08	1.73	1.54
35LR6	4.89	4.40	3.67	3.26
35W4	1.17	1.05	.88	.78
35Y4	2.70	2.43	2.03	1.80
35Z4GT	1.53	1.38	1.15	1.02
35Z5GT	1.77	1.59	1.33	1.18
36AM3B	1.53	1.38	1.15	1.02
36KD6	5.31	4.78	3.98	3.54
38HE7	4.35	3.92	3.26	2.90
38HK7	4.26	3.83	3.20	2.84
40KD6	5.22	4.70	3.92	3.48
42	2.91	2.62	2.18	1.94
42KN6	4.32	3.89	3.24	2.88
43	4.32	3.89	3.24	2.88
50A5	3.51	3.16	2.63	2.34
50B5	1.77	1.59	1.33	1.18
50BM8/UCL82	2.61	2.35	1.96	1.74
50C5	1.83	1.65	1.37	1.22
50DC4	1.44	1.30	1.08	.96
50EH5	2.13	1.92	1.60	1.42
50FE5	2.67	2.40	2.00	1.78
50FK5	1.32	1.19	.99	.88
50GY7A	5.94	5.35	4.46	3.96
50CH6	2.13	1.92	1.60	1.42
50KH6	1.29	1.16	.97	.86
50JY6	4.20	3.78	3.15	2.80
50L6GT	2.67	2.40	2.00	1.78
50Y6GT	2.61	2.35	1.96	1.74
53HK7	5.01	4.51	3.76	3.34
60FX5	1.77	1.59	1.33	1.18
80	2.88	2.59	2.16	1.92
117L7/GT	8.85	7.97	6.64	5.90
117N7/GT	7.71	6.94	5.78	5.14
117Z3	2.70	2.43	2.03	1.80
5879	3.21	2.89	2.41	2.14
6973	3.03	2.73	2.27	2.02
7025	1.86	1.67	1.40	1.24
7027A	4.47	4.02	3.35	2.98
7189	2.31	2.08	1.73	1.54
7199	2.94	2.65	2.21	1.96
7247	2.43	2.19	1.82	1.62
7355	2.19	1.97	1.64	1.46
7408	2.01	1.81	1.51	1.34
7543	1.95	1.75	1.46	1.30
7581A	3.69	3.32	2.77	2.46
7591A	1.68	1.51	1.26	1.21
7695	2.64	2.38	1.98	1.76
7868	2.85	2.56	2.14	1.90
8417	3.39	3.05	2.54	2.26
EM84/6FG6		Use 6FG6/EM84		

Allied Electronics is "the" complete source for Receiving Tubes. New types are placed in stock, ready for immediate shipment, just as soon as they are released by the manufacturer. Production-quantity pricing is available—contact your nearest Allied Electronics facility for quick service.

ee Page 110 for Tube Substitution Guide and Tube Manuals

IMMEDIATE SHIPMENT — IN QUANTITY AT FACTORY PRICES

RESISTORS

Mfr's. Type	Page	MIL Spec	MIL Type
AIRCO-SPEER			
Carbon Resistors	117	R-39008	RC07, RC20, RC32, RC42
Established Reliability Resistors	119	R-55182	RNR, RNC
DALE			
RH	122	18546D	RE60G, RE70G, RE65G, RE75G
RS	122	R26E	RW70U, RW79U, RW74U, RW78U
IRC			
AS	123	R26E	
BWH	117		
Metal Film	120	R-10509F	RN50C
	121	R-55182	RN55C/D, RN60C/D RN65C/D
Metal Glaze	118	R-22684B	RL07, RL20
PW	123		
Assortments	118		
MEMCOR/OHMITE			
Wirewound Axle Leads	124	R-26	RW55, RW58, RW59 RW67, RW68, RW69
Wirewound Radial Leads	124		
OHMITE			
Power Fixed & Adjustable	125		

CONTROLS

Mfr's. Type	Page	MIL Spec	MIL Type
AMPHENOL-BORG			
Micropot Trimmers			
Wirewound Micropots	141	R-27208	RT-22
		R-27208B	RT-24
		R-22097	RJ11
		R-27208	RT11
Ten Turn Micropots	142	STD-202	
BOURNS			
200L, 236L, 260L	126		
224, 271, 3067, 3068	127		
220	127	R-27208A	
3250, 3251	128		
Military	128	R-27208B	RT10, RT11, RT12, RT22
207L, 208L, 209L	128		
215, 235, 272, 274, 3011, 3051	129		
Military	129	R-22097	RJ11, RJ12, RJ22
Cermet Trimmers	130		
	131	R-22097	
Subminiature Potentiometers	132		
Subminiature and Micro Miniature	133		

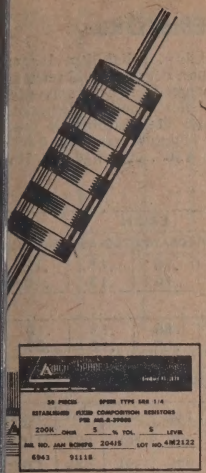
CONTROLS (Cont'd)

Mfr's. Type	Page	MIL Spec	MIL Type
BOURNS—Cont'd			
Precision Controls	134		
Knob Pots and Access.	135		
CENTRALAB			
WN, WW	146		
CLAROSTAT			
380	142		
62JA	143		
63M	143		
371	143		
58	143		
43C-2	143		
U-39	143		
53C-1	143		
53C-2, 3	143	R-94	RV4
CTS			
U-201	145		
X-261	145		
117	145		
P-15	145		
300, 300LT	146	R-94B	RV4, RV6
320LT, 321LT, 252LT	146	R-19A	RA20
IRC			
400	136	R-27208	RF11, RT12
450-10, 450-20	136	R-22097	RJ12, RJ11
600	136	R-27208	RT11
650	136	R-22097C	RJ11
60	136		
205	137	R-27208	RT22C2P, RT22C2L
255	137		RJ-22BW, RJ22BL
500, 506, 550, 556	137		
100, 100-1, 150, 150-1, 300, 310, 320	138		
940	139	R-27208	
700, 750	139		
800, 850	139		
900	139	STD-202	
8403, 8500	139		
Precision Pots and Revodex Dials	140		
Q Controls Universal Types			
L Pads	144		
PQ, RQ, RQL, M	145		
MALLORY			
Hardware, SU, U, TSA, MR, MLC, MTC, MRB	147		
MEMCOR/OHMITE			
Power Rheostats 7½ to 300 Watts	148		
OHMITE			
AB	149	R-94B	RV4
AS	149	R-94	RV6

Allied Electronics Offers Best Percentage of Order Handling in the Coun

Airco Speer, TRW/IRC Carbon Resistors

ESTABLISHED RELIABILITY—SPECIFICATION: MIL-R-39008A



5 REASONS FOR SWITCHING TO 5-BAND RESISTORS

1) You Get Documented Reliability Beyond That Offered With MIL-R-11 Resistors

2) It Costs You Nothing Extra

3) Every Resistor Factory Fresh

4) You Get Resistors That Are Not Obsolete

5) High-Quality Foil Pack Assures Longer Shelf Stability, Greater Moisture Protection

Meet rigid requirements of military specification MIL-R-39008A, which is the established reliability specification for fixed composition resistors. Subjected to special tests for physical perfection and resistance uniformity. Resistors are delivered to an isolated holding area, in which a statistical sample is taken on each inspection lot produced during a 1-month period. These samples are accumulated and placed on life test, once a month, for a full 10,000-hour period. Any resistor that changes in resistance of more than 15% during the 10,000-hour test is considered a failure. The date accumulated from these tests is used to determine the established failure rate level.

The highest standards of quality, service and reliability have been maintained by applying the most modern techniques available in manufacturing control. This is to ensure that these components are thoroughly reliable. A continual investment in the newest equipment for quality control in mass-production is being made as it becomes available. As an example of this, the most sophisticated electronic data processing system is being used as the heart of an established reliability program.

This technique of computerized test procedures is established at in-process points throughout the plant, from raw materials to final shipping inspection. This not only provides a high speed method of testing, but provides greater accuracy than the best human operator can achieve. The data is transmitted to the computer where actual comparison with secondary standards were made. The results are calculated and recorded in a memory bank and on paper for the permanent record. This computerized test complex means reliability and assurance to purchasers.

10% TOLERANCE INSULATED RC

TYPE RC 10% FIXED COMPOSITION—SPECIFY VALUES WANTED

Stock No.	MIL Equiv.	Watts	Values See Table Below	EACH				
				10-99	100-499	500-999	1000-2499	2500-Up
962C2100	RC07	¼	2.7 Ω to 22 meg	.07	.06	.05	.04	.03
962C2200	RC20	½	2.7 Ω to 22 meg	.07	.06	.05	.04	.03
962C2300	RC32	1	10 Ω to 22 meg	.08	.07	.06	.05	.04
962C2400	RC42	2	10 Ω to 22 meg	.15	.13	.11	.10	.09

5% TOLERANCE INSULATED RC TYPES

TYPE RC 5% FIXED COMPOSITION—SPECIFY VALUES WANTED

Stock No.	MIL Equiv.	Watts	Values See Table Below	EACH				
				01-99	100-499	500-999	1000-2499	2500-Up
962C1700	RC07	¼	2.7 Ω to 22 meg	.09	.08	.07	.06	.05
962C1800	RC20	½	2.7 Ω to 22 meg	.09	.08	.07	.06	.05
962C1900	RC32	1	10 Ω to 22 meg	.12	.11	.10	.09	.08
962C2200	RC42	2	10 Ω to 22 meg	.27	.23	.20	.17	.16

STANDARD RESISTANCE VALUES AND TOLERANCES

*AVAILABLE IN 5% TOLERANCE ONLY. SPECIFY VALUES WANTED.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs	Megs
2.7	12	56	270	1200	5600	27K	120K	560	2.7	12.0
3.0*	13*	62*	300*	1300*	6200*	30K*	130K*	620*	3.0*	13.0*
3.3	15	68	330	1500	6800	33K	150K	680	3.3	15.0
3.6*	16*	75*	360*	1600*	7500*	36K*	160K*	750*	3.6*	16.0*
3.9	18	82	390	1800	8200	39K	180K	820	3.9	18.0
4.3*	20*	91*	430*	2000*	9100*	43K*	200K*	910*	4.3*	20.0*
4.7	22	100	470	2200	10K	47K	220K	1.0M	4.7	22.0
5.1*	24*	110*	510*	2400*	11K*	51K*	240K*	1.1M*	5.1*	.....
5.6	27	120	560	2700	12K	56K	270K	1.2M	5.6	.....
6.2*	30*	130*	620*	3000*	13K*	62K*	300K*	1.3M*	6.2*	.....
6.8	33	150	680	3300	15K	68K	330K	1.5M	6.8	.....
7.5*	36*	160*	750*	3600*	16K*	75K*	360K*	1.6M*	7.5*	.....
8.2	39	180	820	3900	18K	82K	390K	1.8M	8.2	.....
9.1*	43*	200*	910*	4300*	20K*	91K*	430K*	2.0M*	9.1*	.....
10	47	220	1000	4700	22K	100K	470K	2.2M	10.0	.....
11*	51*	240*	1100*	5100*	24K*	110K*	510K*	2.4M*	11.0*	.....

DIMENSIONS

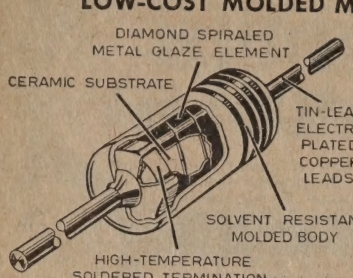
Mil Type	Rating in Watts	Diameter (Inches)	Length (Inches)	Wire Size A.W.G.	Nom. Dia. Lead (Inches)	Lead Length (Inches)
RC 07	¼	.090±.008	.250±.031	#22	.025	1½±⅛
RC 20	½	.138±.007	.390±.025	#20	.032	1½±⅛
RC 32	1	.225±.010	.562±.030	#18	.040	1½±⅛
RC 42	2	.312±.010	.688±.030	#17	.045	1½±⅛

TYPE BWH 5% 2-WATT FIXED WIREWOUND—SPECIFY VALUES WANTED—TO 2400 OHMS ONLY

Stock No.	Mfr's Type	MIL Equiv.	Watts	Values See Table Above	EACH				
					5-99	100-499	500-999	1000-2499	2500-Up
962C0001	BWII	.....	2	.10Ω to 9.1Ω	.17	.16	.15	.14	.13
962C0100	BWII	.....	2	10Ω to 1500Ω	.17	.16	.15	.14	.13
962C0200	BWII	.....	2	1600Ω to 2400Ω	.17	.16	.15	.14	.13

IRC Metal-Glaze Resistors To Mil R-2268

LOW-COST MOLDED METAL-GLAZE 2% AND-5% TOLERANCE RESISTORS



- Extremely Durable Uniform Molded Body
- Impervious to Environmental Extremes
- Meet or Exceed MIL-R-22684 Requirements

Metal-Glaze resistors feature a unique diamond-spiraled, thick-film resistance element composed of glass and special metal alloys fused to a crystalline ceramic core. Resistance element is of unusual stablity, exceptionally tough and hard, and unaffected by environmental conditions such as moisture, temperature, shock, and vibration. Withstands overloads. Tin-lead electroplated copper leads. Meet or exceed all MIL-R-22684 requirements. Perform better than MIL R-11 resistors.

Molded Metal-Glaze precision resistors provide stability, reliability, longer load life. Metal Glaze film is up to 100 times thicker than conventional resistor films. Tough, uniform molded body is extremely rugged, resists solvents, mechanical abuse of automatic handling equipment. Offer excellent temperature coefficients across a wide resistance range. Load life stability is four times better than MIL allowance. Average resistance changes less than 0.6% after 1000 hours, full load at 70°C. Derated to 0 at 150°. Average wt./100 6 oz. Additional data at left.

2%-TOLERANCE RESISTORS

Stock No.	Mfr's Type	Watts	Stock Values— See Table Below	EACH 10-49	50-99	100-249	250-499	500-Up
960C2500	RG07	¼	51 ohms to 150k	.28	.22	.18	.15	.12
960C2700	RG20	½	51 ohms to 150k	.25	.20	.16	.13	.10

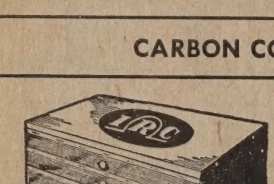
5%-TOLERANCE RESISTORS

960C2600	RG07	¼	51 ohms to 150k	.25	.20	.16	.13	.10
960C2800	RG20	½	51 ohms to 150k	.24	.19	.15	.12	.09

RESISTANCE VALUES IN OHMS—SPECIFY VALUE

51	100	200	390	750	1500	3300	5600	10k	18k	33k	56k	100k
56	110	220	430	820	1600	3600	6200	11k	20k	36k	62k	110k
62	120	240	470	910	1800	3900	6800	12k	22k	39k	68k	120k
68	130	270	510	1000	2000	4300	7500	13k	24k	43k	75k	130k
75	150	300	560	1100	2400	4700	8200	15k	27k	47k	82k	150k
82	160	330	620	1200	2700	5100	9100	16k	30k	51k	91k	.....
91	180	360	680	1300	3000	.....	.....	.....	.....	.....	.....	.....

CARBON COMPOSITION AND WIREWOUND RESISTOR ASSORTMENTS



METAL RESIST-O-CABINETS

- FREE with Resistor Assortment
- Keeps Your Resistors Neat
- Compartment for Each Value

Sturdy metal Resist-O-Cabinets are FREE with the purchase of any of the balanced resistor assortments below and at right. Designed to keep your resistor stocks orderly and easily accessible. Cabinet has four non-spill drawers and 28 carefully designed compartments. Overall size: 5⅜x5⅛x10⅞". Handsome, durable blue and silver finish.

RESISTOR ASSORTMENT 3A

A balanced assortment containing 120 IRC 10%-tolerance molded wirewound and fixed carbon composition resistors. Offer compact size comparable to ½-watt and 1-watt sizes, yet rated 2-watts at 70°C ambient temperature. Contains the following values: 7 each: 8200, 10k, 22k, 47k; 5 each: 1000, 6800, 15k, 100k; 4 each: 100, 330, 470, 1500, 2200, 3300, 4700, 27k, 1.0 meg; 3 each: 47, 82, 150, 220, 270, 3900, 220k, 470k; 2 each: 4.7, 10, 22, 68; 1 each: 15, 27, 33, 39. Assortment is complete with handy metal Resist-O-Cabinet. Shpg. wt., 4½ lbs.

962-2603 ..... **28.80**

RESISTOR ASSORTMENT 4A

Comprehensive selection containing 150 IRC 10%-tolerance fixed carbon composition resistors rated ½-watt at 70°C ambient temperature. Voltage rating: 350V. 1½" solder leads. Assortment contains the following values: 8 each: 1000, 47k, 100k, 270k, 470k, 1.0 meg; 7 each: 3700, 10k, 220k, 2.2 meg; 5 each: 3300, 22k 27k, 33k, 330k, 4.7 meg; 4 each: 100, 470, 1500, 2200, 2700, 56k, 68k, 3.3 meg; 3 each: 47, 220, 270, 10 meg. Assortment with Resist-O-Cabinet. Shpg. wt., 4½ lbs.

962-2604 ..... **18.0**

RESISTOR ASSORTMENT 5A

Assortment contains an extensive stock of IRC 10%-tolerance fixed carbon composition resistors rated 1-watt at 70°C ambient temperature. Voltage rating: 500V. 1½" solder leads. 125 resistance values. 7 each: 1000, 10k, 27k, 47k, 100k, 270k, 470k, 1.0 meg; 5 each: 2200, 4700, 22k; 4 each: 33k, 39k, 68k; 3 each: 47, 100, 150, 220, 270, 470, 1500, 2700, 3300, 15k, 150k, 220k. 2.2 meg; 4.7 meg. Assortment includes metal IRC Resist-O-Cabinet to keep resistors orderly and easily accessible. Shpg. wt., 4¾ lbs.

962-2605 ..... **22.5**

RESISTOR ASSORTMENT 7A

Assortment contains a balanced inventory of 150 IRC 10%-tolerance fixed carbon composition resistors rated ¼-watt at 70°C ambient temperature. Voltage rating: 250V. 1½" solder leads. Resistances as follows: 10 each: 1000, 4700, 10k; 8 each: 2200, 22k, 100k; 6 each: 100, 470, 1500, 6800, 15k, 33k, 47k; 5 each: 3300, 1.0 meg; 4 each: 150, 220, 2700, 3900, 18k; 3 each: 47, 270, 680, 27k, 39k, 68k, 220k, 470k. With metal Resist-O-Cabinet. 4¼ lbs.

962-2607 ..... **19.5**

RESISTOR ASSORTMENTS WITH STORAGE CABINETS

Each assortment is housed in a 54x27x15" red and black metal cabinet. Cabinet has 8 drawers with labeled dividers for each resistance value, and with expandable compartments. **Descriptions of MIL Nos. of resistors on page 121. 123 "F" suffix indicates factory shipped from Philadelphia, Pa.**

ELS 22. IRC Type RC07 ¼-watt, 5% tolerance resistors. 121 standard values *indicated in table right. 50 resistors per value, 6050 total. In 8-drawer cabinet. *Separately, $592.00.*

962F0618. Shpg. wt. 200 lbs..... **499.00**

ELS 23. IRC Type RC20 ½-watt, 5% tolerance resistors. 167 standard values (see table right). 50 of each value, 8350 total. *Separately, $1002.* In metal cabinet described above.

962F0616. Shpg. wt. 200 lbs..... **655.00**

ELS 24. IRC Type RC32 1-watt, 5% tolerance resistors. 167 standard values (see table below). 25 of each value, 4175 total. *Separately, $751.50.* In metal cabinet described at left.

962F0617. Shpg. wt. 200 lbs..... **585.00**

TABLE OF RESISTANCE VALUES IN OHMS

2.7	9.1	*33	*110	*390	*1300	*4700	*16k	*56k	*200k	*680k	2.2	7.5
3.0	*10	*36	*120	*430	*1500	*5100	*18k	*62k	*220k	*750k	2.4	8.2
3.3	*11	*39	*130	*470	*1600	*5600	*20k	*68k	*240k	*820k	2.7	9.1
3.6	*12	*43	*150	*510	*1800	*6200	*22k	*75k	*270k	*910k	3.0	10
3.9	*13	*47	*160	*560	*2000	*6800	*24k	*82k	*300k	Megs	3.3	11
4.3	*15	*51	*180	*620	*2200	*7500	*27k	*91k	*330k	*1.0	3.6	12
4.7	*16	*56	*200	*680	*2400	*8200	*30k	*100k	*360k	1.1	3.9	13
5.1	*18	*62	*220	*750	*2700	*9100	*33k	*110k	*390k	1.2	4.3	15
5.6	*20	*68	*240	*820	*3000	*10k	*36k	*120k	*430k	1.3	4.7	16
6.2	*22	*75	*270	*910	*3300	*11k	*39k	*130k	*470k	1.5	5.1	18
6.8	*24	*82	*300	*1000	*3600	*12k	*43k	*150k	*510k	1.6	5.6	20
7.5	*27	*91	*330	*1100	*3900	*13k	*47k	*160k	*560k	1.8	6.2	22
8.2	*30	*100	*360	*1200	*4300	*15k	*51k	*180k	*620k	2.0	6.8	...

Allied Electronics Maintains the World's Largest Stock of Electronic Components

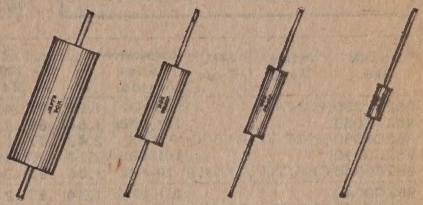
Dale/TRW-IRC Precision Metal Film Resistors

NOMENCLATURE FOR MIL-R-55182C

RN R 55 J 49R9 B P

- **Failure Rate Designator:** P=0.1%, (failure rate/1000 hr. @ 60% confidence level).
- **Resistance Tolerance:** B=±.1%, D=.5%, F=±1%
- **Resistance Value:** 49R9=49.9 ohms, 1001=1K, 1002=10K, 1003=100K.
- **Temperature Coefficient/°C:** J=±25 ppm, H=±50 ppm, K=±100 ppm, (molded styles).
- **Wattage Designator.**
- **Lead Type:** R=Solderable, C=Weldable/Solderable.
- **Style**

MIL-R-10509 AND ESTABLISHED RELIABILITY TYPES RNR AND RNC TO MEET MIL-R-55182



RN55 RNR55 RNC55 | RN60 RNR60 RNC60 | RN65 RNR65 RNC65 | RN70

Dale and TRW-IRC companies manufacture a broad line of ultra-precision, high stability resistors. Emphasis on highly-controlled manufacturing processes and the most advanced measuring capabilities has resulted in a single class of product which is equally at home in satellites, missiles or in resistor networks for high-speed data conversion applications—both military and non-military.

Feature improvements in precision and stability parameters. MIL-R-10509 METAL FILM RESISTORS. Meet or exceed requirements for Characteristic E (±25PPM/°C) metal film resistors as set forth in MIL-R-10509. Available in just two weeks. MIL-R-55182 ESTABLISHED RELIABILITY RESISTORS. Supersedes MIL-R-10509. 1% Minimum order 10 pieces.

MIL-R-10509 TYPES 25PPM E CHART (4-Week Delivery)

Stock No.	Mfr's Type	Mil Type	Values (Ohms)	10-24	25-99	100-249	250-999	1000-Up
962C0055	CEA-T9	RN55E	30.1-499 k	2.58	1.09	.65	.45	Volume
962C0015	CCA-T9	RN60E	499.9-1 Meg	2.63	1.11	.65	.45	Pricing
9620035	CCB-T9	RN65E	49.9-1.5 Meg	3.10	1.55	.75	.45	Available

TABLE A. DECADE TABLE DETERMINING MIL-BELL STANDARD RESISTANCE VALUES

Standard Resistance Values are obtained from the Decade Table by multiplying by multiples of 10. As an example, 1.33 can represent 13.3 ohms: 133 ohms, 1.33 K, 13.3 K, 133 K. 1.33 megohms.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1.00	1.21	1.47	1.78	2.15	2.61	3.16	3.83	4.64	5.62	6.81	8.25
1.02	1.24	1.50	1.82	2.21	2.67	3.24	3.92	4.75	5.76	6.98	8.45
1.05	1.27	1.54	1.87	2.26	2.74	3.32	4.02	4.87	5.90	7.15	8.66
1.07	1.30	1.58	1.91	2.32	2.80	3.40	4.12	4.99	6.04	7.32	8.87
1.10	1.33	1.62	1.96	2.37	2.87	3.48	4.22	5.11	6.19	7.50	9.09
1.13	1.37	1.65	2.00	2.43	2.94	3.57	4.32	5.23	6.34	7.68	9.31
1.15	1.40	1.69	2.05	2.49	3.01	3.65	4.42	5.36	6.49	7.87	9.53
1.18	1.43	1.74	2.10	2.55	3.09	3.74	4.53	5.49	6.65	8.06	9.76

MIL-R-55182 ESTABLISHED RELIABILITY RESISTORS

"R" FAILURE RATE LEVEL—1% TOLERANCE (F)—DELIVERY 8-12 WEEKS

Stock No.	MIL Types	Temp. Coef.	Resistance Value	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
729C1234 729C1235	RNR55 RNC55	K (100 PPM)	49.9 ohms to 100 K	2.15	1.41	1.04	.84	.76	.71	.61
729C1230 729C1231	RNR55 RNC55	H (50 PPM)	49.9 ohms to 100K	2.28	1.50	1.12	.88	.79	.72	.66
729C1232 729C1233	RNR55 RNC55	J (25 PPM)	49.9 ohms to 100 K	2.51	1.81	1.43	1.14	.95	.88	.79
729C1244 729C1245	RNR60 RNC60	K (100 PPM)	49.9 ohms to 499 K	2.10	1.39	.96	.82	.75	.70	.59
729C1240 729C1241	RNR60 RNC60	H (50 PPM)	49.9 ohms to 499 K	2.17	1.45	1.05	.86	.77	.71	.62
729C1242 729C1243	RNR60 RNC60	J (25 PPM)	49.9 ohms to 499 K	2.34	1.66	1.33	.95	.89	.85	.77
729C1254 729C1255	RNR65 RNC65	K (100 PPM)	49.9 ohms to 1.0 meg.	2.10	1.39	.96	.82	.75	.70	.59
729C1250 729C1251	RNR65 RNC65	H (50 PPM)	49.9 ohms to 1.0 meg.	2.17	1.45	1.05	.86	.77	.71	.62
729C1252 729C1253	RNR65 RNC65	J (25 PPM)	49.9 ohms to 1.0 meg.	2.34	1.66	1.33	.95	.89	.85	.77
		Special Tolerance Adders	D (5%)							
			B (0.1%)							

(D&F) tolerances are applicable to all. Tolerance (B) is applicable **only** to J Temp. Coef.

Specify Stock No. Resistance and Wattage When Ordering

Precision Metal Film Resistors to MIL R-10509

ORDER INFORMATION

At Our Option, We Will Ship the T2 Resistor (50PPM/°C) in place of T0 Resistors (100PPM/°C)

See Table on Page 121 for Standard Resistance Decade Values (Ohms)

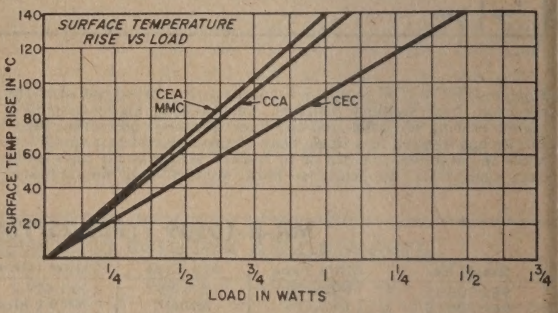
SPECIFICATION CHART

Stock No.	Mfr's Type	MIL Type	MIL Watts 125° C	Mfr's. Watts 70° C	Mfr's. Watts 125° C	MIL Volts	Mfr's Volts	MIL Resistance Range	Mfr's. Resistance Range (Ohms)
962C0090	MMC-T2	RN50C	1/20	¾	⅜	200V	400V	10-100k	10 -100k
962C0050	CEA-T2	RN55C	1/10	¾	⅜	200V	500V	49.9-100k	30-1-499k
962C0010	CCA-T2	RN60C	⅛	.8	⅜	250V	500V	49.9-499k	30.1-1 Meg
962C0030	CCB-T2	RN65C	¼	¾	½	300V	600V	49.9-1 Meg.	30.1-1.5 Meg.
962C0070	CEC-T2	.....	.....	1⅛	½	.....	700V	.....	24.9-1.5 Meg

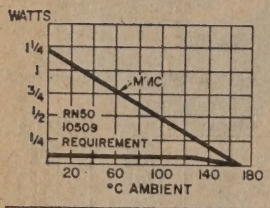
Stock No.	Mfr's. Type	MIL Type	Resistance Range (ohms)	EACH 1-24	25-99	100-249	250-999	1000-Up
962C0080	MMC-TO		20-100	1.93	.77	.47	.37	
962C0080			101-100k	1.64	.66	.43	.34	Volume
962C0090	MMC-T2	RN50C	49.9-100	2.43	.97	.53	.43	Pricing
962C0090			101-100k	2.14	.85	.48	.39	Available—
962C0040	CEA-TO	RN55D	10-150	1.86	.80	.24	.17	Contact
962C0040			151-499k	1.34	.57	.21	.14	Allied
962C0050	CEA-T2	RN55C	30.1-150	2.00	.86	.32	.20	Electronics
962C0050			151-499K	1.73	.74	.28	.17	For
962C0005	CCA-TO	RN60D	10-200	2.00	.85	.25	.18	Quotations
962C0005			201-1Meg	1.47	.63	.22	.15	

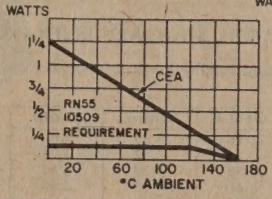
Stock No.	Mfr's. Type	MIL Type	Resistance Range (ohms)	EACH 1-24	25-99	100-249	250-999	1000-Up
962C0010	CCA-T2	RN60C	30.1-200	2.26	.97	.31	.21	
962C0010			201-1 Meg	1.86	.80	.28	.18	Volume
962C0020	CCB-TO	RN65D	10-200	2.33	.93	.28	.19	Pricing
962C0020			201-15Meg	1.92	.77	.25	.16	Available—
962C0030	CCB-T2	RN65C	30.1-200	2.69	1.13	.46	.25	Contact
962C0030			201-1.5Meg	2.61	1.09	.43	.21	Allied
962C0060	CEC-TO		10-200	2.28	.91	.26	.18	Electronics
962C0060			201-1.5Meg	1.86	.74	.23	.15	For
962C0070	CEC-T2		24.9-300	2.71	1.08	.32	.22	Quotations
962C0070			201-1.5Meg	2.28	.91	.29	.19	

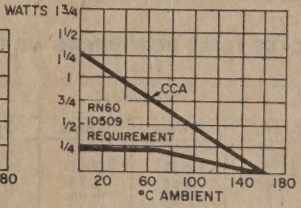
SURFACE TEMPERATURE RISE VERSUS LOAD CURVES AND DERATING CURVES FOR MMC, CEA, CCA AND CEC HIGH STABILITY PRECISION METAL FILM RESISTORS

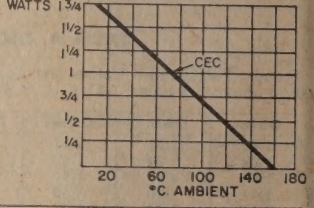


DERATING CURVES









Mfr's. Type	MIL Type	Body Length (inches)	Body Dia. (inches)	Clean Lead Length (inches)	Lead Dia. (inches)
MMC-T2	RN50C	.152 ± .020	.065 ± .010	.200	.016 #26*
MMC-T0	.....				
CEA-T0	RN55D	.250 ± .031	.090 ± .010	.325	.025 #22
CEA-T2	RN55C				
CCA-T0	RN60D	.400 ± .031	.140 ± .020	.540	.0253 #22
CCA-T2	RN60C				

Mfr's. Type	MIL Type	Body Length (inches)	Body Dia. (inches)	Clean Lead Length (inches)	Lead Dia. (inches)
CCB-T0	RN65D	.594 ± .031	.180 ± .020	.734	.0253 #22
CCB-T2	RN65C				
CEC-T0	.....	.594 ± .031	.180 ± .020	.734	.032 #20
CEC-T2	.....				

*Lead Length 1.00 ± .062

EXPLANATION OF MIL CODES

EXPLANATION OF MILITARY STYLE NUMBERS

EXAMPLE USED IN EXPLANATION

(A)	(B)	(C)	(D)	(E)
RN60	D	249	4	F

(A) Identifies size and wattage.

(B) Identifies characteristic. D stands for +0.02, —0.05 maximum temperature coefficient %/°C; 70° maximum ambient at rated watts; ±% maximum change due to moisture resistance. C: ±0.005; 125°C; 0.5; X: ±0.05; 40°C; ±4.

(C) Identifies ohms. First 3 digits are significant.

(D) An additional figure indicates number of zeros that follow. If an R follows, it represents decimal point for values under 100 ohms or fractional values. Digits following R become significant, as 24.9=24R9.

(E) Identifies resistance tolerance. In this case, ±1%.

EXPLANATION OF MIL NUMBERS

CHARACTERISTICS

Code	Max. Ambient at Rated Watts	Max. Change Due to Moisture Resistance Test
B, D	70° C	±3% wet, ±1.5% dry
C	125° C	±0.5%, wet or dry
X	40° C	±4% wet

Example: RN60 D 2671 F

RN60, high-stability film resistor and size and wattage.

D, characteristic—see Table, Code column. TC is ±0.05%/°C.

2671, ohms resistance. First three digits are significant figures, last digit is zeros to add. For values under 100 ohms, the letter R is used to indicate decimal point, e.g. 34R8 is 34.8.

F, resistance tolerance: ±1%.

Specify Stock No., Resistance and Wattage When Ordering

High-Stability Metal Film Resistors

SPECIAL PRODUCTS, TOLERANCES, TEMPERATURE COEFFICIENTS AND RESISTANCE RANGES AVAILABLE ON SPECIAL ORDER

12-14 WKS. Tolerances—±0.5%, ±0.25%, ±0.13%, ±0.05%, ±0.27% Temp. Coefficients—TO (±100PPM/°C) to T16 (±5PPM/°C)

8 WKS. Extended Ranges—Depending on Size and TC, Available to 540 Megohms

6 WKS. High Temperature, High Voltage—Pyrolytic Alloy Film—to 350°C, 15,000 Volts

+5 WKS. Power Film—Replace Wirewounds up Through 3 Watts

- Tolerances ±.05% to ±1%
- Temperature Coefficients of ±5PPM to ±100PPM/°C
- MIL-R-10509F T-0 to T-9
- MIL-R-55182 K, H, J (TO-T2-T9)
- M, P, R and S Failure Rates
- Extended Ranges to 45 Megohms

RESISTANCE RANGE

The maximum extended ranges shown in the table below are also available from Allied Electronics on Special Order with a temperature coefficient of +100PPM/°C, −250PPM/°C—Code TR or +100PPM/°C, −500PPM/°C—Code TE ±1.0% tolerance only.

TOLERANCES

All metal film resistors described below are supplied in standard tolerances of ±1.0%, ±0.5%, and ±0.25%. In addition, tolerances of ±0.1% and ±0.5% are available on special order—simply contact the Allied Electronics facility nearest you. Specify resistance values and wattage values when ordering.

VOLTAGE COEFFICIENT

Voltage coefficient when measured between 1/10-volt and full-rated voltage is less then 5PPM/VOLT, for all values. On low and medium value resistors, the voltage coefficient is zero.

TEMPERATURE COEFFICIENTS

These high-stability evaporated metal film resistors are available in nine temperature coefficient tolerances.

MIL-R-10509 Char.	Code	Temperature** Coefficient	Temperature Span
*D	T-0	0±100PPM/°C	−55°C to +165°C
*C	T-2	0±50PPM/°C	−55°C to +175°C
*E	T-9	0±25PPM/°C	−55°C to +175°C
	T-3	0± to +100PPM/°C	−55°C to +165°C
	T-4	0± to −100PPM/°C	−55°C to +165°C
	T-5	0± 25PPM/°C	+25°C to +145°C
	T-6	0± to +50PPM/°C	−55°C to +165°C
	T-7	0± to −50PPM/°C	−55°C to +165°C
	T-8	0±25PPM/°C	+25°C to +165°C
		0±35PPM/°C	−55°C to +250°C

*Standard types. All others are special.
**Parts per million per degree centigrade (100PPM equals 0.01%) T.C. code marking is combined with the code for the date of manufacture.

MIL-R-10509 TYPES 25PPM E CHART

Stock No.	Mfr's Type	Mil Type	Values (OHMS)	10-24	25-99	100-249	250-999	1000-Up
962C0055	CEA-T9	RN55E	30.1-499 k	2.58	1.09	.65	.45	Volume
962C0015	CCA-T9	RN60E	499.9-1 Meg	2.63	1.11	.65	.45	Pricing
9620035	CCB-T9	RN65E	49.9-1.5 Meg	3.10	1.55	.75	.45	Available

TABLE A. DECADE TABLE DETERMINING MIL-BELL STANDARD RESISTANCE VALUES

Standard Resistance Values are obtained from the Decade Table by multiplying by multiples of 10. As an example, 1.33 can represent 13.3 ohms; 133 ohms, 1.33 K, 13.3 K, 133 K, 1.33 megohms.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1.00	1.21	1.47	1.78	2.15	2.61	3.16	3.83	4.64	5.62	6.81	8.25
1.02	1.24	1.50	1.82	2.21	2.67	3.24	3.92	4.75	5.76	6.98	8.45
1.05	1.27	1.54	1.87	2.26	2.75	3.32	4.02	4.87	5.90	7.15	8.66
1.07	1.30	1.58	1.91	2.32	2.80	3.40	4.12	4.99	6.04	7.32	8.87
1.10	1.33	1.62	1.96	2.37	2.87	3.48	4.22	5.11	6.19	7.50	9.09
1.13	1.37	1.65	2.00	2.43	2.94	3.57	4.32	5.23	6.34	7.68	9.31
1.15	1.40	1.69	2.05	2.49	3.01	3.65	4.42	5.36	6.49	7.87	9.53
1.18	1.43	1.74	2.10	2.55	3.09	3.74	4.53	5.49	6.65	8.06	9.76

MIL-R-55182C QUICK REFERENCE CHART

MIL Specified Characteristic	H (Non-hermetically sealed)	J (Non-hermetically sealed)	K (Non-hermetically sealed)
Maximum resistance-temperature characteristic Temperature Coefficient or T.C.	±0.005% or ±50 PPM/°C	±0.0025% or ±25 PPM/°C	±.010% or ±100 PPM/°C
Maximum ambient temperature at rated wattage	125°C	125°C	125°C
Maximum ambient temperature at zero wattage derating	175°C	175°C	175°C
MIL (IRC) specified sizes—			
RNC50, RNR50 (MMC)	1/20 W, 200 V (T2)	1/20 W, 200 V (T9)	1/20 W, 200 V (T0)
RNC55, RNR55 (CCM)	1/10 W, 200 V (T2)	1/10 W, 200 V (T9)	1/10 W, 200 V (T0)
RNC60, RNR60 (CCA)	⅛ W, 250 V (T2)	⅛W, 250 V (T9)	⅛ W, 250 V (T0)
RNC63, RNR63	—	—	—
RNC65, RNR65 (CCB)	¼ W, 300 V (T2)	¼ W, 300 V (T9)	¼ W, 300 V (T0)
RNC70, RNR70	—	—	½ W, 350 V (T0)
Resistance tolerances ± percent	1.0%, 0.5%	1.0%, 0.5%, 0.1%	1.0%, 0.5%

MIL-R-10509 QUICK REFERENCE CHART

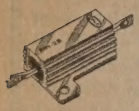
MIL Specified Characteristic	C	D	E
Maximum resistance-temperature characteristic. (Temp. Coefficient or T.C.)	±0.005% or ±50 PPM/°C	+0.02% −0.05% or +200 PPM/°C −500 PPM/°C	±0.0025% or ±25 PPM/°C
Maximum ambient temp. for full rated wattage	125°C	70°C	125°C
Temp. limits for linear wattage derating from 100% loading	175°C	165°C	175°C
MIL (IRC) Specified Sizes—			
RN50 (MMC)	1/20 W, 200 V (T2)	—	1/20 W, 200 V (T9)
RN55 (CCM, CEA)	1/10 W, 200 V (T2)	⅛ W, 200 V (T0)	1/10 W, 200 V (T9)
RN60 (MEA, CCA)	⅛ W, 250 V (T2)	¼ W, 300 V (T0)	⅛ W, 250 V (T9)
RN65 (MEB, CCB, MDB)	¼ W, 300 V (T2)	½ W, 350 V (T0)	¼ W, 300 V (T9)
RN70 (MEC, MDC)	½ W, 350 V (T2)	¾ W, 500 V (T0)	½ W, 350 V (T9)
RN75 (MDF, MEF)	1 W, 500 V (T2)	—	1W, 500 V (T9)
RN80 (MDH)	—	—	—
MIL specified resistance tolerances (others available for commerical units)	1.0%, 0.5%, 0.25%, 0.1%	1.0%	1.0%, 0.5%, 0.25%, 0.1%

*Available in this characteristic only.

DALE MIL Style Wirewound 1% Resistors

SEE PAGE 123 FOR EXPLANATION OF MILITARY NUMBERS

MIL-R-18546D SERIES RH POWER RESISTORS



Precision resistors, molded in die-cast gold anodized, radiator-finned aluminum housings. Screw-mount directly to chassis for maximum heat dissipation. Impervious to moisture. Welded construction, terminal to terminal. Small size. Meets MIL-R-18546D. Precision ±1% tolerance. Series RH power resistors are also available with tolerances of .05% through 5%; write for prices. Specify values shown in Table "A," below. Per 100, 3¼ lbs.

TYPE RH-5—7.5-WATT

MIL Type RE60—QPL to 3320 Ohms (Complete Range .1Ω to 24.5k)

Stock No.	Values—See Table "A" Below	EACH 1-24	25-49	50-99	100-Up
767C0400	1 ohm to 1000 ohms	2.00	1.60	1.50	1.40
767C0500	1400 to 5000	2.10	1.68	1.58	1.47
767C0600	6000 to 10K	2.29	1.83	1.72	1.60
767-0700	15K	2.73	2.18	2.05	1.92
767-0800	20K	2.93	2.68	2.44	2.18

TYPE RH-10—12.5-WATT

MIL Type RE65—QPL to 5620 Ohms (Complete Range .008Ω to 47.1k)

Stock No.	Values—See Table "A" Below	EACH 1-24	25-49	50-99	100-Up
767C1000	1 to 1000	2.00	1.60	1.50	1.40
767C1100	1400 to 5000	2.10	1.68	1.58	1.47
767C1200	6000 to 10K	2.29	1.83	1.72	1.60
767-1300	15K	2.73	2.18	2.05	1.92
767C1400	20K and 25K	2.93	2.68	2.44	2.18
767-1500	30K	3.25	2.97	2.70	2.43

TYPE RH-25—25-WATT

MIL Type RE70—QPL to 12,100 Ohms (Complete Range .01Ω to 95.2k)

Stock No.	Values—See Table "A" Below	EACH 1-24	25-49	50-99	100-Up
767-1700	.5 ohm	2.73	2.46	2.24	2.06
767C1800	1 to 1000	2.00	1.60	1.50	1.40
767C1900	1400 to 5000	2.10	1.68	1.58	1.47
767C2000	6000 to 10K	2.29	1.83	1.72	1.60
767-2100	15K	2.73	2.18	2.05	1.92
767C2200	20K and 25K	2.93	2.68	2.44	2.18
767-2300	30K	3.25	2.97	2.70	2.43
767-2400	50K	3.57	3.26	2.96	2.71

TYPE RH-50—50-WATT

MIL Type RE75—QPL to 39,200 Ohms (Complete Range .01Ω to 273k)

Stock No.	Values—See Table "A" Below	EACH 1-24	25-49	50-99	100-Up
767-2600	.5 ohm	2.91	2.65	2.43	2.25
767C2700	1 to 5	2.73	2.48	2.20	2.02
767C2800	6 to 1000	2.45	1.96	1.84	1.72
767C2900	1400 to 5000	2.56	2.06	1.94	1.80
767C3000	6000 to 10K	2.78	2.22	2.08	1.95
767C3100	15K to 20K	3.08	2.46	2.31	2.16
767C3200	25K to 50K	3.36	2.68	2.51	2.35

TABLE "A" STOCK VALUES (OHMS)—SPECIFY VALUES WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
.5	2.5	5	10	30	60	85	175	225	375	560	900	1750	3000	6000	25k
1	3	6	15	35	70	100	180	250	400	600	1000	1800	3500	10k	30k
1.5	4	7.5	20	40	75	125	200	300	470	700	1400	2000	4000	15k	50k
2	4.5	8	25	50	80	150	220	350	500	750	1500	2500	5000	20k	.....

MIL-R-26E SERIES RS 1% MINIATURE POWER RESISTORS

Series RS resistors are specifically designed to meet precision power requirements in advanced circuits at high ambient temperatures. Ideal where space is at a premium. Meet the functional requirements of MIL-R-26E specifications. Specially developed silicone coating protects against moisture, salt spray and abrasion; maintains stable performance under the most difficult environmental conditions. Resistors, dielectric strength, 1000 VAC. Tolerance, ±1%. Feature complete-welded construction. Axial leads. Specify values from Table "B" below, when ordering. Type CW-2C-1 (MIL RW69) is also available. Allow 2-3 weeks for delivery. Shpg. wt. per 100 resistors, 2 oz.

Type	Complete Range
RS-½ (½ watt)—	.1Ω to 4.9k
RS-1A (1 watt)—QPL to 2740 ohms	.1Ω to 10.4k
RS-1B (1 watt)—	.1Ω to 15k
RS-2B (3 watts)—QPL to 6490 ohms	.1Ω to 24.5k
RS-5 (5 watts)—	.1Ω to 95.1k
RS-5-69 (5 watts)—QPL to 24.3k ohms	.1Ω to 95.1k
RS-10 (10 watts)—	.1Ω to 273k
RS-10-38 (10 watts)—QPL to 71.5k ohms	.1Ω to 273k
CW-2C-1 (3 watts)—QPL to 2k ohms	.1Ω to 12k

TABLE "B" STOCK VALUES (OHMS)—SPECIFY VALUES WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
.5	3	10	30	60	100	225	400	650	1200	1800	4000	7000	13k	27.5k	50k
1	4	12	35	70	125	250	450	750	1300	2000	4500	7500	15k	30k	60k
1.5	5	15	40	75	150	270	470	800	1500	2200	5000	10k	20k	35k	.....
2	6	20	45	80	200	300	500	900	1600	2500	6000	12k	22.5k	40k	.....
2.5	8	25	50	90	220	350	600	1000	1750	3000	6800	12.5k	25k	47k	.....

MINIATURE POWER RESISTORS

RS-½ (½ Watt) MIL RW70U Stock No.	RS-1A (1 Watt) MIL RW70U Stock No.	RS-1B (1 Watt) Stock No.	Values (Ohms)—See Table "B" Above	EACH 1-24	25-49	50-99	100-Up
767-4000	767-4500	767-5000	0.5	1.68	1.48	1.25	1.05
767C4010	767C4510	767C5010	1 to 1000	1.08	.85	.80	.75
767C4020	767C4520	767C5020	1200 to 3000	1.19	.95	.89	.83
767C4030	767C4530	767C5030	3100 to 4000	1.19	.95	.89	.83
767C4040	767C4540	767C5040	4500 to 7500	1.36	1.06	1.01	.93

MIL TYPE RW79, RW78 AND RW74 RESISTORS

RS-2B (3 Watts) MIL RW79U Stock No.	RS-5 (5 Watts) Stock No.	RS-5-69 (5 Watts) MIL RW74U Stock No.	RS-10 (10 Watts) Stock No.	RS-10-38 (10 Watts) MIL RW78U Stock No.	Values (Ohms)—See Table "B" Above	EACH 1-24	25-49	50-99	100-Up
767C5500	767C6000	767C6500	767C7000	767C7500	1 to 1000	.83	.65	.62	.57
767C5510	767C6010	767C6510	767C7010	767C7510	1200 to 5000	.91	.73	.68	.63
767C5520	767C6020	767C6520	767C7020	767C7520	6000 to 10k	.95	.75	.70	.65
767C5530	767C6030	767C6530	767C7030	767C7530	12k to 15k	.99	.78	.74	.69
767C5540	767-6040	767-6540	767-7040	767-7540	20k	1.03	.83	.77	.73
767C5550	767C6050	767C6550	767C7050	767C7550	22.5k to 27.5k	1.10	.87	.83	.76
767C5560	767C6060	767C6560	767C7060	767C7560	30k	1.10	.87	.83	.76
767C5570	767C6070	767C6570	767C7070	767C7570	30k to 40k	1.10	.87	.83	.76
767C5580	767C6080	767C6580	767C7080	767C7580	47k to 50k	1.18	.95	.88	.83
767C5590	767-6090	767C6590	767-7090	767-7590	60k	1.30	1.03	.97	.91

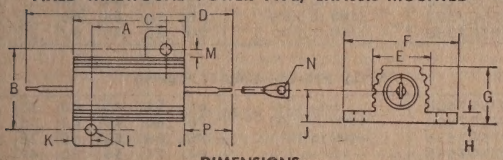
Other Standard DALE Products Are Available from Allied Electronics

Power Resistors and MIL Ordering Information

HOW TO READ MILITARY SYMBOLS

MIL-R-18546D

FIXED WIREWOUND POWER TYPE, CHASSIS MOUNTED



DIMENSIONS

MIL	A(±)	B(±)	C(±)	D(±)	E(±)	F(±)	G(±)	H(±)	J(±)	K(±)	L(±)	M(±)	N(±)	P(±)
RE60	.444 .005	.490 .005	.600 .031	1.125 .062	.334 .015	.646 .015	.320 .015	.065 .010	.133 .010	.078 .010	.093 .005	.078 .015	.050 .005	.262 .062
RE65	.562 .005	.625 .005	.750 .031	1.375 .062	.420 .015	.800 .015	.390 .015	.075 .010	.165 .010	.093 .010	.093 .005	.102 .015	.086 .005	.312 .062
RE70	.719 .005	.781 .005	1.062 .031	1.938 .062	5.50 .015	1.080 .015	.546 .015	.088 .010	.231 .010	.172 .010	.125 .005	.115 .015	.086 .005	.438 .062
RE75	1.563 .005	.844 .005	1.968 .031	2.781 .062	6.30 .015	1.140 .015	.610 .015	.088 .010	.260 .010	.196 .010	.125 .005	.107 .015	.086 .005	.406 .062

RE65 — G — 1001
1 2 3

This specification covers power wirewound, fixed resistors using the principle of heat dissipation through metal mounting surface. Initial resistance tolerance of ±1% and resistance-temp. characteristic of ±0.0030% per °C (30 parts per million) for values of 2000 ohms and up; ±0.0050% per °C (50 ppm) for values under 2000 ohms.

1. Style—Fixed wirewound.
2. Characteristic—G, inductive winding; 275° C max. cont. oper.
   N, non-inductive; 275° C max. cont. oper.
3. Resistance Value—First three digits are significant digits and last digit represents number of zeroes to follow, unless there is an "R" in the series; if so, the "R" represents a decimal point and all numbers represent significant digits.

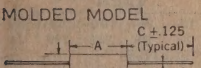
MIL Style	Dale Type*	MIL Watts Free Air	MIL Watts Chassis	MIL Style	Dale Type*	MIL Watts Free Air	MIL Watts Chassis
RE60	RH-5	3	5	RE70	RH-25	8	20
RE65	RH-10	6	10	RE75	RH-50	10	30

*Also NH-5, NH-10, NH-25 and NH-50.

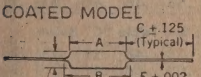
MIL-R-26E

FIXED WIREWOUND POWER TYPE RESISTORS

MOLDED MODEL



COATED MODEL



DIMENSIONS

Type	A	B	C	D	E
RS-½	.312"†	.....	1.500"	.078"‡	.020"
RS-1A	.422"†	.....	1.500"	.093"	.020"
RS-1B	.575"†	.....	1.500"	.093"	.020"
RS-2B	.560"	.622"	1.500"	.187"	.032"
RS-5	.875"	1.000"	2.000"	.312"	.040"
RS-5-69	.875"	.937"	2.000"	.312"	.040"
RS-10	1.780"	1.875"	2.000"	.375"	.040"
RS-10-38	1.780"	1.842"	2.000"	.375"	.040"
CW-2C-1*	.500"	.....	1.500"	.218"	.032"

*On special order. †Molded types; ±.015"; other "A" dim., ±.062". ‡±.015"; other "D" dimensions, ±.031-.032".

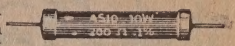
RW79 — U — 49R9 — F
1 2 3 4

This specification covers power type wirewound, fixed resistors. Included are general purpose styles of 5% initial resistance with power ratings from 3 to 240 watts at 25° C, derated to zero at 350° C (Char. V) and precision axial lead types of .1, .5 and 1% initial resistance tolerance with power ratings from 1 to 10 watts at 25° C, derated to zero at 275° C (Char. U).

1. Style—Fixed wirewound.
2. Characteristic—U, max. continuous operating temp. is 275° C T.C. ±30 ppm, 10 ohms and over; ±50 ppm, 1-10 ohms; ±90 ppm, under 1 ohm. V, max. cont. oper. temperature is 350° C T.C. ±400 ppm under 20 ohms; ±260 ppm, 20 ohms and over.
3. Resistance Value—First two or three digits represent first two or three significant digits of value; last digit represents number of zeroes to follow; an "R" in the series represents a decimal point, with all numbers representing significant digits.
4. Tolerance—F, ±1%.

MIL Style	Dale Type	MIL Watts	MIL Style	Dale Type	MIL Watts	MIL Style	Dale Type	MIL Watts
	RS-½	½	RW79U	RS-2B	3		RS-10	10
RW70U	RS-1A	1		RS-5	5	RW78U	RS-10-38	10
	RS-1B	1	RW74U	RS-5-69	5	RW69V	CW-2C-1	3

IRC TYPE AS 1% AND 5% TOLERANCE POWER RESISTORS



Miniature wirewound resistors incorporating "Thermocoat"—a solvent-resistant silicone coating formulation with high dielectric strength and heat capabilities. Carry full power even at 215°C ambients, expanding circuit design limits significantly. Welded connections. Meet MIL V (MIL-R-26E). Temperature coefficient less than 20 ppm/°C. Maximum working voltages are 150 volts for Type AS-2, and 400 volts for Type AS-5A. Av. wt. 1 oz.

1%—TYPE AS-2 2-WATT (½x¼")

Stock No.	Val. Avail. in Ohms See Table Below	EACH 1-9	10-24	25-49	50-99	100-Up
963C0100	1.0 to 1000	.98	.73	.57	.54	.50
963C0200	1100 to 4700	1.07	.81	.64	.60	.55
963C0300	5100 to 10k	1.10	.84	.66	.62	.57
963-0400	15k	1.12	.86	.68	.64	.60
963C0500	16k to 20k	1.19	.90	.72	.67	.63

1%—TYPE AS-5A 5-WATT (15/16x1 1/32")

963C0600	1.0 to 1000	1.00	.75	.59	.56	.52
963C0700	1100 to 4700	1.09	.83	.66	.62	.57
963C0800	5100 to 10k	1.12	.86	.68	.64	.59
963-0900	15k	1.14	.88	.70	.66	.62
963C1000	16k to 20k	1.21	.92	.74	.69	.65
963C1100	22k to 39k	1.28	.98	.78	.74	.68
963-1200	51k	1.39	1.05	.85	.79	.74

OHM VALUES AVAILABLE FROM STOCK—SPECIFY VALUES

1.0	4.7	12	33	120	300	820	2400	5600	20k
1.2	5.1	13	39	130	330	910	2700	6200	22k
1.5	5.6	15	51	150	360	1000	3000	6800	27k
2.0	6.2	16	56	160	430	1100	3300	7500	30k
2.2	6.8	18	68	180	510	1500	3600	8200	36k
2.4	7.5	20	75	200	560	1600	3900	10k	39k
2.7	8.2	22	82	220	620	1800	4300	15k	51k
3.0	9.1	24	91	240	680	2000	4700	16k	.....
3.3	10	30	100	270	750	2200	5100	18k	.....

10% 5 AND 10-WATT POWER RESISTORS

TYPES PW-5 AND PW-10

Popular axial-lead power resistors. Compact shape fits easily among other components. Precisely-wound element has glass fiber core, and is sealed in a rectangular ceramic case. Tolerance is ±10%. Power ratings are at 25° C ambient. 1½" leads.

Type PW-5 5 Watt. Size, 7/8x3/8x1 1/32". *Available in values of 1 to 6000 ohms only.* Specify values from Table below. *Inquire for prices on quantities of 1000 or more.* Shpg. wt., 2 oz.

963C1400. 1-99.....Each .25
100-499.....Each .17 500-Up.....Each .13

PW-5 VALUES AVAILABLE—SPECIFY VALUES WANTED (OHMS)

1	7.5	30	125	350	750	1500	3000
2	10	50	150	400	800	1750	4000
3	15	75	200	500	1000	2000	4500
4	20	100	250	600	1200	2250	5000
5	25	120	300	700	1250	2500	6000

Type PW-10 10 Watt. Size, 1 7/8x3/8x1 1/32". Specify values when ordering—see Table of values available below. *Inquire for prices on quantities of 1000 or more.* Shpg. wt., 2 oz.

963C1500. 1-99.....Each .36
100-499.....Each .25 500-Up.....Each .19

PW-10 VALUES AVAILABLE—SPECIFY VALUES WANTED (OHMS)

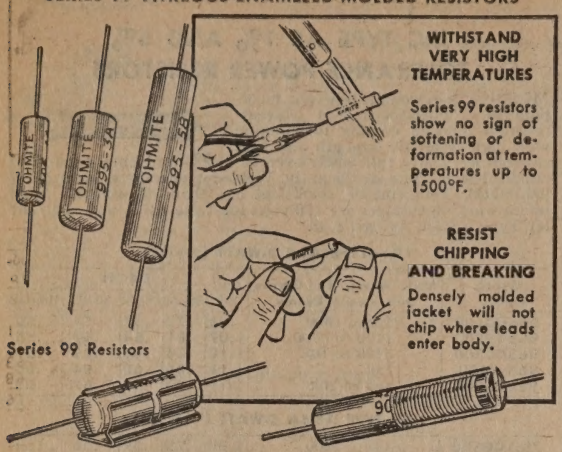
1	7.5	30	150	600	2000	10k
2	10	40	200	750	3000	12k
3	15	50	250	1000	3500	20k
4	20	75	300	1200	5000	25k
5	25	100	500	1500	6000	.....

ATTENTION QUANTITY BUYERS

Make Allied your "One-Stop" Headquarters for all your industrial needs. Pay OEM prices, slash handling expenses and reduce paperwork in purchasing and receiving. Allied Electronics has the world's largest stock of components.

Memcor/Ohmite Wirewound Resistors

SERIES 99 VITREOUS-ENAMELED MOLDED RESISTORS



UNIFORM SIZE
Consistent size and shape.. Ideal for automated assembly.

HIGH-VOLTAGE INSULATION
1000 VAC Breakdown for molded vitreous enamel insulation.

These wirewound resistors feature molded vitreous enamel coating for excellent insulation characteristics and heat dissipation. Uniform size—mount in metal clips for heat-sink effect allowing up to 100% wattage increase. Uniform insulation thickness for 1000 VAC breakdown rating. Identifying markings fired right onto coating. Consistent size and shape—ideal for automated assembly. Withstand high humidity, immersion in salt solution. 1½" tinned leads. Tolerance, ±5%. Meet MIL-R-26 for RW57, RW58, RW59, RW67, RW68, RW69. Av. shpg. wt. per 25, 4 oz.

STYLE 995-3A—3¼-WATT 3⁵⁄₆₄x1³⁄₆₄"

Stock No.	Stock Values (Ohms) See Table "A" Below	EACH 1-9	10-24	25-99	100-249	250-499	500 Up
875C7200	1 to 1000	.63	.54	.44	.38	.32	.3
875C7300	1100 to 5000	.66	.56	.46	.40	.33	.3
875C7350	5100 to 10k	.70	.60	.49	.42	.35	.3

STYLE 995-5B—5-WATT 1⁵⁄₁₆x1³⁄₆₄"

875C7400	1 to 1000	.66	.56	.46	.40	.33	.3
875C7500	1100 to 5000	.70	.60	.49	.42	.35	.3
875C7535	5100 to 10k	.75	.64	.53	.45	.38	.3
875C7565	11k to 20k	.84	.71	.59	.50	.42	.3
875C7580	22k to 25k	.88	.75	.62	.53	.44	.4

STYLE 995-10A—11-WATT 1²⁵⁄₃₂x5⁄₁₆"

875C7600	1 to 1000	.72	.61	.50	.43	.36	.3
875C7700	1100 to 5000	.79	.67	.55	.47	.40	.3
875C7750	5100 to 10k	.90	.77	.63	.54	.45	.4
875C7780	11k to 20k	1.00	.85	.70	.60	.50	.4
875C7800	22k to 40k	1.05	.89	.74	.63	.53	.4
875C7850	43k to 51k	1.20	1.02	.84	.72	.60	.5

TABLE "A" STOCK VALUES—FOR STYLE 995 ABOVE
Specify Values Wanted in Ohms

1.0	3.3	8.2	25	56	180	430	820	2200	4700	9100	24k	50k
1.1	3.6	9.1	27	62	200	450	900	2400	5000	10k	25k	51k
1.2	3.9	10	30	68	220	470	910	2500	5100	11k	27k	....
1.3	4.0	11	33	75	240	500	1000	2700	5600	12k	30k	....
1.5	4.3	12	35	82	250	510	1100	3000	6000	13k	33k	....
1.6	4.7	13	36	91	270	560	1200	3300	6200	14k	35k	....
1.8	5.0	15	39	100	300	600	1300	3500	6800	15k	36k	....
2.0	5.1	16	40	110	330	620	1400	3600	7000	16k	39k	....
2.2	5.6	18	43	120	350	680	1500	3900	7500	17k	40k	....
2.4	6.2	20	47	130	360	700	1600	4000	8000	18k	43k	....
2.7	6.8	22	50	150	390	750	1800	4300	8200	20k	45k	....
3.0	7.5	24	51	160	400	800	2000	4500	9000	22k	47k	....

MOUNTING CLIPS FOR STYLE 99 RESISTORS

Protect from mechanical shock. Have heat-sink effect for up to 100% increase in power rating. Av. shpg. wt. per 100, 3 oz.

Stock No.	Mfr's Type	For Resistor	EACH 1-99	100-499	500-Up
875-6900	5900	995-1A (1½-Watt)	.21	.16	.13
875-6925	5904	995-3A (3¼-Watt)	.21	.16	.13
875-6930	5906	995-5B (5-Watt)	.21	.16	.13
875-6950	5908	995-10A (11-Watt)	.21	.16	.13

TYPE 200 "BROWN DEVIL" WIREWOUND RESISTORS

Wide selection of high-quality, compact, wirewound resistors. Specially designed for applications such as voltage dropping, bias supplies, bleeders. Have thick vitreous enamel coating for excellent heat conduction and insulation. Also fully protected against the harmful effects of humidity and moisture, preventing costly and needless failure. Tolerance, ±5%. Overall sizes (excluding leads): 3-watt, 7⁄16x1³⁄₆₄"; 5¼-watt, 5⁄8x¼"; 8-watt, 1x5⁄16"; 12-watt, 1¾x5⁄16"; 20-watt 2x7⁄16". 1½" leads. Specify values from Tables "B" or "C" below. Av. shpg. wt., per 25, 8 oz.

STYLE 200-3—3-WATT (Values to 10K) See Table "B" Below

Stock No.	Stock Values (Ohms) See Table "B" Below	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
875C4200	1 to 1000	.56	.48	.39	.34	.28	.26
875C4300	1100 to 4700	.60	.51	.42	.36	.30	.28
875C4330	5100 to 10k	.63	.54	.44	.38	.32	.30

STYLE 200-5¼—5¼-WATT (Values to 20K) See Table "B" Below

875C4400	1 to 1000	.60	.51	.42	.36	.30	.28
875C4500	1100 to 4700	.63	.54	.44	.38	.32	.30
875C4225	5100 to 10k	.66	.56	.46	.40	.33	.31
875C4550	11k to 20k	.73	.62	.51	.44	.37	.34

TABLE "B" STOCK VALUES—FOR 3 AND 5¼-WATT STYLES ABOVE—Specify Values Wanted

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1.0	3.6	12	43	150	510	1800	6200
1.1	3.9	13	47	160	560	2000	6800
1.2	4.3	15	51	180	620	2200	7500
1.3	4.7	16	56	200	680	2400	8200
1.5	5.1	18	62	220	750	2700	9100
1.6	5.6	20	68	240	820	3000	10k
1.8	6.2	22	75	270	910	3300	11k
2.0	6.8	24	82	300	1000	3600	12k
2.2	7.5	27	91	330	1100	3900	13k
2.4	8.2	30	100	360	1200	4300	15k
2.7	9.1	33	110	390	1300	4700	16k
3.0	10	36	120	430	1500	5100	18k
3.3	11	39	130	470	1600	5600	20k

STYLE 200-8—8-WATT (Values to 10K) See Table "C" Below

Stock No.	Stock Values (Ohms) See Table "C" Below	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
875C4600	1 to 1000	.60	.51	.42	.36	.30	.28
875C4700	1100 to 5000	.63	.54	.44	.38	.32	.30
875C4740	6000 to 10k	.66	.56	.46	.40	.33	.31

STYLE 200-12—12-WATT (Values to 50K) See Table "C" Below

875C4800	1 to 1000	.65	.55	.46	.39	.33	.31
875C4900	1100 and 5000	.69	.59	.48	.41	.35	.32
875C4925	6000 and 10k	.80	.68	.56	.48	.40	.38
875C4940	12.5k to 20k	.90	.77	.63	.54	.45	.42
875C4950	25k and 30k	.94	.80	.66	.56	.47	.44
875C4970	50k	1.10	.94	.77	.66	.55	.52

STYLE 200-20—20-WATT (In All Values Except * in Table "C")

Stock No.	Values (Ohms) Table "C" Below	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
875C5000	1 to 1000	.77	.65	.54	.46	.39	.36
875C5100	1200 to 5000	.80	.68	.56	.48	.40	.38
875C5140	6000 to 10k	.94	.80	.66	.56	.47	.44
875C5160	12.5k to 20k	.96	.82	.67	.58	.48	.45
875C5170	25k and 30k	1.15	98	.81	.69	.58	.54
875C5180	50k and 60k	1.30	1.11	.91	.78	.65	.61
875C5190	100k	1.80	1.53	1.26	1.08	.90	.85

TABLE "C" STOCK VALUES—FOR 8, 12 AND 20-WATT STYLES ABOVE—Specify Values Wanted

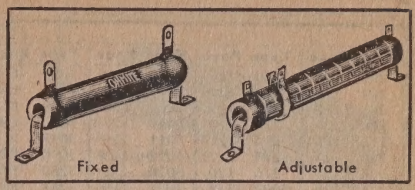
Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	15*	125*	500	1250	4500	15k
1.5*	20*	150	600*	1500	5000	20k
2	25	200	700	1750	6000	25k
3	30*	225*	750	2000	7000	30k
4	35*	250	800	2250	7500	50k
5	40*	300	900	2500	8000	60k
7.5*	50	350	1000	3000	9000	100k
10	75	400	1100*	3500	10k	.....
12*	100	450*	1200	4000	12.5k	.....

Be Sure to Specify Stock No., Resistance and Wattage When Ordering

Wirewound Power Resistors Memcor/Ohmite

FIXED AND ADJUSTABLE POWER RESISTORS

FIXED TYPES. For use as voltage droppers, bias resistors, and bleeders in applications where resistance need not be varied. Resistance tolerance, ±5% for values 1 ohm or higher; ±10% for values below 1 ohm. **Adjustable Types.** For voltage dividing networks, power supplies—anywhere adjustable resistance is required. Feature fine alloy wire, wound on quality ceramic cores and insulated by vitreous enamel coatings. Tolerance ±10%. With slider and mounting brackets. Wattage rating applies only when entire resistance is in circuit; with center lug at intermediate point, rating is reduced in same proportion. Wattage ratings are for free air mounting. **Specify value when ordering.** Av. shpg. wt., 5-50 watts, 4 oz.; 100 watts and up, 1 lb.



FIXED POWER RESISTORS

STYLE 270-12—12 WATTS—1¾-5⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
875C6200	.51, 1.0, 1.5, 10, 15, 18, 33, 39, 47, 56, 68, 82, 100, 120, 150, 180, 220, 470, 560, 820, 1000	.66	.56	.46	.40	.33	.31
875C6100	1200, 1500, 2200, 3300, 3900, 4700	.70	.60	.49	.42	.35	.33
875C6230	10k	.81	.69	.57	.49	.41	.38
875C6240	12k, 15k	.90	.77	.63	.54	.45	.42
875C6250	22k	.95	.81	.67	.57	.48	.45
875C6255	51k	1.10	.94	.77	.66	.55	.52

STYLE 270-25—25 WATTS—2x5⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
875C6300	1, 2, 3, 4, 5, 10, 15, 25, 50, 75, 100, 150, 200, 250, 500, 750, 800, 1000	.83	.71	.58	.50	.42	.39
875C6350	1500, 2000, 2500, 3000, 4000, 5000	.86	.73	.60	.52	.43	.40
875C6365	6000, 7500, 10k	.97	.82	.68	.58	.49	.46
875C6375	15k, 20k	1.05	.89	.74	.63	.53	.49
875C6385	25k, 30k	1.20	1.02	.84	.72	.60	.56
875C6390	50k, 60k	1.40	1.19	.98	.84	.70	.66
875C6396	70k	1.60	1.36	1.12	.96	.80	.75
875C6398	100k	1.85	1.37	1.30	1.11	.93	.87

STYLE 270-50—50 WATTS—4x5⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-Up
875C6400	1	1.75	1.49	1.23	1.05
875C6420	2, 3, 4, 5, 10, 25, 50, 75, 100, 150, 200, 250, 500, 750, 800, 1000	1.30	1.11	.91	.78
875C6460	1500, 2000, 2500, 5000	1.30	1.11	.91	.78
875C6475	10k	1.40	1.19	.98	.84
875C6480	20k	1.55	1.32	1.09	.93
875-6485	25k	1.75	1.49	1.23	1.05
875-6490	50k	2.00	1.70	1.40	1.20
875-6495	100k	2.45	2.08	1.72	1.47

STYLE 270-100—100 WATTS—6½x¾″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-Up
875C6500	1, 2, 3	2.45	2.08	1.72	1.47
875C6510	4, 5, 10, 25, 50, 75, 100, 125, 150, 250, 500, 1000	1.75	1.49	1.23	1.05
875C6550	1500, 2000, 2500	1.80	1.53	1.26	1.08
875C6560	7500, 10k	1.95	1.66	1.37	1.17
875-6570	20k	2.10	1.79	1.47	1.26
875-6575	50k	2.50	2.13	1.75	1.50
875-6580	100k	3.10	2.64	2.17	1.86

STYLE 270-175—175 WATTS—8½x1⅛″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-Up
875C6600	3, 5	3.55	3.02	2.49	2.13
875C6620	10, 25, 50, 75, 100, 125, 150	2.55	2.17	1.79	1.53
875-6640	10k	2.85	2.42	2.00	1.71
875-6650	75k	3.45	2.93	2.42	2.07
875-6660	100k	3.65	3.10	2.56	2.19

STYLE 270-225—225 WATTS—10½x1⅛″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-Up
875C6700	1, 2, 3, 4, 5	3.90	3.32	2.73	2.34
875C6720	10, 25, 50, 75, 100, 150, 250, 500, 1000	2.75	2.34	1.93	1.65
875C6750	2000, 2500, 3000, 5000	2.85	2.42	2.00	1.71
875-6780	10k	3.05	2.59	2.14	1.83
875C6783	15k, 20k	3.25	2.76	2.28	1.95
875C6790	50k	3.45	2.93	2.42	2.07
875C6795	100k	3.90	3.32	2.73	2.34

DIVIDOHM ADJUSTABLE RESISTORS

STYLE 210-12—12 WATTS—1¾x5⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
875C5200	1, 2, 3, 5, 7.5, 10, 15, 20, 25, 50, 75, 100, 150, 250, 300, 400, 500, 750, 1000	1.30	1.11	.91	.78	.65	.61
875C5300	1250, 1500, 2000, 2500, 3000, 3500, 5000	1.35	1.15	.95	.81	.68	.63
875C5350	7000, 7500, 8000, 10k	1.45	1.23	1.02	.87	.73	.68
875-1333	Extra Slider for 12-Watt Types					1-9 Ea.	.16

STYLE 210-25—25 WATTS—2x5⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
875C5400	1, 2, 3, 5, 10, 15, 20, 25, 50, 75, 100, 150, 250, 300, 400, 500, 750, 1000	1.45	1.23	1.02	.87	.73	.68
875C5430	1500, 2000, 2500, 3000, 5000	1.50	1.28	1.05	.90	.75	.71
875C5450	7500, 10k	1.60	1.36	1.12	.96	.80	.75
875C5460	15k, 20k	1.65	1.40	1.16	.99	.83	.78
875C5480	25k	1.80	1.53	1.26	1.08	.90	.85

STYLE 210-50—50 WATTS—4x5⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-Up
875-5500	1	2.45	2.08	1.72	1.47
875C5510	2, 3, 4, 5, 10, 25, 50, 75, 100, 150, 200, 250, 300, 400, 500, 750, 1000	1.90	1.62	1.33	1.14
875C5540	1500, 2000, 2500, 4000, 5000	2.00	1.70	1.40	1.20
875-5555	10k	2.10	1.79	1.47	1.26
875-5560	15k, 20k	2.20	1.87	1.54	1.32
875-5570	25k, 30k, 40k	2.45	2.08	1.72	1.47
875-5580	50k	2.60	2.21	1.82	1.56
875-5590	100k	3.10	2.64	2.17	1.86

STYLE 210-75—75 WATTS—6x5⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-Up
875C5700	1, 2	2.70	2.30	1.89	1.62
875C5725	5,10,15,25,50,100,200,250,300,1000	2.10	1.79	1.47	1.26
875-5760	2000	2.15	1.83	1.51	1.29
875-1134	Extra Slider for 25, 50 and 75-Watt Types				1-9 Ea.	.16

STYLE 210-100—100 WATTS—6½x¾″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-Up
875C5800	1, 2, 3	3.05	2.59	2.14	1.83
875C5830	4, 5, 10, 25, 50, 100, 250, 500, 1000	2.40	2.04	1.68	1.44
875C5850	5000	2.45	2.08	1.72	1.47
875C5860	25k, 40k	3.05	2.51	2.14	1.83
875C5880	100k	3.70	3.15	2.59	2.22
875C1335	Extra Slider for 100-Watt Types				1-9 Ea.	.16

STYLE 210-225—225 WATTS—10½x1⅛″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-Up
875C5900	1, 2, 3, 4, 5	4.85	4.12	3.40	2.91
875C5925	10, 25, 50, 100, 250, 500, 1000	3.75	3.19	2.63	2.25
875C5950	5000	3.80	3.23	2.66	2.28
875C5960	10k	4.00	3.40	2.80	2.40
875C1336	Extra Slider for 225-Watt Types				1-9 Ea.	.25

EXTRA MOUNTING BRACKETS FOR RESISTORS

Stock No.	Type No.	For Resistor Core O. D.	Watts	PKG. OF 100 1-9	10-24	25-Up
875-6796	5	5⁄16″	12	3.90	3.32	2.73
875-6797	9	9⁄16″	25, 50, 75	3.50	2.98	2.45
875-6798	12	¾″	100	7.00	5.95	4.90
875-6799	18	1⅛″	175, 225	7.00	5.95	4.90

BOURNS Adjustment Potentiometers

BOURNS HANDY INDEX

Type	Page	Type	Page	Type	Page	Type	Page	Type	Page	Type	Page	Type	Page	Type	Page	Type	Page	Type	Page
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207	128	271	127	3007	132	3067	127	3262	131	3329	131	3520	134	H-04	135	H90	135	H494	134
208	128	272	129	3009	130	3068	127	3280	132	3367	132	3600	135	H-05	135	H93	135	RT10C	128
209	128	273	127	3010	128	3069	130	3281	132	3368	132	3640	135	H11E	135	H97	135	RT11C	128
215	129	274	129	3011	129	3082	131	3282	133	3400	134	3650	134	H12S	135	H98	135	RT12C	128
220	127	275	127	3012	129	3099	131	3290	133	3438	135	3660	135	H15S	135	H99	135	RT22C	128
224	127	276	129	3020	129	3250	128	3292	130	3500	134	3700	134	H21E	135	H103	135	RJ11B	129
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236	126	3001	132	3052	129	3252	131	3301	133	3509	134	H-01	135	H2S	135	H492	134	RJ22B	129

BOURNS PART NUMBERING SYSTEM

3011	L	10	253	M
Basic Model	Term. Style	Modifying Number	Resistance Code	Panel Mount

Basic Model: Three or 4 digits designate the various models available.

Terminal Styles: "L," insulated wire leads; "S," solder terminals; "P," printed circuit pins; "W," bare-wire leads.

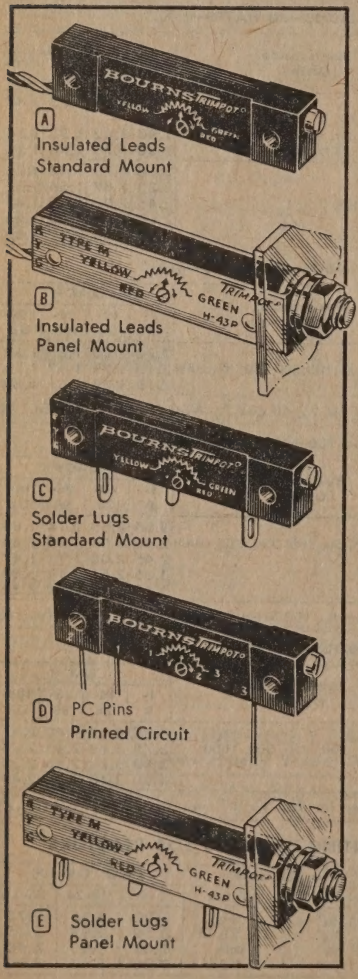
Modifying Number: −1, is std. model. −2, is std. WW with values of 100k. −XX, is 2 digit nonstandard basic model.

Resistance Code (in Ohms): Three digit code—the first two digits represent the significant numbers. The last digit number represents the number of zeros that follow the first two numbers.

Panel Mount Designator: For panel mount feature add "M" to complete the part no.

TABLE A—VALUES (OHMS)

10	200	5000	50k	750k
20	500	10k	100k	1 meg
50	1000	20k	200k	2 meg
100	2000	25k	500k	5 meg



WIREWOUND POTENTIOMETERS

Precision-made, multi-turn, subminiature potentiometers. Self-locking screwdriver adjustments. 22 to 25-turn adjustments. Panel mounts require panel thickness max. .13" with .228" hole. Std. mounts have two #2 holes on 1" centers. L suffix, insulated leads. Resistance tol.: carbon models ±20%; wirewound models, ±10%. Quantity prices are for one resistance and one type only. Specify value when ordering. 2 oz.

½-WATT GENERAL-PURPOSE WIREWOUND. 1¼x¼x5/16". −65°C to +125°C

Stock No.	Mfr's Type	Fig.	Term. Conn.	Mtg.	Values (Ohms) See Table A	EACH §					
						1-9	10-24	25-49	50-99	100-249	250-Up
735C0050	200L	A	Leads	Std.	10 ohms-10k	4.86	4.50	4.05	3.84	3.60	3.42
735C0150	200L	A	Leads	Std.	20k, 25k	6.48	6.00	5.40	5.12	4.80	4.56
735C0200	200L	A	Leads	Std.	50k only	7.56	7.00	6.30	5.98	5.60	5.32
735C0250	200L-2	A	Leads	Std.	100k only	9.18	8.50	7.65	7.26	6.80	6.46
735C0300	200L	B	Leads	Panel	10 ohms-10k	5.67	5.25	4.73	4.48	4.20	3.99
735C0350	200L	B	Leads	Panel	20k, 25k	7.29	6.75	6.08	5.76	5.40	5.13
735C0400	200L	B	Leads	Panel	50k only	8.37	7.75	6.98	6.62	6.20	5.89
735C0450	200L-2	B	Leads	Panel	100k only	9.99	9.25	8.33	7.90	7.40	7.03
735C0700	200S	C	Lugs	Std.	10 ohms-10k	4.86	4.50	4.05	3.84	3.60	3.42
735C0750	200S	C	Lugs	Std.	20k, 25k	6.48	6.00	5.40	5.12	4.80	4.56
735C0800	200S	C	Lugs	Std.	50k only	7.56	7.00	6.30	5.98	5.60	5.32
735C0850	200S	E	Lugs	Panel	10 ohms-10k	5.67	5.25	4.73	4.48	4.20	3.99
735C0900	200S	E	Lugs	Panel	20k, 25k	7.29	6.75	6.08	5.76	5.40	5.13
735C0950	200S	E	Lugs	Panel	50k only	8.37	7.75	6.98	6.62	6.20	5.89
735C0550	200P	D	PC pins	PC	10 ohms-10k	4.86	4.50	4.05	3.84	3.60	3.42
735C0600	200P	D	PC pins	PC	20k, 25k	6.48	6.00	5.40	5.12	4.80	4.56
735C0650	200P	D	PC pins	PC	50k only	7.56	7.00	6.30	5.98	5.60	5.32

4/5-WATT HUMIDITY-PROOF WIREWOUND 2 3/64x1 9/64x1 11/32". − 55°C to +135°C.

735C2700	236L	A	Leads	Std.	10 ohms-10k	7.02	6.50	5.85	5.55	5.20	4.94
735C2750	236L	A	Leads	Std.	20k, 25k	8.64	8.00	7.20	6.83	6.40	6.08
735C2800	236L	A	Leads	Std.	50k only	9.18	8.50	7.65	7.26	6.80	6.46
735C2850	236L-2	A	Leads	Std.	100k only	11.34	10.50	9.45	8.97	8.40	7.98
735C2900	236L	B	Leads	Panel	10 ohms-10k	7.83	7.25	6.53	6.19	5.80	5.51
735C3000	236L	B	Leads	Panel	20k, 25k	9.45	8.75	7.88	7.47	7.00	6.65
735C3050	236L	B	Leads	Panel	50k only	9.99	9.25	8.33	7.90	7.40	7.03
735C3100	236L-2	B	Leads	Panel	100k only	12.15	11.25	10.13	9.61	9.00	8.55
735C3300	236S	C	Lugs	Std.	10 to 10k	7.02	6.50	5.85	5.55	5.20	4.94
735C3350	236S	C	Lugs	Std.	20k, 25k	8.64	8.00	7.20	6.83	6.40	6.08
735C3400	236S	C	Lugs	Std.	50k only	9.18	8.50	7.65	7.26	6.80	6.46
735C3450	236S	E	Lugs	Panel	10 to 10k	7.83	7.25	6.53	6.19	5.80	5.51
735C3500	236S	E	Lugs	Panel	20k, 25k	9.45	8.75	7.88	7.47	7.00	6.65
735C3550	236S	E	Lugs	Panel	50k only	9.99	9.25	8.33	7.90	7.40	7.03
735C3150	236P	D	PC pins	PC	10 to 10k	7.02	6.50	5.85	5.55	5.20	4.94
735C3200	236P	D	PC pins	PC	20k, 25k	8.64	8.00	7.20	6.83	6.40	6.08
735C3250	236P	D	PC pins	PC	50k only	9.18	8.50	7.65	7.26	6.80	6.46

1-WATT HIGH-TEMPERATURE WIREWOUND 5/16x9/32x1¼". −55°C to +175°C.

735C3700	260L	A	Leads	Std.	10 ohms-10k	5.94	5.50	4.95	4.70	4.40	4.18
735C3750	260L	A	Leads	Std.	20k, 25k	7.56	7.00	6.30	5.98	5.60	5.32
735C3800	260L	A	Leads	Std.	50k only	8.10	7.50	6.75	6.41	6.00	5.70
735C3850	260L-2	A	Leads	Std.	100k only	9.72	9.00	8.10	7.68	7.20	6.84
735C3900	260L	B	Leads	Panel	10 ohms-10k	6.75	6.25	5.63	5.34	5.00	4.75
735C3950	260L	B	Leads	Panel	20k, 25k	8.37	7.75	6.98	6.62	6.20	5.89
735C4000	260L	B	Leads	Panel	50k only	8.91	8.25	7.43	7.05	6.60	6.27
735C4050	260L-2	B	Leads	Panel	100k only	10.53	9.75	8.78	8.32	7.80	7.41
735C4250	260S	C	Lugs	Std.	10 ohms-10k	5.94	5.50	4.95	4.70	4.40	4.18
735C4300	260S	C	Lugs	Std.	20k, 25k	7.56	7.00	6.30	5.98	5.60	5.32
735C4350	260S	C	Lugs	Std.	50k only	8.10	7.50	6.75	6.41	6.00	5.70
735C4400	260S	E	Lugs	Panel	10 ohms-10k	6.75	6.25	5.63	5.34	5.00	4.75
735C4450	260S	E	Lugs	Panel	20k 25k	8.37	7.75	6.98	6.62	6.20	5.89
735C4500	260S	E	Lugs	Panel	50k only	8.91	8.25	7.43	7.05	6.60	6.27
735C4100	260P	D	PC pins	PC	10 ohms-10k	5.94	5.50	4.95	4.70	4.40	4.18
735C4150	260P	D	PC pins	PC	20k, 25k	7.56	7.00	6.30	5.98	5.60	5.32
735C4200	260P	D	PC pins	PC	50k only	8.10	7.50	6.75	6.41	6.00	5.70

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

Adjustment Potentiometers

BOURNS

TABLE A—STOCK VALUES—SPECIFY VALUES WANTED (OHMS)

10	50	200	1000	5000	20k	100k	500k	1 meg	5 meg
20	100	500	2000	10k	50k	200k	750k	2 meg	

TRIMIT® SUBMINIATURE POTENTIOMETERS

ow cost pots—body is only 9/32x5/16x1 1/4". May be stacked. Have 25-turn screwdriver djustment, zero to full value, with self- ocking shaft. Power rating is at 25°C. perating range, —55 to +105°C. Panel mounting requires .228" hole with max. thickness, .13" Standard mounts have two #2 holes on 1" ctrs. Quantity price for one resistance value and type only. Specify Mfr's Type and resistance when ordering. 2 oz.

½-WATT WIREWOUND TYPE Size: 5/16x1/4x1 1/4". Tolerance: ±10%

Stock No.	Mfr's Type	Fig.	Terminal Connections	Mtg.	Values See Table A	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
735C4550	271	A	Insul. leads	Std.	50 ohms-10k	3.19	2.95	2.66	2.52	2.36	2.24
735-4600	271	A	Insul. leads	Std.	20k only	4.32	4.00	3.60	3.42	3.20	3.04
735C4650	271	B	Insul. leads	Panel	50 ohms-10k	4.00	3.70	3.34	3.16	2.96	2.81
735-4700	271	B	Insul. leads	Panel	20k only	5.13	4.75	4.28	4.06	3.80	3.61
735C4850	273	C	Solder lugs	Std.	50 ohms-10k	3.19	2.95	2.66	2.52	2.36	2.24
735-4900	273	C	Solder lugs	Std.	20k only	4.32	4.00	3.60	3.42	3.20	3.04
735C4950	273	D	Solder lugs	Panel	50 ohms-10k	4.00	3.70	3.34	3.16	2.96	2.81
735-5000	273	D	Solder lugs	Panel	20k only	5.13	4.75	4.28	4.06	3.80	3.61
735C5150	275	E	PC pins	PC	50 ohms-10k	3.19	2.95	2.66	2.52	2.36	2.24
735-5200	275	E	PC pins	PC	20k only	4.32	4.00	3.60	3.42	3.20	3.04

E-Z TRIM® POTENTIOMETERS

ypes 3067, 3068. Type 3067 ½-watt 15-turn nd 3068 1/5-watt 15-turn pots for com- nercial applications. 3068 has a Resiston® arbon resistance element, ±20% tolerance. ype 3067 has wirewound element, ±10% tolerance. Wipers idle at both ends of travel. Mtg. ctrs., 53/64". 3/8x1x9/32". Specify Mfr's Type No. and resistance value when ordering. Quantity prices for one resistance value and type only. 2 oz.

Stock No.	Mfr's Type	Fig.	Terminal Connections	Mtg.	Values See Table A	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
35C6200	3067-S	G	Solder lugs	Std.	50 ohms-20k	1.85	1.71	1.54	1.46	1.37	1.30
35C6150	3067-P	F	PC pins	Std.	50 ohms-20k	1.85	1.71	1.54	1.46	1.37	1.30
35C6300	3068-S	G	Solder lugs	Std.	20k-1 meg	1.85	1.71	1.54	1.46	1.37	1.30
35C6250	3068-P	F	PC pins	Std.	20k-1 meg	1.85	1.71	1.54	1.46	1.37	1.30

1-WATT HUMIDITY-PROOF WIREWOUND

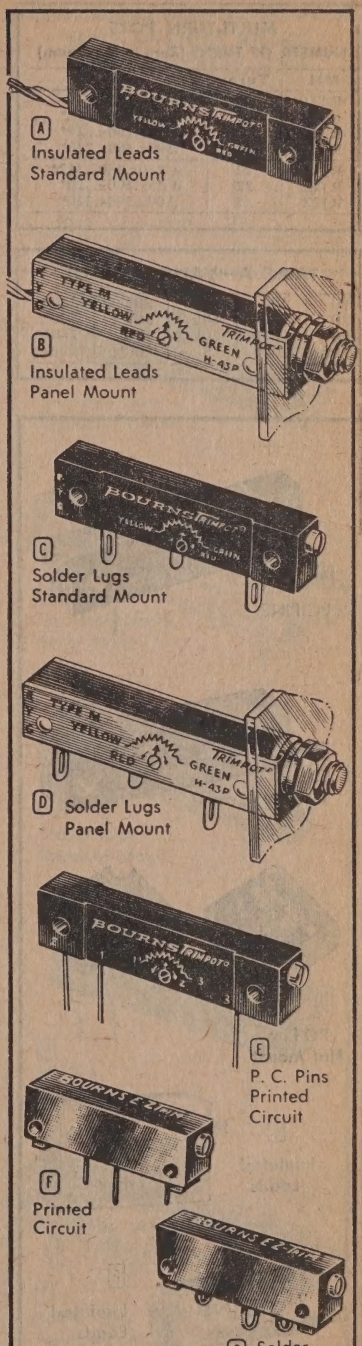
MIL-R-27208A. ±5% tol. 1 watt at 70°C. 20L: 6" Teflon .024" standard leads. 220W: 1½" gold-plated leads. —65°C to +175°C. 5/16x3/16x1". 2 oz.

734C1850	220L	A	Insul. lds.	Std.	10 ohms-10k	8.64	8.00	7.20	6.83	6.40	6.08
734C1900	220L	A	Insul. lds.	Std.	20k, 30k	10.26	9.50	8.55	8.11	7.60	7.22
734C1950	220W	A	Unins. lds.	Std.	10 ohms-10k	8.64	8.00	7.20	6.83	6.40	6.08
734C2000	220W	A	Unins. lds.	Std.	20k, 30k	10.26	9.50	8.55	8.11	7.60	7.22

1-WATT HUMIDITY-PROOF WIREWOUND

For initial or occasional adjustment, or where a non-standard value is required. Subminiature. Sealed in high-temperature plastic cases. Meet MIL. specs. 22 turns. High dissipation: 1 watt @ 70°C, 0.5 Watt @ 125°C; Std. mounts have two #2 threaded holes on 1" ctrs. Panel mt. types: max. .13" panel thickness, .194" hole. 1 1/4x3/16x 5/16". —65°C to +175°C. Quantity prices for one value and type only. 2 oz.

Stock No.	Mfr's Type	Fig.	Term. Conn.	Mtg.	Values (Ohms) (See Table A)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
735C1350	224L	A	Leads	Std.	10 ohms-10k	7.02	6.50	5.85	5.55	5.20	4.94
735C1400	224L	A	Leads	Std.	20k, 25k	8.64	8.00	7.20	6.83	6.40	6.08
735-1450	224L	A	Leads	Std.	50k only	9.18	8.50	7.65	7.26	6.80	6.46
735-1500	224L-2	A	Leads	Std.	100k only	11.34	10.50	9.45	8.97	8.40	7.98
735C1550	224L	B	Leads	Panel	10 ohms-10k	7.83	7.25	6.53	6.19	5.80	5.51
735C1600	224L	B	Leads	Panel	20k, 25k	9.45	8.75	7.88	7.47	7.00	6.65
735-1650	224L	B	Leads	Panel	50k only	9.99	9.25	8.33	7.90	7.40	7.03
735-1700	224L-2	B	Leads	Panel	100k only	12.15	11.25	10.13	9.61	9.00	8.55
735C2000	224S	C	Lugs	Std.	10 ohms-10k	7.02	6.50	5.85	5.55	5.20	4.94
735C2050	224S	C	Lugs	Std.	20k, 25k	8.64	8.00	7.20	6.83	6.40	6.08
735-2100	224S	C	Lugs	Std.	50k only	9.18	8.50	7.65	7.26	6.80	6.46
735-2150	224S-2	C	Lugs	Std.	100k only	11.34	10.50	9.45	8.97	8.40	7.98
735C2200	224S	D	Lugs	Panel	10 ohms-10k	7.83	7.25	6.53	6.19	5.80	5.51
735C2250	224S	D	Lugs	Panel	20k, 25k	9.45	8.75	7.88	7.47	7.00	6.65
735-2300	224S	D	Lugs	Panel	50k only	9.99	9.25	8.33	7.90	7.40	7.03
735-2350	224S-2	D	Lugs	Panel	100k only	12.15	11.25	10.13	9.61	9.00	8.55
735C1750	224P	E	PC pins	PC	10 ohms-10k	7.02	6.50	5.85	5.55	5.20	4.94
735C1800	224P	E	PC pins	PC	20k, 25k	8.64	8.00	7.20	6.83	6.40	6.08
735-1850	224P	E	PC pins	PC	50k only	9.18	8.50	7.65	7.26	6.80	6.46
735-1900	224P-2	E	PC pins	PC	100k only	11.34	10.50	9.45	8.97	8.40	7.98



BOURNS PART NUMBERING SYSTEM

3011 L 10 253 M

Basic Model | Term. Style | Modifying Number | Resistance Code | Panel Mount

Basic Model: Three or 4 digits designate the various models available.

Terminal Styles: "L," insulated wire leads; "S," solder terminals; "P," printed circuit pins; "W," bare-wire leads.

Modifying Number: —1, is std. model. —2, is std. WW with values of 100k. —XX, is 2 digit nonstandard basic model.

Resistance Code (in Ohms): Three digit code—the first two digits represent the significant numbers. The last digit number represents the number of zeros that follow the first two numbers.

Panel Mount Designator: For panel mount feature add "M" to complete the part no.

NOTE: §QUANTITY PRICES ARE FOR ONE RESISTANCE VALUE AND TYPE ONLY

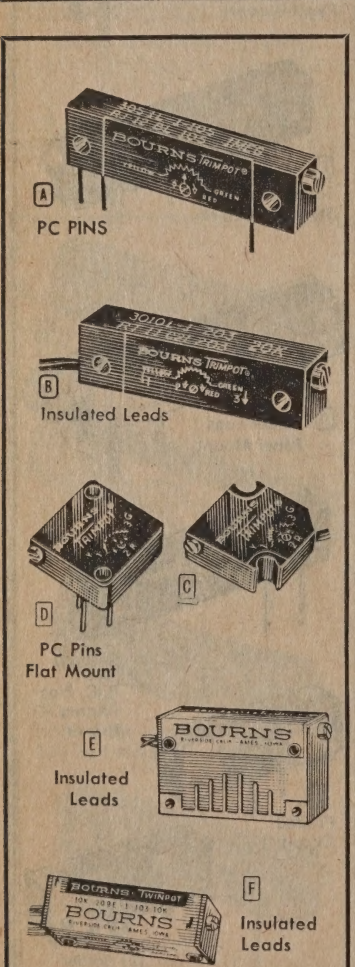
Adjustment Potentiometers

MULTI-TURN POTS
NUMBER OF TURNS (Zero to Maximum)

MIL	Turns	Size
RT10	15	1x.180x.315"
RT11	25	1.25x.280x.312"
RT12	22	1.25x.190x.320"
RT22	25	.500x.500x.220"
RJ11	22	1.250x.280x.312"
RJ12	22	1.25x.190x.320"
RJ22	25	.500x.500x.220"

TABLE A—VALUES (OHMS)

10	200	5000	30k	250k
20	500	10k	50k	500k
50	1000	20k	100k	750k
100	2000	25k	200k	1 meg



Meet MIL specs for humidity-proof, plus shock, vibration and acceleration stability. Power: Rating @ 50-70°. Turns: 22 to 25, zero to full value. Res. Tol: ±5%. Resolution: 2% at 10 ohms to .17% @ 100,000 ohms. *Std. mounts: two #2 holes, 1" ctrs. †Panel mounts require max. .13" panel thickness. ‡PC mount. Av. shpg. wt. 2 oz.

1-WATT HUMIDITY-PROOF WIREWOUND 1¼x⅝x⅜". −65°C to +175°C.

Stock No.	MIL or Mfr's Type	Fig.	Terminals	Values See Table A	EACH§ 1-9	10-24	25-49	50-99	100-249	250-499
735C5450	3010L*	B	Insul.	10 ohms-10k	7.02	6.50	5.85	5.55	5.20	4.94
735C5500	3010L*	B	Insul.	20k, 25k	8.64	8.00	7.20	6.83	6.40	6.08
735-5550	3010L*	B	Insul.	50k only	9.18	8.50	7.65	7.26	6.80	6.46
735-5600	3010L-2*	B	Insul.	100k only	11.34	10.50	9.45	8.97	8.40	7.98
735C5650	3010L†	A	Insul.	10 ohms-10k	7.83	7.25	6.53	6.19	5.80	5.51
735C5700	3010L†	A	Insul.	20k, 25k	9.45	8.75	7.88	7.47	7.00	6.65
735-5750	3010L†	A	Insul.	50k only	9.99	9.25	8.33	7.90	7.40	7.03
735-5800	3010L-2†	A	Insul.	100k only	12.15	11.25	10.13	9.61	9.00	8.55
735C5900	3010P‡	A	PC pins	10 ohms-10k	7.02	6.50	5.85	5.55	5.20	4.94
735C5950	3010P‡	A	PC pins	20k, 25k	8.64	8.00	7.20	6.83	6.40	6.08
735-6000	3010P‡	A	PC pins	50k only	9.18	8.50	7.65	7.26	6.80	6.46
735-6050	3010P-2‡	A	PC pins	100k only	11.34	10.50	9.45	8.97	8.40	7.98

½" SQUARE HUMIDITY-PROOF

Type 3250, 3251. 25-turn adjust. 3250 wirewound to 175°C, 1 W @ 70°C. Res.: 1.09 to .10%, 10-50k ohms. Tol. ±5%. 3251 carbon to 150°C, rated ½-W 50°C, ¼-W @ 100°C. Infinite res. Tol., ±20%. MIL-R 27208B, MIL-R-22097C. L, Teflon leads; P, W printed circuit pins. L, ½x½x3⁄16"; P, W, ½x½x⁷⁄₃₂". *No 25k, 30k, 250k. 2 oz.

735C6350	3250L	C	Insul. lds.	10 ohms-10k	6.71	6.22	5.59	5.31	4.97	4.72
735C6400	3250L	C	Insul. lds.	20k, 25k	7.56	7.00	6.30	5.98	5.60	5.32
735-6450†	3250L	C	Insul. lds.	50k only	10.00	9.27	8.34	7.91	7.41	7.04
735C3750	3251L	C	Insul. lds.	20k-1 meg*	7.83	7.25	6.53	6.19	5.80	5.51
735C6550	3250P	D	PC	10 ohms-10k	7.23	6.69	6.02	5.71	5.35	5.08
735C6600	3250P	D	PC	20k, 25k	7.97	7.38	6.64	6.30	5.90	5.61
735-6650	3250P	D	PC	50k only	10.53	9.75	8.78	8.33	7.80	7.41
735-6150	3251P	D	PC	20k-1 meg*	7.83	7.25	6.53	6.19	5.80	5.51
735C6700	3250W	G	PC	10 ohms-10k	7.23	6.69	6.02	5.71	5.35	5.08
735C6750	3250W	G	PC	20k, 25k	7.97	7.38	6.64	6.30	5.90	5.61
735-6800	3250W	G	PC	50k only	10.53	9.75	8.78	8.33	7.80	7.41
735C3850	3251W	G	PC	20k-1 meg*	7.83	7.25	6.53	6.19	5.80	5.51

MILITARY STANDARD MULTI-TURN POTENTIOMETERS

MIL-R-27208 **Wirewound.** Rated ¾-watt at 85°C. Max. oper. temp., 150°C. Temp. coeff., ±50PPM/°C, referred to an ambient of 25°C. Tol., ±5%. RT10, miniature, ¾" mtg. ctrs. RT11, RT12; subminiature, 1" mtg. ctrs. RT22 square, .52" mtg. ctr. on lead type. MIL-R-22097 **Carbon.** ¼-watt at 70°C. Max., 125°C. Coeff., ±600-PPM/°C. Tol., ±10%. Mtg. ctrs. RJ11BL, RJ12, 1"; RJ22BL, .52". Wt., 2 oz.

MIL-R-27208 WIREWOUND ELEMENT

734C0650	RT10C2L	B	Insul. wire	100 ohms-10k	8.64	8.00	7.20	6.83	6.40	6.08
734C0400	RT11C2L	B	Insul. wire	10 ohms-10k	5.56	5.13	4.71	4.34	4.03	3.79
734-0450	RT11C2L	B	Insul. wire	20k only	6.11	5.64	5.18	4.77	4.43	4.17
734C0500	RT11C2P	A	PC pins	10 ohms-10k	5.56	5.13	4.71	4.34	4.03	3.79
734-0550	RT11C2P	A	PC pins	20k only	6.11	5.64	5.18	4.77	4.43	4.17
734C0600	RT12C2L	B	Insul. wire	10 ohms-10k	5.56	5.13	4.71	4.34	4.03	3.79
734-0650	RT12C2L	B	Insul. wire	20k only	6.11	5.64	5.18	4.77	4.43	4.17
734C0700	RT12C2P	A	PC pins	10 ohms-10k	5.56	5.13	4.71	4.34	4.03	3.79
734-0750	RT12C2P	A	PC pins	20k only	6.11	5.64	5.18	4.77	4.43	4.17
734C0800	RT22C2L	C	Insul. wire	100 ohms-10k	5.27	5.01	4.74	4.48	4.22	3.95
734-0850	RT22C2L	C	Insul. wire	20k only	5.75	5.46	5.18	4.89	4.60	4.31
734C0900	RT22C2P	D	PC pins	100 ohms-10k	4.72	4.48	4.25	4.00	3.78	3.54
734-0950	RT22C2P	D	PC pins	20k only	5.20	4.94	4.68	4.42	4.16	3.90
734C1000	RT22C2W	G	PC pins	100 ohms-10k	4.72	4.48	4.25	4.00	3.78	3.54
734-1050	RT22C2W	G	PC pins	20k only	5.20	4.94	4.68	4.42	4.16	3.90
734C1100	RT22C2X	. . .	PC pins	100 ohms-10k	4.72	4.48	4.25	4.00	3.78	3.54
734-1150	RT22C2X	. . .	PC pins	20k only	5.20	4.94	4.68	4.42	4.16	3.90

SPECIAL PURPOSE ADJUSTMENT POTENTIOMETERS

Humidity-proof types meet MIL specs. Tol., ±10%. Res.: 2.7% @ 10 ohms to less than 0.2% @ full value. *Standard mts: 207, 208 (rheostat); 4 holes on 1"x1½" sq. 220, two #2 holes on ¾" ctr. †Panel mt. req. .13" max. thickness with .228" hole, except 220, .194". 2 oz. 1¼x1 3⁄16x9⁄32". Temp., −65°C to +175°C.

2-WATT WIREWOUND ELEMENT (‡Not available in 25k, 30k)

734C1200	207L*	E	Insul. lds.	100 ohms-50k‡	10.26	9.50	8.55	8.11	7.60	7.22
734-1250	207L*	E	Insul. lds.	100k only	11.88	11.00	9.90	9.39	8.80	8.36
734C1300	207L†	E	Insul. lds.	100 ohms-50k‡	11.07	10.25	9.23	8.75	8.20	7.79
734-1350	207L†	E	Insul. lds.	100k only	12.69	11.75	10.58	10.03	9.40	8.93
734C1400	208L*	E	Insul. lds.	100k, 150k	11.34	10.50	9.45	8.97	8.40	7.98
734-1450	208L*	E	Insul. lds.	200k only	12.96	12.00	10.80	10.25	9.60	9.12
734C1500	208L†	E	Insul. lds.	100k, 150k	12.15	11.25	10.13	9.61	9.00	8.55
734-1550	208L†	E	Insul. lds.	200k only	13.77	12.75	11.48	10.89	10.20	9.69

½-WATT TWINPOT® DUAL-ELEMENT WIREWOUND

Both elements identical value. Each dissipates ½-watt @ 70°C. Tracking is 5% from 200 ohms to 50k, 8% from 10 ohms to 100 ohms. ±10% tol. −65° to +135°C. *Standard mounts have two #2 mtg. holes on 1" ctrs. †Panel mount types require max. .13" panel thickness and .228" hole. 1¼x½x 5⁄16". **Quantity prices for one value.** Wt., 2 oz.

734C1600	209L*	F	Insul. lds.	10 ohms-10k	12.96	12.00	10.80	10.25	9.60	9.12
734-1750	209L*	F	Insul. lds.	20k only	14.58	13.50	12.15	11.53	10.80	10.26
734-1651	209L*	F	Insul. lds.	50k only	16.20	15.00	13.50	12.81	12.00	11.40
734C1700	209L†	F	Insul. lds.	10 ohms-10k	15.12	14.00	12.60	11.97	11.20	10.64
734-1650	209L†	F	Insul. lds.	20k only	16.74	15.50	13.95	13.25	12.40	11.78
734-1751	209L†	F	Insul. lds.	50k only	18.36	17.00	15.30	14.53	13.60	12.92

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

Adjustment Potentiometers

BOURNS

TABLE A—STOCK VALUES SPECIFY VALUES WANTED

Ohms	Ohms	Ohms
10	2000	200k
20	5000	500k
50	10k	750k
100	20k	1 meg
200	25k	2 meg
500	50k	5 meg
1000	100k	

¼-WATT CARBON. Infinite resolution carbon element. Resistance tolerance, ±20%. 22 to 25 turns. Temperature Range, −65°C to +125°C. Size 1¼x¼x5/16".

Stock No.	Mfr's Type	Fig.	Term. Conn.	Mtg.	Values See Table "A"	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
735C1100	215L	A	Leads	Std.	5000-5 meg except 25 k	4.86	4.50	4.05	3.84	3.60	3.42
735C1150	215L	B	Leads	Panel		5.67	5.25	4.73	4.48	4.20	3.99
735C1250	215S	C	Lugs	Std.		4.86	4.50	4.05	3.84	3.60	3.42
735C1300	215S	E	Lugs	Panel		5.67	5.25	4.73	4.48	4.20	3.99
735C1200	215P	D	PC pins	PC		4.86	4.50	4.05	3.84	3.60	3.42
735C2550	235L	A	Leads	Std.		7.02	6.50	5.85	5.55	5.20	4.94
735C2600	235L	B	Leads	Panel		7.83	7.25	6.53	6.19	5.80	5.51
735C2650	235P	D	PC pins	PC		7.02	6.50	5.85	5.55	5.20	4.94

1/5-WATT CARBON TYPE Size: 9/32x5/16x1¼". Tolerance: ±20%

Stock No.	Mfr's Type	Fig.	Terminal Connections	Mtg.	Values See Table "A"	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
735C4750	272	A	Insul. leads	Std.	5000 ohms-5 meg	3.78	3.50	3.15	2.99	2.80	2.66
735C4800	272	B	Insul. leads	Panel		4.59	4.25	3.83	3.63	3.40	3.23
735C5050	274	C	Solder lugs	Std.		3.78	3.50	3.15	2.99	2.80	2.66
735C5100	274	E	Solder lugs	Panel		4.59	4.25	3.83	3.63	3.40	3.23
735C5250	276	D	PC pins	PC		3.78	3.50	3.15	2.99	2.80	2.66

MIL specs. for humidity and temp. Require 5 turns to go from zero to full value. Resolution varies from 2% @ 10 ohms to less than 0.2% @ full value. 3051 has ±20% resistance tolerance; 236 and 260, ±10%. Std. mounts have two #2 holes on 1" ctrs. Panel mounts require max. panel thickness .13". Av. shpg. wt., 2 oz.

¼-WATT HIGH-TEMP. HUMIDITY-PROOF CARBON 1¼x5/16x3/16". −65°C to +150°C.

735C2950	3051L	A	Insul. leads	Std.	5000 ohms-5 meg, except 25k	7.02	6.50	5.85	5.55	5.20	4.94
735C3000	3051L	B	Insul. leads	Panel		7.83	7.25	6.53	6.19	5.80	5.51
735C3100	3051S	C	Solder lugs	Std.		7.02	6.50	5.85	5.55	5.20	4.94
735C3150	3051S	E	Solder lugs	Panel		7.83	7.25	6.53	6.19	5.80	5.51
735C3050	3051P	D	PC pins	PC		7.02	6.50	5.85	5.55	5.20	4.94

¼-WATT HUMIDITY-PROOF CARBON 1¼x5/16x9/32". −65°C to +150°C.

735C2350	3011L	A	Insul. leads	Std.	10k-2 meg (except 25k)	7.02	6.50	5.85	5.55	5.20	4.94
735C2400	3011L	B	Insul. leads	Panel		7.83	7.25	6.53	6.19	5.80	5.51
735C2450	3011P	D	PC pins	PC		7.02	6.50	5.85	5.55	5.20	4.94

MILITARY STANDARD MULTI-TURN POTENTIOMETERS

MIL-R-22097 CARBON. ¼-watt at 70°C. Maximum, 125°C. Coeff., ±600-PPM/°C. Tolerance, ±10%. Mounting centers. RJ11BL, RJ12. 1"; RJ22BL. 52". 2 oz.

MIL-R-22097 CARBON ELEMENT (*Not available in 200k, 750k)

Stock No.	Mfr's Type	Fig.	Terminal Connections	Values See Table "A"	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
734C0050	RJ11BL	A	Insul. leads	20k-1 meg*	5.56	5.13	4.71	4.34	4.03	3.79
734C0100	RJ11BP	D	PC pins		5.56	5.13	4.71	4.34	4.03	3.79
734C0150	RJ12BL	A	Insul. leads		5.56	5.13	4.71	4.34	4.03	3.79
734C0200	RJ12BP	D	PC pins	20k-1 meg*	5.56	5.13	4.71	4.34	4.03	3.79
734C0250	RJ22BL	A	Insul. leads		7.83	7.25	6.53	6.19	5.80	5.51
734C0300	RJ22BP	D	PC pins		7.83	7.25	6.53	6.19	5.80	5.51

PALIRIUM®-ELEMENT POTENTIOMETERS

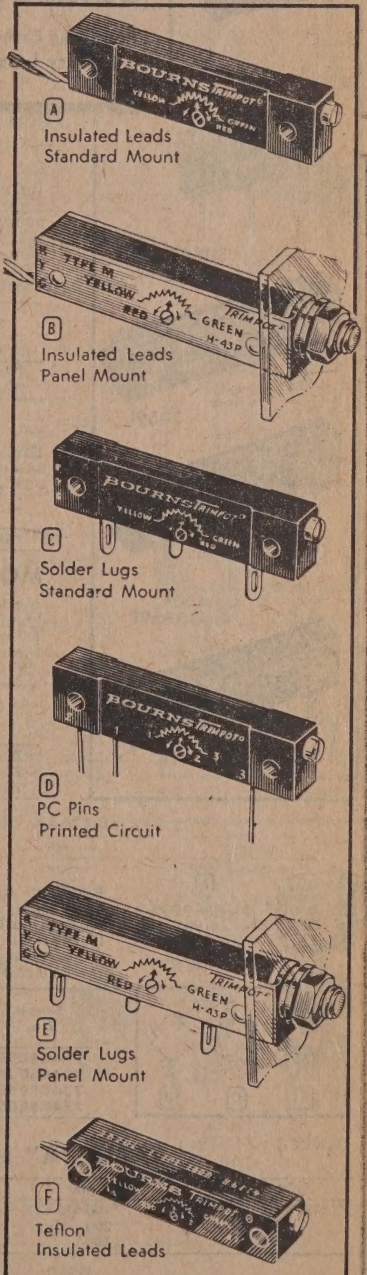
Non-wirewound, infinite, resolution resistance element Palarium®. Humidity-proof. 5 turns. Meets MIL-R-22097B. Max. operating temp., 175° C. Types 3012 and 3052. Tol., ±10%. End settings, 0.1% maximum. Power rating, 1 watt at 70° C. Temperature coefficient: 25° C to 175° C. ±100 ppm/°C. Specify Mfr's Type No. and resistance value desired when ordering. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Terminal Connections	Mtg.	Values See Table "A"	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C2500	3012L	A	Insul. leads	Std.	10 ohms-1 meg	5.94	5.50	4.95	4.70	4.40	4.18
734C2550	3012L	B	Insul. leads	Panel		6.75	6.25	5.63	5.34	5.00	4.75
734C2600	3012P	D	PC pins	PC		5.94	5.50	4.95	4.70	4.40	4.18
734C2650	3012P	. .	PC pins	Panel		6.75	6.25	5.63	5.34	5.00	4.75
734C3250	3052L	A	Insul. leads	Std.	10 ohms-1 meg	5.94	5.50	4.95	4.70	4.40	4.18
734C3300	3052L	B	Insul. leads	Panel		6.75	6.25	5.63	5.34	5.00	4.75
734C3350	3052P	D	PC pins	PC		5.94	5.50	4.95	4.70	4.40	4.18
734C3400	3052P	F	PC pins	Panel		6.75	6.25	5.63	5.34	5.00	4.75

3020L 5-WATT WIREWOUND TRIMPOT® POTENTIOMETERS

Rated 5 watts @ 25°C; 3.75 watts @ 70°C; 2 watts @ 130°C. MIL-R-27208A. Strain-resistant mandrel. Silverweld® wire terminations. Tol., ±5%. Resolution: 1.23% to 0.20%, 100 to 50k ohms. 25 turn adjust. 3/16x¼x1¼". Av. shpg. wt., 2 oz.

Stock No.	Fig.	Terminal Connections	Mtg.	Values See Table "A"	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C2750	F	Insul. leads	Std.	100 ohms-10k	14.04	13.00	11.70	11.10	10.40	9.88
734C2800	F	Insul. leads	Std.	20k and 25k	15.66	14.50	13.05	12.38	11.60	11.02
734C2850	F	Insul. leads	Std.	50k only	16.20	15.00	13.50	12.81	12.00	11.40



A Insulated Leads Standard Mount

B Insulated Leads Panel Mount

C Solder Lugs Standard Mount

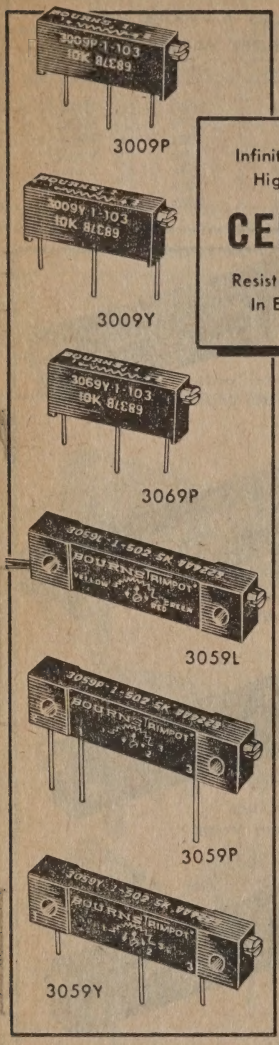
D PC Pins Printed Circuit

E Solder Lugs Panel Mount

F Teflon Insulated Leads

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

BOURNS Cermet Adjustment Pots



Infinite Resolution, High Stability

CERMET®

Resistance Element In Every Type

TRIMMING POTENTIOMETERS WITH HIGH-STABILITY CERMET ELEMENT

- Infinite Resolution Cermet Element for the Stability of a Wirewound
- Low Temperature Coefficient of ±100 ppm/°C Over Entire Range
- Excellent Shock and Vibration Stability • Tinned PC Pins
- Choice of Values from 10 Ohms Through 2 Megohms • 10% Tolerance

Humidity-resistant potentiometers feature Cermet element for infinite resolution with the stability of a wirewound unit. Low temperature coefficient of ±100 ppm/°C over entire resistance range. Outstanding settability of ±0.05%. Wiper assembly idles at both ends of travel, preventing damage from forced adjustment. Excellent shock, vibration and acceleration stability. Tinned PC pins compatible with automated and hand soldering methods (except 3059L with insulated wire leads). Type 3009, 3059, and 3069 have Mil-Spec immersion seal. **Values Available (Specify):** 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k and *750k ohms, 1 megohm and 2 megohms.

MODEL 3009 COMPACT E-Z TRIM® POTENTIOMETERS

Infinite resolution Cermet element with ±0.05% settability. Only .75x.19x.35"; standard or RJ11 pin configuration. Tinned .021" dia. pins for easy printed circuit board fabrication. Mil-Spec immersion seal. Power rating: 0.75 watt at 25°C derated to zero at 125°C. Operating Temp: −55° to +125°C. Temp. coefficient: ±100 ppm/°C maximum. Tol: ±10%. Min. resistance: 2.0% or 1 ohm, whichever is greater. No. of turns, 20 nominal. Insulation resistance: 100 megs min. at 500 VAC. Shaft torque: 5.0 oz.-in. max. PC pin spacing (staggered): standard 3009P, .30" between pin 1 and 2, .20" between 2 and 3; 3009Y (RJ11), .40" between pin 1 and 2, .30 between 2 and 3. 1 oz.

Stock No.	Mfr's Type	Terminal Connections	Values (See below)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C2200	3009P	Std. PC pins	10 ohms	1.94	1.84	1.75	1.71	1.65	1.55
734C2250	3009Y	RJ11 PC pins	to 2 megs	1.94	1.84	1.75	1.71	1.65	1.55

MODEL 3069 COMMERCIAL E-Z TRIM® POTENTIOMETERS

Same as Model 3009 above, but slightly larger size (.75x.35x.25").

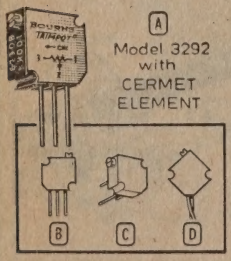
Stock No.	Mfr's Type	Terminal Connections	Values (See below)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C3600	3069P	Std. PC pins	10 ohms-2 megs	1.94	1.84	1.75	1.71	1.65	1.55

MODEL 3059 HIGH-TEMPERATURE TRIMPOT® POTENTIOMETERS

Meet or exceed all requirements of MIL-R-22097, Characteristic C, Style RJ12. Excellent Mil-Spec humidity performance; stable, infinite resolution with Palirium® Cermet element. Power rating: 1.0 watt at 70°C, derated to zero at 150°C. Temp. coefficient: ±150 ppm/°C. Tol: ±10%. No. of turns: 22 (±5). End settings: 2 ohms max. PC pin spacing: 3059P, .70" and .20"; 3059Y .30" and .40" (staggered). Size: 1.25x.19x.32"; two mtg. holes for #2 screw on 1.000" centers. Wt., 1 oz.

Stock No.	Mfr's Type	Terminal Connections	Values* (See below)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C3450	3059L	Insul. leads	10 ohms to 2 megs	3.00	2.85	2.70	2.57	2.43	2.29
734C3500	3059P	Std. PC pins	10 ohms to 2 megs	3.00	2.85	2.70	2.57	2.43	2.29
734C3550	3059Y	RJ11 PC pins	10 ohms to 2 megs	3.00	2.85	2.70	2.57	2.43	2.29

MODEL 3292 TRIMPOT® POTENTIOMETERS WITH CERMET ELEMENT



Excellent stability and performance. Thin line (.150") design in ⅜" square case. Infinite resolution on Palirium® Cermet element. High Performance: .50 watt at +85°C; +175°C maximum operating temperature; 30G vibration; 100G shock; humidity proof all plastic case. Temperature coefficient: ±100 ppm/°C maximum. Meets or exceeds MIL-R-22097 characteristic C. Complete resistance range: 1 ohms to 1 megohm. Wiper idles at both ends to prevent forced adjustment. PC pin spacing. Insulation resistance: 500 volts DC, 1000 megohms minimum. Tol: ±10%. End settings: 1 ohm. Wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Terminal Connections	Values† See table A below	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C6050	3292X	A	PC pins	10 ohms to 1 meg	6.50	6.18	5.85	5.72	5.52	5.18
734C6000	3292W	B	PC pins	10 ohms to 1 meg	6.50	6.18	5.85	5.72	5.52	5.18
734C5950	3292P	C	PC pins	10 ohms to 1 meg	6.50	6.18	5.85	5.72	5.52	5.18
734C5900	3292L	D	Insul. leads	10 ohms to 1 meg	6.50	6.18	5.85	5.72	5.52	5.18

TABLE "A" STOCK VALUES (OHMS) SPECIFY VALUES WANTED †Except 3292

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
10	100	1000	10k	50k	500k
20	200	2000	20k	100k	1 meg
50	500	5000	25k	200k	2 meg†

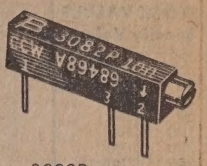
NOTE: §QUANTITY PRICES ARE FOR ONE RESISTANCE VALUE AND TYPE ONLY

Specify Stock No., Mfr's Type and Value When Ordering Potentiometer

Cermet Adjustment Pots BOURNS

PREMIUM-QUALITY TRIMMING POTENTIOMETERS WITH HIGH-STABILITY CERMET® ELEMENTS

Durable sealed, humidity-resistant potentiometers feature Cermet element for infinite resolution with the stability of a wirewound unit. Low temperature coefficient over entire resistance range. Outstanding settability of ±.05%. Wiper assembly idles at both ends of travel, preventing damage from forced adjustment. Excellent shock, vibration and acceleration tolerance. For automated or hand soldering.



3082P

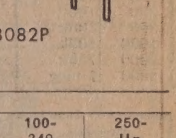
MODEL 3082P MICRO-MINIATURE TRIMPOT® CERMET POTENTIOMETER

World's smallest palirium cermet LSAP meets MIL-R-22097. Rated 0.3 W at 85°C. Temperature coefficient: ±100 ppm/°C. Range: −65 to 150°C. Ten turns nominal. #26 PC pins are .016" dia.; .40" space from pins 1 and 2, .30" from 1 and 3, .10" from 2 and 3. Size, .10x.15x.50". Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Terminal Connections	Values* (See Table "A" below)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C3650	3082P	Std. PC pins	10 ohms to 2 megs	7.70	7.13	6.42	6.09	5.71	5.42

DUAL IN-LINE MODEL 3099 TRIMPOT® CERMET ELEMENT POTENTIOMETER

Standard DIP size (TO-116) pots meet requirements of MIL-R-22097. Feature infinite resolution with ±.05% settability. Low temperature coefficient of ±100 ppm/°C. Completely sealed for temperature and humidity stability. Rated 0.75 W at 25°C. Range: −55 to 125°C. Can be used in IC DIP sockets; installation with IC equipment. Gold-plated IC PC pins. Size, .20x.30x.75". Shpg. wt., 1 oz. See Table "A" below for resistance values.

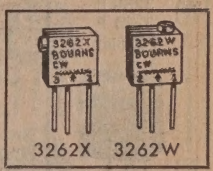


3099

Stock No.	Mfr's Type	Terminal Connections	Values (See Table "A" below)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C3700	3099	IC PC pins	10 ohms to 2 megs	3.75	3.35	3.00	2.80	2.60	2.45

MODELS 3262X AND 3262W TRIMPOT® CERMET POTENTIOMETERS

Miniature cermet potentiomenters meet MIL-R-22097. Rated 0.25 W at 85°C. Extended temperature range of −65 to 175°C. Temperature coefficient: ±100 ppm/°C. 12 turns nominal. "X" has adjustment screw on side. "W" has it on top. .25x.25x.17". Shpg. wt., 0.1 oz. Values below.

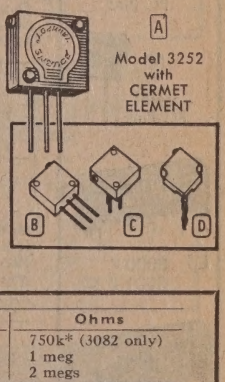


3262X 3262W

Stock No.	Mfr's Type	Terminal Connections	Values (See Table "A" below)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C4300	3262X	Std. PC pins	10 ohms to 1 meg	7.00	6.50	5.84	5.55	5.20	4.94
734C4250	3262W	Std. PC pins	10 ohms to 1 meg	7.00	6.50	5.84	5.55	5.20	4.94

MODELS 3252L, 3252P, 3252W AND 3252X TRIMPOT® CERMET POTENTIOMETERS

Precision potentiometers have Eutectbond™ process terminal pins and sealed plastic case for reliable performance under adverse conditions. Meet requirements of MIL-R-22097. Have low temperature coefficient of ±100 ppm/°C. High power dissipation: 1 watt at 70°C. Maximum contact resistance variation is only 1.6%. Size of shaft head permits easy adjustment with standard screwdriver. Size, .5x.5x.19". Series "L" has wire leads. Series "W" and "X" are side-mounted types. Series "P" is flat-mounted type. Shpg. wt., 0.1 oz. Complete list of resistance values available—see table below.



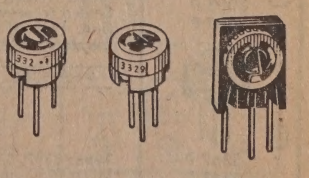
Stock No.	Mfr's Type	Fig.	Terminal Connections	Values† (See Table "A" below)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C4050	3252X	A	Std. PC pins	10 ohms to 2 megs	5.62	5.35	5.06	4.77	4.50	4.05
734C4000	3252W	B	Std. PC pins	10 ohms to 2 megs	5.62	5.35	5.06	4.77	4.50	4.05
734C3950	3252P	C	Std. PC pins	10 ohms to 2 megs	5.62	5.35	5.06	4.77	4.50	4.05
734C3900	3252L	D	Stranded wire	10 ohms to 2 megs	5.62	5.35	5.06	4.77	4.50	4.05

TABLE "A" STOCK VALUES (OHMS) SPECIFY VALUES WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
10	100	1000	10k, 20k	100k	750k* (3082 only)
20	200	2000	25k† (3252 only)	200k	1 meg
50	500	5000	50k	500k	2 megs

MODELS 3329H, 3329P AND 3329W SINGLE-TURN TRIMPOT® CERMET POTENTIOMETERS

Low-priced palirium cermet single-turn potentiometers meet MIL-R-22097. Extended temperature range of −55 to 150°C. Rated 0.5 W at 70°C. Sealed to withstand soldering and immersion process. Temperature coefficient: ±100 ppm/°C. "H" and "P" styles are .25" dia. by .18" h. "W" side-mount is .245x.290x.375". Wt. 0.1 oz. Values below



3329P 3329H 3329W

Stock No.	Mfr's Type	Terminal Connections	Values (See Table "B" below)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C6450	3329H	Std. PC pins	10 ohms to 1 meg	1.75	1.66	1.57	1.50	1.45	1.40
734C6460	3329P	Std. PC pins	10 ohms to 1 meg	1.75	1.66	1.57	1.50	1.45	1.40
734C6470	3329W	Std. PC pins	10 ohms to 1 meg	2.50	2.38	2.25	2.15	2.07	2.00

TABLE "B" STOCK VALUES (OHMS) SPECIFY VALUES WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
10	100	1000	10k	100k	1 meg
20	200	2000	20k	200k	.....
50	500	5000	50k	500k	.....

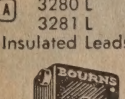
§NOTE: QUANTITY PRICES ARE FOR ONE RESISTANCE VALUE AND TYPE ONLY

BOURNS Adjustment Potentiometers

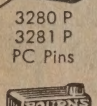
TABLE A—STOCK VALUES Specify Values

Ohms	Ohms
10	10k
20	20k
50	25k
100	50k
200	100k
500	200k
1000	500k
2000	750k
5000	1 meg

A 3280 L
3281 L
Insulated Leads

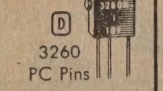


B 3280 P
3281 P
PC Pins

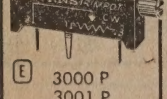


C 3280 W 3281 W
PC Pins

D 3260
PC Pins



E 3000 P
3001 P



F 3005 P
3007 P

G 3367 P
3368 P

H 3367 S
3368 S

MICROMINIATURE HUMIDITY-PROOF POTENTIOMETERS

Type 3280. Humidity-proof wire wound Trimpot potentiometer with relatively high power handling capabilities in a package only ⅜" square. Rated @ 1 watt at 70°C, ½-watt at 125°C. Usable to 175°C. High resolution, 1.25% to 0.11% from 10 to 50k ohms respectively. 25-turn screwdriver adjustment with positive acting end stops and clutch. Meets or exceeds MIL-R-27208B specs for humidity, shock, vibration and dielectric strength. Size: .150" thick by ⅜" square. Shpg. wt., 2 oz.

Type 3281. Identical in appearance, dimensions, and mounting arrangements to 3280. Power rating 0.50 watt at 50°C. Minimum insulation resistance at 500 VDC, 100 megs. Resiston carbon element provides values up to 1 meg. 25-turn mechanical worm gear with positive stops. Automatic clutch prevents damage to stop mechanism. Dielectric strength per MIL-R-22097C. MIL specs for sand, dust, salt, spray, and moisture resistance. —65°C to +150°C. Wt., 2 oz. *Not avail. in 25k.

Stock No.	Mfr's Type	Fig.	Mounting	Values—See Table A, Left	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C4350	3280L	A	Standard	10 ohms-10k	7.56	7.00	6.30	5.98	5.60	5.32
734C4400	3280L	A	Standard	20k, 25k	9.18	8.50	7.65	7.26	6.80	6.46
734C4450	3280L	A	Standard	50k only	9.72	9.00	8.10	7.69	7.20	6.84
734C4800	3281L	A	Standard	20k-1 meg*	7.56	7.00	6.30	5.98	5.60	5.32
734C4500	3280P	A	PC	10 ohms, 10k	7.56	7.00	6.30	5.98	5.60	5.32
734C4550	3280P	B	PC	20k, 25k	9.18	8.50	7.65	7.26	6.80	6.46
734C4600	3280P	B	PC	50k only	9.72	9.00	8.10	7.69	7.20	6.84
734C4850	3281P	B	PC	20k-1 meg*	7.56	7.00	6.30	5.98	5.60	5.32
734C4650	3280W	C	PC	10 ohms-10k	7.56	7.00	6.30	5.98	5.60	5.32
734C4700	3280W	C	PC	20k, 25k	9.18	8.50	7.65	7.26	6.80	6.46
734C4750	3280W	C	PC	50k only	9.72	9.00	8.10	7.69	7.20	6.84
734C4900	3281W	C	PC	20k-1 meg*	7.56	7.00	6.30	5.98	5.60	5.32

Model 3260 is a humidity-proof, microminiature potentiometer which provides resistance values up to 20k ohms in a package only ¼" square. All plastic sealed case protects against liquids and potting compounds. 11-turn mechanical adjustment. Positive end stops at both ends of travel and clutch wiper action. Power rating is 0.2 watt at 70°C. Operating temperature range, —65°C to +175°C. Exceeds MIL specs for shock, vibration, salt, sand, dust, etc. Dielectric strength per MIL-R-27208A. Resistance tol., ±5%. Insulation resistance at 500 VDC, 1000 meg minimum. Resolution—1.68% at 10 ohms to .23% at 23k. **Specify Stock No. and Resistance when ordering.** Size: .25x.25x.25". Av. shpg. wt., 2 oz.

734C4100	3260H	D	PC	10-1000	7.50	6.95	6.25	5.93	5.56	5.28
734C4150	3260H	D	PC	2000, 5000	8.25	7.64	6.88	6.53	6.11	5.81
734C4200	3260H	D	PC	10k and 20k	10.50	9.72	8.75	8.31	7.78	7.39

15-TURN MICROMINIATURE, HIGH-TEMPERATURE, HUMIDITY-PROOF POTS

Type 3000P. Microminiature Trimpot with high temperature, sealed plastic case usable to +175°C. Precision wirewound element. 15-turn screwdriver adjustment. Meet MIL-R-27208B specs for humidity, vibration and shock. Silverweld® termination. Power rating, ½ watt at 70°C. Resolution: 1.7% to 0.29%, 50 to 20k. Resistance tol. ±10%. PC mtg. ¾x5/32x5/16".

Type 3001P. Same in appearance, dimensions and mounting arrangement as 3000P, but is a carbon pot usable to +150°C. Resiston® carbon element. Power rating, 0.2 watt at 70°C. Meets MIL specs for humidity, shock and vibration. Wiper assembly idles at end of travel. Infinite resolution. Res. tol. ±20%. *Not avail. in 25k. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Mounting	Values—See Table A, Above	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C2050	3000P	E	PC	50, ohms-10k	9.72	9.00	8.10	7.68	7.20	6.84
734-2100	3000P	E	PC	20k only	10.80	10.00	9.00	8.54	8.00	7.60
734C2150	3001P	E	PC	20k, 1 meg*	9.18	8.50	7.65	7.26	6.80	6.46

20-TURN MICROMINIATURE E-Z TRIM® POTENTIOMETER

Model 3007. Microminiature potentiometer with high temperature sealed plastic case, usable to 125°C. Precision wirewound element. 20-turn screwdriver adjustment. Meet MIL-R-27208B specs for humidity, vibration and shock. Power rating, 1 watt at 40°C. Resolution: 1.6% to 0.2%, 50 to 20k. Resistance tol. ±10%. Standard PC mounting. .75x.16x.31." (Prices are for one resistance value only). Shpg. wt., 2 oz.

735C5400	3007P	F	PC	50 ohms-20k	1.75	1.62	1.46	1.39	1.30	1.23

20-TURN SUBMINIATURE E-Z TRIM® POTENTIOMETER

Model 3005. Commercial, subminiature, wirewound potentiometers. 20-turn mechanical screwdriver adjustment. Wiper assembly idles at both ends of travel. Sealed to prevent contamination. Silverweld® termination. Printed-circuit pin terminals. Meets MIL-STD-202 humidity specifications. Resistance range: 10 to 25k ohms. Resistance tolerance, ±10%. Insulation resistance, 500 VDC, 100 megohm minimum. Resolution: 0.2 to 1.7%. Power rating: 40°C ambient at 1.0 watt; 125°C amb. at 0 watt. Operating temperature range: —55°C to 125°C. Temp. coeff., 50PPM/°C nom, 100PPM/°C max. Size: .75x.16x.31".

735C5300	3005P	F	PC	10 ohms-25k	2.00	1.85	1.75	1.72	1.65	1.55

1-TURN SUBMINIATURE TRIMPOT® POTENTIOMETERS

Types 3367, 3368. Type 3367 is wirewound pot rated ½ W to 70°C, usable to 105°C ambient. Resolution 1.3 to 0.19% from 10 to 20,000 ohms respectively. ±5%. Type 3368 is Resiston® carbon pot rated ¼ W to 50°C, usable to 105°C. Infinite resolution. ±20% tolerance.

Both types meet steady state humidity test with under 1% wiper shift under extreme vibration. Body 3/16x½" dia. S types have #12-18 bushings and nut. 9/32" long. **Specify value wanted and Mfr's type.** Shpg. wt., 2 oz. *Not available in 25k.

Stock No.	Mfr's Type	Fig.	Terminal	Values—See Table A, Above	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C6490	3367S	G	Lugs	10 ohms-20k	5.67	5.25	4.73	4.48	4.20	3.99
734C6510	3368S	H	Lugs	20k-1 meg*	6.75	6.25	5.63	5.34	5.00	4.75
734C6480	3367P	G	PC	10 ohms-20k	4.86	4.50	4.05	3.84	3.60	3.42
734C6500	3368P	H	PC	20k-1 meg*	5.94	5.50	4.95	4.70	4.40	4.18

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

Adjustment Potentiometers BOURNS

SUBMINIATURE AND MICROMINIATURE TRIMPOT® POTENTIOMETERS

1-TURN MICROMINIATURE TRIMPOT® POTENTIOMETERS

ype 3300. Humidity-proof, single-turn, wirewound otentiometers. Power rating: ½-watt at 70°C mbient; ¼-watt at 110° ambient. Excellent shock nd vibration stability. Meet all MIL-R-27208A pecifications. Low residual end setting resistance)-1.0%). Continuity is maintained through full iechanical range. Silverweld® termination elimi- nates vulnerable single-wire termination. Resistance tolerance, ±5%. Electrical adjustment slot .025" wide. 3300P has No. 26 gold-plated printed circuit pins .016" dia. 3300S has gold-plated solder lugs 5/32" long. 3/16x5/16" dia. with ¼" 10-32 bushing on 3300S, Quantity prices are for one resistance value and type only. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Terminal Connections	Values (Ohms) See Table A	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C6100	3300P	C	PC pins	10 ohms-10k	5.94	5.50	4.95	4.70	4.40	4.18
734-6150	3300P	C	PC pins	20k only	7.56	7.00	6.30	5.98	5.60	5.32
734C6300	3300W	A	PC pins	10 ohms-10k	5.94	5.50	4.95	4.70	4.40	4.18
734-6350	3300W	A	PC pins	20k only	7.56	7.00	6.30	5.98	5.60	5.32
734C6200	3300S	B	Solder lugs	10 ohms-10k	8.91	8.25	7.43	7.05	6.60	6.27
734-6250	3300S	B	Solder lugs	20k only	10.53	9.75	8.78	8.33	7.80	7.41

ype 3301. Humidity-proof, single-turn potentio- ieters with high temperature Resiston carbon lement. Power rating, 0.25 watts @ +70°C. Resistance tolerance, ±20%. Same size and mounting characteristics as 3300 above. Quantity prices for one value and type only. Specify values.

734C6380	3301P	C	PC pins	10k-1 meg	5.94	5.50	4.95	4.70	4.40	4.18
734C6400	3301W	A	PC pins	10k-1 meg	5.94	5.50	4.95	4.70	4.40	4.18
734C6390	3301S	B	Solder lugs	10k-1 meg	8.91	8.25	7.43	7.05	6.60	6.27

MODEL 3305 COMMERCIAL SINGLE TURN POT

Meets MIL-STD-202B humidity insulation. Sealed o prevent contamination. Silverweld termination lloys with multiple resistance wires. Stops pro- ided at each end of travel. 3305P, printed circuit pins. 3305W, printed circuit pins (side adjust). Operating range, —55°C to +125°C. Power rating 0.5 watt at 25°C. Tol., ±5%. Quantity prices for one value and type only. Av. shpg. wt., .02 oz.

Stock No.	Mfr's Type	Fig.	Terminal Connections	Values (See Table A)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C6410	3305P	D	PC pins	50 ohms-5k	1.75	1.68	1.61	1.56	1.47	1.37
734-6420	3305P	D	PC pins	10k	2.00	1.92	1.84	1.78	1.68	1.57
734-6421	3305P	D	PC pins	20k	2.50	2.40	2.30	2.23	2.10	1.96
734C6430	3305W	E	PC pins	50 ohms-5k	2.25	2.16	2.07	2.00	1.89	1.77
734-6440	3305W	E	PC pins	10k	2.50	2.40	2.30	2.23	2.10	1.96
734-6441	3305W	E	PC pins	20k	3.00	2.88	2.76	2.67	2.52	2.36

SERIES 3282/3290 TRIMPOT® POTENTIOMETERS

MODEL 3282 NON-WIREWOUND ELEMENT

ficrominiature potentiometers, 3/8" square. Stable, finite resolution Palirium element. Rated 1 watt t 85°C. Max. operating temp., 175°C. Meets MIL-R-22097. Single mounting hole; printed circuit pins or insulated leads. Positive end stops. Tol., ±10%. Quantity prices for one value only. 2 oz.

Stock No.	Mfr's Type	Fig.	Terminal Connections	Values (See Table A)	EACH§ 1-9	10-24	25-49	50-99	100-249	250-Up
734C5000	3282H	F	PC pins	10 ohms-1 meg. (Except 200k, 750k)	6.50	6.18	5.85	5.72	5.52	5.18
734C5150	3282W	G	PC pins		6.50	6.18	5.85	5.72	5.52	5.18
734C5100	3282P	H	PC pins		6.50	6.18	5.85	5.72	5.52	5.18
734C5050	3282L	J	Ins. wire		6.50	6.18	5.85	5.72	5.52	5.18

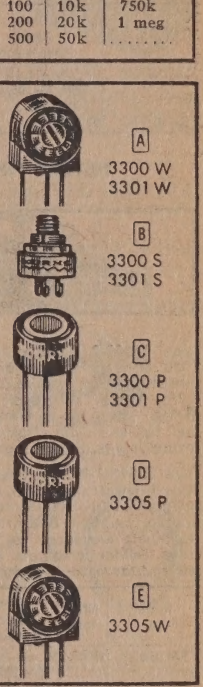
MODEL 3290 WIREWOUND ELEMENT

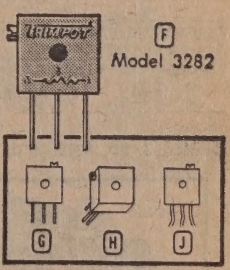
lumidity-proof wire-wound potentiometer only 50" thick, 3/8" square. Rated 1 watt at 70°C. fax. operating temperature, 175°C. Meets MIL-R-27208. Single center mounting hole; printed circuit pins or insulated leads. Tol., ±5%. Quantity prices for one value, type only. 2 oz.

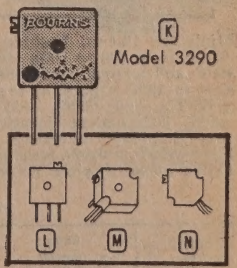
734C5250	3290H	K	PC pins	10 ohms-10k	7.33	6.79	6.11	5.80	5.43	5.16
734C5300	3290H	K	PC pins	20k, 25k	8.75	8.10	7.30	6.92	6.48	6.16
734-5350	3290H	K	PC pins	50k only	10.10	9.35	8.42	7.99	7.48	7.11
734C5400	3290L	N	Ins. wire	10 ohms-10k	7.33	6.79	6.11	5.80	5.43	5.16
734C5450	3290L	N	Ins. wire	20k, 25k	8.75	8.10	7.30	6.92	6.48	6.16
734-5500	3290L	N	Ins. wire	50k only	10.10	9.35	8.42	7.99	7.48	7.11
734C5550	3290P	M	PC pins	10 ohms-10k	7.33	6.79	6.11	5.80	5.43	5.16
734C5600	3290P	M	PC pins	20k, 25k	8.75	8.10	7.30	6.92	6.48	6.16
734-5650	3290P	M	PC pins	50k only	10.10	9.35	8.42	7.99	7.48	7.11
734C5700	3290W	L	PC pins	10 ohms-10k	7.33	6.79	6.11	5.80	5.43	5.16
734C5750	3290W	L	PC pins	20k, 25k	8.75	8.10	7.30	6.92	6.48	6.16
734-5800	3290W	L	PC pins	50k only	10.10	9.35	8.42	7.99	7.48	7.11

TABLE A—STOCK VALUES SPECIFY VALUES WANTED

Ohms	Ohms	Ohms
10	1000	100k
20	2000	200k
50	5000	500k
100	10k	750k
200	20k	1 meg
500	50k	.....







BOURNS PART NUMBERING SYSTEM

3011 L 10 253 M

Basic Model | Term. Style | Modifying Number | Resistance Code | Panel Mount

Basic Model: Three or 4 digits designate the various models available.

Terminal Styles: "L," insulated wire leads; "S," solder terminals; "P", printed circuit pins; "W," bare-wire leads.

Modifying Number: —1, is std. model. —2, is std. WW with values of 100k. —XX, is 2 digit nonstandard basic model.

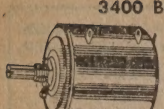
Resistance Code (in Ohms): Three digit code—the first two digits represent the significant numbers. The last digit number represents the number of zeros that follow the first two numbers.

Panel Mount Designator: For panel mount feature add "M" to complete the part no.

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

BOURNS Precision Controls

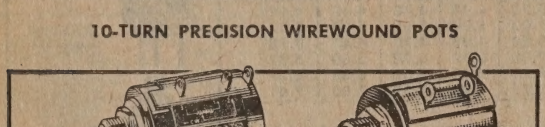
3400 BUSHING-MOUNT 10-TURN POT



Excellent wiper stability, resolution. Silverweld® wire termination. Moisture-resistant. Rated 5 watts at 40°C. Temp. range —65 to +105°C. Meets MIL-R-12934C humidity cycling. 1 13/16" dia. body is 1¾" long. ¼" shaft. ⅜"-32 bushing. Solder lug terms. **Quantity prices for one value and type only.** Wt., 7 oz.

Stock No.	Ohms (Specify Value Wanted)	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
734C6530	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k	11.00	10.00	9.50	9.00	8.50	8.00
734-6540	500k only	20.90	19.00	18.05	17.10	16.15	15.20

10-TURN PRECISION WIREWOUND POTS



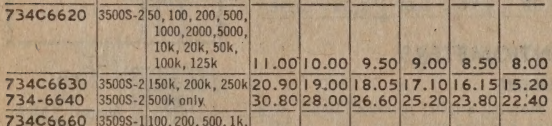
3509 3500S-2

Type 3500S-2. Steady-state humidity proof. Rated 2 watts at 70°C. Operating temperature range, −65° to +125°C. Resist shock, vibration, sand, dust, fungus. Resistance tolerance, ±3%; linearity, 0.2%. Molded all-plastic case with shaft seal. Resolution: .049% to .005%—50 ohms to 500k, respectively. Has 13/16" shaft with bushing. ¼" shaft dia. Bushing. ⅜-22. Body, 1x7/8" dia. Silverweld® terminations. Solder lug terminals.

Type 3509S-1-RC. Precision 10-turn pot has excellent wiper stability. Rated 2 watts at 25°C. Operating range, −55° to +105°C. Resolution. .044 to .006% from 100 ohms to 100k, respectively. Tolerance, ±5%. Body, 1⅛x⅞" dia. Non-metallic screwdriver-slot shaft measures 13/16" long with bushing. Silverweld® terminations. Solder terminals. **Specify value wanted. Quantity prices are for one resistance value and type only.** Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Ohms (Specify Value Wanted)	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
734C6620	3500S-2	50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 125k	11.00	10.00	9.50	9.00	8.50	8.00
734C6630	3500S-2	150k, 200k, 250k	20.90	19.00	18.05	17.10	16.15	15.20
734-6640	3500S-2	500k only	30.80	28.00	26.60	25.20	23.80	22.40
734C6660	3509S-1	100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k	6.55	5.95	5.66	5.36	5.06	4.76

SERIES 3700 AND 3707—½" 10-TURN POTENTIOMETERS



Miniature 10-turn bushing mount pots. Resolution, .072% to .014% from 100 to 100k respectively. Type 3700 rated 1 watt at 70°C and is steady-state humidity-resistant; Type 3707 rated 1 watt at 40°C. Operating temperature range; Type 3700, −65° to +125°C; Type 3707, −55° to +105°C. Resistance tolerance, ±5%. Independent linearity: Type 3700 ±0.59%; Type 3707 ±1.0%. Molded all-plastic case with shaft seal and solder lugs. Silverweld® multiple resistance wires eliminate single wire terminations. **Quantity prices for one value and type only.** Shpg. wt. 4 oz.

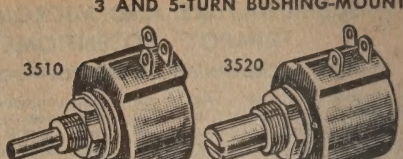
TYPE 3700

Stock No.	Ohms (Specify Value Wanted)	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
734C6820	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k	26.95	24.50	23.27	22.05	20.82	19.60

TYPE 3707

734C6840	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k and 100k	18.98	17.25	16.39	15.53	14.67	13.80

3 AND 5-TURN BUSHING-MOUNT POTS



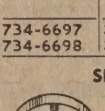
- Humidity Resistant
- Temp. Rang —65° to +125°C
- Individually Inspected

Types 3510S, 3520S. Compact, sealed wirewound pots with hig humidity resistance. Meet MIL-STD-202 for steady-state humi ity, vibration and shock; meet MIL-E-5272C for sand, dust, fungu Individual inspection of each potentiometer is carried out to gua antee physical and electrical characteristics.

Type 3510S is a 3-turn pot rated @ 1 watt to 70°C. Resolution is to .019% from 200-ohm to 100k models respectively. ⅞" dia. bo is .557" long with 1 1/16" long bushing and shaft. ⅛" dia. shaft wit ¼" bushing. Type 3520S is a 5-turn pot rated @ 1½ watts to 70° Resolution is .077 to .012 up to 250k models. ⅞" diameter body .678" long with 13/16" long bushing and shaft, ¼" dia. shaft with ⅜ bushing. Tol. ±3%. Solder lugs. **Specify values. Quantity prices a for one resistance value and type only.** 3 oz.

Stock No.	Mfr's Type	Ohms (Specify Value Wanted)	EACH § 1-4	5-9	10-24	25-49	50-99	100-Up
734C6675	3510S	25, 50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k	16.50	15.00	14.25	13.50	12.75	12.0
734-6685	3510S	100k only	36.30	33.00	31.35	29.70	28.05	26.4
734C6686	3520S	50, 100, 200, 500, 1000, 5000, 10k, 20k, 50k, 75k	14.85	13.50	12.82	12.15	11.47	10.8
734-6697	3520S	100k only	24.75	22.50	21.37	20.25	19.12	18.0
734-6698	3520S	250k only	34.65	31.50	29.92	28.35	26.77	25.2

SERIES 490 30-TURN COUNTING DIALS



H-491 H-494

For use with Bourns precision p tentiometers or other devices rota ing up to 30 turns. Easy-to-re white numerals on black bac ground—even on types with cle anodized body. Read one part 1000 for ten turns. Compact desi requires only 1" diameter par space. Mount directly to potentiometer shaft to eliminate backlas Reliable locking device on units with brake secures dial witho shift in setting. Fit ¼" diameter bushing except H-491-3, H-492 H-493-3 and H-494-3 fit ⅜" bushing. 1" diameter. **Quantity pric are for one type only.** Shpg. wt., 4 oz.

Stock No.	Mfr's Type: With Brake	Mfr's Type: No Brake	Fits Shaft Dia.	Finish	EACH § 1-9	10-24	25-99	100-249	250 U
734-0020	.....	H-491-1	3/32"	Clear	7.05	6.70	6.35	5.99	5.6
734-0023	H-492-1	.....	3/32"	Clear	7.25	6.89	6.53	6.16	5.8
734-0026	.....	H-493-1	3/32"	Black	7.25	6.89	6.53	6.16	5.8
734-0029	H-494-1	.....	3/32"	Black	7.40	7.03	6.66	6.29	5.9
734-0021	.....	H-491-2	⅛"	Clear	7.05	6.70	6.35	5.99	5.6
734-0024	H-492-2	.....	⅛"	Clear	7.25	6.89	6.53	6.16	5.8
734-0027	.....	H-493-2	⅛"	Black	7.25	6.89	6.53	6.16	5.8
734-0030	H-494-2	.....	⅛"	Black	7.40	7.03	6.66	6.29	5.9
734-0022	.....	H-491-3	¼"	Clear	6.75	6.41	6.08	5.74	5.4
734-0025	H-492-3	.....	¼"	Clear	6.95	6.60	6.26	5.91	5.5
734-0028	.....	H-493-3	¼"	Black	6.95	6.60	6.26	5.91	5.5
734-0031	H-494-3	.....	¼"	Black	7.15	6.79	6.44	6.08	5.7

3650 10-TURN DIGITAL KNOBPOT®

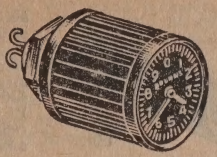
- Integral Digital Readout, Knob and Pot
- Accuracy—Output Within 0.1% of Reading
- Repeatability—Within 0.05% Voltage Ra

MIL-R-12934 for dielectric strength, vibratic etc. MIL-R-5272 for sand, dust, fungus. Silv weld® term. Panel, solder lugs. Tol., ±3 Res., .053 for 100 ohms to .004% for 50 ohms. 2.5 watts at 25°C. 1¼" knob; 1 flange. For panels ½-¼". Panel hole, 1.3 **Quantity prices are for one resistance value a type only.** 4 oz.

Stock No.	Ohms (Specify Value Wanted)	EACH § 1-9	10-24	25-49	50-99	100 U
734C6780	100, 200, 500, 1000, 2000 5000, 10k, 20k, 50k, 75k 100k, 125k, 200k, 250k	28.50	26.39	23.75	22.54	21.
734-6790	500k only	39.25	36.35	32.71	31.04	29.(

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

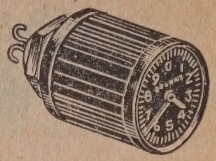
TYPE 3600S KNOBPOT® POTENTIOMETER



his 10-turn unit has a readout dial ith small hand that indicates number completed turns and a large hand that ycles once every turn. Clock face has xcellent readability with settings re- eatable within a 0.1% voltage ratio. hasing of readout to pot is ±0.5%. Re- uires virtually no back-of-panel space -only bushing and terminals are located ehind panel. Front panel space required only ¾" diameter by 1" deep. Unit uses only two holes for mount- g—1³⁄₃₂" hole for bushing and ⁵⁄₆₄" hole for locking pin. Power itings: 1½ watts at 25°C and ¾ watt at 75°C. Meets MIL-STD-202B ecs for humidity, dielectric strength. **Quantity prices are for one esistance value only.**

Stock No.	Mfr's Type	Values Available (Specify Value Wanted)	EACH§ 1-9	10-24	25-49	50-99	100-Up
34C6720	3600S	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k ohms	23.00	21.30	19.17	18.19	17.04
34C6730	3600S	200k, 250k ohms	34.00	31.48	28.34	26.89	25.18

TYPE 3640S KNOBPOT SENIOR POTENTIOMETER



Ten-turn pot, knob and readout dial in one small package. Repeatability, ±0.05% voltage ratio. Dial setting accuracy (including linearity) ±0.20% for 100 and 200 ohms; ±0.15%, 500-2k; ±0.10%, 10k to 500k. Tol. ±3%. Rotation, 3600°. 1000-megohm insulation res. at 500 VDC. Ambient temp. range, −65°C to +85°C. Rated 2½ watts at 25° Centigrade Silverweld® terminations. Self-locking for stability during vibration. 1¼" dia., 1½" long. Requires ¹³⁄₃₂" hole for bushing, ⁵⁄₆₄" for locking pin. Hook terminals. Meet MIL-STD-202B specs for humidity and dielectric strength. Also meet military specs for vibration, shock, load life. **Quantity prices are for one resistance value only.**

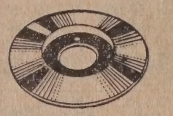
Stock No.	Mfr's Type	Values Available (Specify Value Wanted)	EACH§ 1-9	10-24	25-49	50-99	100-Up
734C6740	3640S	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 250k ohms	23.00	21.30	19.17	18.19	17.04
734-6750	3640S	500k only	34.00	31.48	28.34	26.89	25.18

ACCESSORIES FOR 3600S KNOBPOT

93 Color Snap-Rings. Provide lor-coding or style for 3600S nobpot. Durable, high tem- rature plastic. Available in d, yellow, blue, green or white— ecify choice. Wt., 2 oz.
34C0014. 1-24.....Each .35
-Up.....Each .30

H-103 Brake. For use with 3600S Knobpot listed above. Locks control setting. Snaps on easily —prevents control from slipping or shifting out of adjustment. Wt., 2 oz.
734-0019. 1-24.....Each 1.25
25-Up.....Each 1.07

H-95 Skirt. For use with 3600S Knobpot listed above. Highly polished, stainless steel skirt lends highly attractive appearance to assembly. 1½" diameter. Wt., 2 oz.
734-0015. 1-24.....Each 1.50
25-Up.....Each 1.25



SKIRT

ACCESSORIES FOR 3640S KNOBPOT

99 Color Snap-Rings. Provide lor coding or higher style for e 3640S Knobpot. Durable, gh temperature plastic. Avail- le in red, yellow, blue, green white—specify choice when or- ring. Wt., 2 oz.
34C0018. 1-24.....Each .35
-Up.....Each .30

H-97 Brake. For use with 3640S Knobpot potentiometers listed above. Locks control setting in any desired position. Easy to install—prevents control setting from slipping or shifting out of adjustment. Wt., 2 oz.
734-0016. 1-24.....Each 1.25
25-Up.....Each 1.07

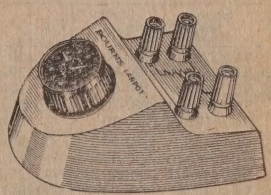
H-98 Skirt. For use with 3640S Knobpot listed above. Highly polished stainless steel. Imparts an attractive modern appearance to panel. Mounts securely through bushing and locking pin. 2½" diameter. Wt., 2 oz.
734-0017. 1-24.....Each 3.77
25-Up.....Each 3.43

BRAKE

RING

TYPE 3660B 10-TURN PRECISION LABPOT® POTENTIOMETER

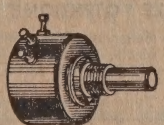
lf-contained, 10-turn, dial readout precision pot for laboratory e. Rapid setting of precise voltages to achieve null in a bridge cuit, or to introduce known resistance. Large 5-way binding st terminals permit hook-up of any lead. Rugged case of heavy ty plastic. Fused wiper circuit for protection. Resistance: 100 ohms (.049% resolution); 1000 ohms (.022%); 10k (.010%); 100k (.008%). Tolerance: ±1%. Power rating: 2.5 watts. Size: 2¼x3½x4⅝". Wt., 14 oz.



Stock No.	Mfr's Type	Values (Ohms) Specify	EACH§ 1-4	5-9	10-24	25-49	50-99	100-Up
734C6800	3660B	100, 1000, 10k, 100k	45.00	42.66	38.39	36.43	34.13	32.42

TYPE 3438 SINGLE TURN POT

ecision pot has Infinitron® element for entially infinite resolution. Power: 1 watt 40°C. Tolerance: ±20%. Operating temp: 5° to +105°C. Temp. coeff.: 200PPM/°C x. Size: 1⅛" dia. x .71"; shaft, ⅛" including 32 bushings ⅜" long. Gold plated turret ter- nals. Available in 100, 200, 500, 1000, 2000, d 5000 ohms; 10k, 20k and 50k ohms. Shpg. wt., 4 oz.



Stock No.	Mfr's Type	Values (See Copy)	EACH§ 1-4	5-9	10-24	25-49	50-99	100-Up
4C6600	3438S	100 ohms-50k	13.75	12.50	11.25	10.00	9.50	9.00

TYPE 3501 10-TURN POT

Infinitron® element for essentially infinite resolution. Meets MIL-R-39023 humidity cycling requirements. Power: 2 watts at 70°C. Tolerance: ±10%. Operating temp.: −55° to +125°C. Temp. coeff.: 200PPM/°C max. Size: ⅞" dia.x¹⁵⁄₁₆". Gold-plated turret terminals. Available in values of 1000, 2000, and 5000 ohms; 10k, 20k, 50k, 100k, 200k and 500k ohms. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Values (See Copy)	EACH§ 1-4	5-9	10-24	25-49	50-99	100-Up
734C6650	3501S	1000 ohms-500k	16.50	15.00	14.25	13.50	12.75	12.00

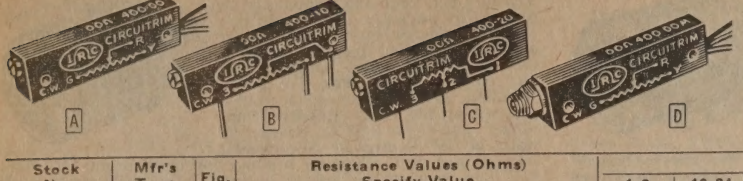
MOUNTING ACCESSORIES Av. shpg. wt., 1 oz.

ock No.	Type	Used with These Types	Description	1-24, EA.	25-Up, EA.
4-0001	H-01	All types	1½", 2-56 round head screws; for mtg., 4 or 5 units	.02	.02
4-0002	H-02	All types	12" long, 2-56 stainless rod; for group mtg., any number units	.80	.80
4-0003	H-04	3250, 3251, 3280, 3281	#1-72x1" machine screw for mounting	.03	.03
4-0004	H-05	3250, 3251, 3280, 3281	Hex nut for use with above screw	.05	.05
4-0005	H-11E	200, 207, 208, 209, 215, 224, 235, 236,	End mounting bracket for types having 1" mtg. ctrs.	.20	.15
4-0006	H-12S	260, 271-274, 3010-3012, 3051-3053	Side mounting bracket for types having 1" mtg. ctrs.	.20	.15
4-0008	H-15S	3067, 3068	Side mounting bracket	.20	.15
4-0009	H-21E	220	End mounting bracket for types having ¾" mtg. ctrs.	.20	.15
4-0010	H-22S	220	Side mounting bracket for types having ¾" mtg. ctrs.	.20	.15
4-0011	H-25	3250, 3251	Stainless stacking straps. For ½" square types.	.05	.04
4-0012	H-26S	3250, 3251	Stainless side mounting bracket. For ½" square types.	.20	.15
4-0013	H-90	All types	Screwdriver for setting panel-mount models. With clip.	.35	.30

NOTE: §QUANTITY PRICES FOR ONE RESISTANCE VALUE AND TYPE ONLY

Trimmer Potentiometers

SERIES 400 WIREWOUND TRIMMER POTENTIOMETERS



MIL-R-27208. Absolute min. resistance. 1 ob or 0.2%. Tol. ±5%. 1 W at 70° C. 22 turn .1 oz.-in. to 8 oz.-in. −65°C to +150°C; e efficient, ±50 PPM/°C. Insul. res., 10 meg. Diel. strength, 1000 VAC. Type 0(#30 AWG Teflon insul. leads; Type 10-in-li PC pins (MIL RT-12); Type 20-staggered p (MIL-RT-11). 1.25x.190x.315". Two .093" ameter mounting holes. Wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Resistance Values (Ohms) Specify Value	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-U
960C3550	400-00	A	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.75	4.27	3.96	3.73	3.56	3.40	3.2
960-3600	400-00	A	20k only	5.23	4.70	4.36	4.11	3.93	3.74	3.5
960-3601	400-00	A	50k only	5.71	5.13	4.76	4.48	4.27	4.08	3.9
960C3650	400-10	B	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.75	4.27	3.96	3.73	3.56	3.40	3.2
960-3651	400-10	B	20k only	5.23	4.70	4.36	4.11	3.93	3.74	3.5
960-3652	400-10	B	50k only	5.71	5.13	4.76	4.48	4.27	4.08	3.9
960C3700	400-20	C	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.75	4.27	3.96	3.73	3.56	3.40	3.2
960-3701	400-20	C	20k only	5.32	4.70	4.36	4.11	3.93	3.74	3.5
960-3702	400-20	C	50k only	5.71	5.13	4.76	4.48	4.27	4.08	3.9

SERIES 450 METAL-GLAZE TRIMMER POTENTIOMETERS

TYPES 450-00, 450-10, and 450-20. Infinite resolution. Power rating is ½ watt at 70°C. Operates from −55°C to +150°C. Meet MIL-R 22097. Size RJ-12. Has 24-turn leadscrew adjustment, humidity-proof construction. Excellent high frequency characteristics. Insulation resistance, 1000 megohms; dielectric strength, 900 volts, 300 working volts, AC or DC. Type 450-00 has three 10" Tef insulated leads. Type 450-10 and 450-20 have .028" diameter pi ½" long. PC pin placement for 450-10 is per RJ-12 MIL style and 450-20 pins is per RJ-11 MIL style. Mounting holes .093" diameter 1" centers. 1.250x.190x.315". Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Res. Tol.	Terminal Style	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-
960C3800	450-00	A	10%	Tef. leads	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	5.00	4.50	4.17	3.92	3.75	3.58	3.4
960C3850	450-10	B	10%	PC pins		5.00	4.50	4.17	3.92	3.75	3.58	3.4
960C3825	450-00	A	20%	Tef. leads		3.00	2.85	2.70	2.57	2.43	2.29	2.1
960C3900	450-10	B	20%	PC pins		3.00	2.85	2.70	2.57	2.43	2.29	2.1
960C4000	450-20	C	10%	PC pins		5.00	4.50	4.17	3.92	3.75	3.58	3.4
960C4025	450-20	C	20%	PC pins		3.00	2.85	2.70	2.57	2.43	2.29	2.1

SERIES 600 WIREWOUND TRIMMER POTENTIOMETERS

MIL-R-27208. Dimensions per MIL RT-11, 1.25x.275x.315". Rated 1 watt at 70°C. Electrical travel, 22 turns with stops and slip clutch. Temp. range: −65°C to +150°C. Coefficient, ±50 PPM/°C. Absolute min. res.: 1 ohm or 0.2%, whichever is greater. Insulation resistance, 1000 megohms. Dielectric strength, 1000 volts, AC. Torque, 0.1 oz.-in. min., 8 oz.-in. maximum. Available in t styles: Type 600-00 has three No. 30 AWG flexible Teflon insula leads; Type 600-20 has three staggered printed circuit pins as MIL RT-11. †In Type No. indicates panel mtg., others have t .093" diameter holes. Av. shpg. wt. 2 oz.

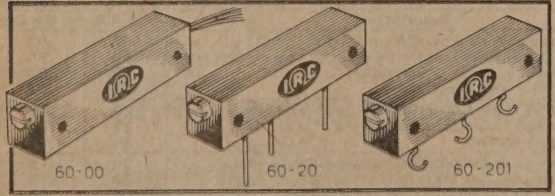
Stock No.	Mfr's Type	Fig.	Resistance Values (Ohms) Specify Value	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-
960C4200	600-00	A	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.75	4.27	3.96	3.73	3.56	3.40	3.2
960-4225	600-00	A	20k only	5.23	4.70	4.36	4.11	3.93	3.74	3.5
960-4226	600-00	A	50k only	5.71	5.13	4.76	4.48	4.27	4.08	3.9
960C4230	600-20	C	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.75	4.27	3.96	3.73	3.56	3.40	3.2
960-4250	600-20	C	20k only	5.23	4.70	4.36	4.11	3.93	3.74	3.5
960-4251	600-20	C	50k only	5.71	5.13	4.76	4.48	4.27	4.08	3.9
960C4260	600-00M†	D	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	5.60	5.04	4.69	4.40	4.20	4.01	3.8
960-4290	600-00M†	D	20k only	6.08	5.47	5.10	4.78	4.57	4.35	4.1
960-4291	600-00M†	D	50k only	6.56	5.90	5.49	5.15	4.91	4.69	4.4

SERIES 650 METAL GLAZE POTENTIOMETERS

Metal glaze version of series 600 above. Provides infinite resolution output, low reactance in high frequency applications. Meets specifications of MIL-R-22097C. Power rating, ¾ watt at 85°C. Temperature range, −55°C to +125°C. Temperature coefficient, ±250 PPM/°C. Dielectric strength, 1000 VAC. Insulation resistance, 1000 megohms. Contact resistance variation, ±3% or ohms, whichever is greater. End resistance, 2 ohms maximu 650-00, three #30 AWG Teflon leads, .093" mounting holes. 650- staggered PC pins, per RJ-11 Mil Style. Types with "M" in M Type No. indicate panel mounting. 3⅝4x25⁄64x1⅝6". Av. shpg. wt. 2

Stock No.	Mfr's Type	Fig.	Res. Tol.	Terminal Style	Resistance Values (Ohms Specify Values Wanted)	EACH 1-9	10-24	25-49	50-99	100-249	25(U
960C4300	650-00	A	5%	Teflon® leads	100, 200, 500, 1k, 2k, 5k, 10k	5.00	4.50	4.17	3.92	3.75	3.5
960C4310	650-20	C	5%	PC pins		5.00	4.50	4.17	3.92	3.75	3.5
960C4330	650-00M	D	5%	Panel mount Tef. leads		5.85	5.27	4.90	4.59	4.39	4.1
960C4320	650-20M	C	5%	Panel mount PC pins		5.85	5.27	4.90	4.59	4.39	4.1

TYPE 60 LOW COST WIREWOUND TRIMMERS



- Dependable Performance
- Economical Prices
- Built-in Reliability
- Immediate Availability

Rated 1 watt at 70° C, with temperature range of −55° C to +1 C. Tolerance, ±10%. Rotation, 22 turns (±5). Shaft torque, 8 in. maximum. Temperature coefficient, ±70 PPM/° C. 60-00 three #30 AWG Teflon® insulated leads; 60-20 has three stagge PC pins; 60-201 has two pins and one hook terminal. Meets l life, humidity, shock, vibration, seal tests. 1.250 x .275 x .3 Panel mount type available. Values: 10, 20, 50, 100, 200, 500, 1(2000, 5000, 10k—specify. 2 oz.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-249	250-499	5(U
960C2900	60-00	3.19	2.95	2.66	2.52	2.36	2.24	2.
960C2915	60-20	3.19	2.95	2.66	2.52	2.36	2.24	2.
960C2930	60-201	3.19	2.95	2.66	2.52	2.36	2.24	2.

Specify Mfr's Type and Value When Ordering Potentiomet

Potentiometers

205 AND 255 SERIES CIRCUITRIM SUBMINIATURE TRIMMER POTENTIOMETERS

205 SERIES. ½" square precision miniature wirewound trimmers, rated 1 watt at 70° C. RT22C2P (205-10) and RT22C2L (205-00) styles meet all requirements of MIL-R-27208. 25-turn, self-locking anti-backlash construction provides outstanding settability. Diallyl phthalate cases completely sealed with compression-loaded Teflon® and epoxy seals. Precious metal alloy contacts. Resistance tolerance, ±5%. Dielectric strength, 900 VAC. Temperature coefficient, ±50 PPM/°C maximum over operating temperature range of —65° C to +150° C. MIL rating of ¾ watt at 85° C.

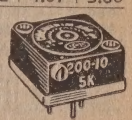
SERIES 255. Infinite resolution metal glaze element. MIL rating of ¾ watt at 70° C. Better high-frequency characteristics. Contact resistance variation, 3% or 20 ohms, whichever is greater. Tolerance, ±10%. Operating temperature range, —55° C to +150° C. Temperature coefficient: 100 ohms to 500 ohms, ±250 PPM/°C (+25° to +125° C); 1000 ohms to 1 meg, ±250 PPM/°C; above 1 meg, ±400 PPM/°C. Dielectric strength, 900 VAC. 25-turn self-locking, anti-backlash construction. Precious metal alloy contacts. Diallyl phthalate cases, compression loaded Teflon® and epoxy seals.

FLEXIBLE-LEAD MINIATURE TRIMMERS

205-00. Precision miniature trimmers for a wide variety of applications in military and industrial devices. Correspond to MIL Style RT22C2L. Compact, diallyl phthalate case with compression-loaded Teflon and epoxy seals. Precious metal alloy contacts for long dependable operation. Temperature coefficient, ±500 PPM/°C maximum over operating temperature range of —65° C to 150° C. Resistance tolerance, ±5%. MIL rating of ¾ watt at 85° C. Other specifications above. Three #30 AWG Teflon insulated leads, 6" long. Two .093" diameter through-holes on .523" centers for fast, easy mounting. Screwdriver slot adjustment for accurate settings. Size, ½x½x3/16". Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Resistance Values (Ohms) Specify Values Wanted		EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
960C3370	205-00	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	Mil Style RT22C2L	4.72	4.48	4.25	4.01	3.78	3.39	3.16
960-3381	205-00	20k only		5.18	4.92	4.66	4.40	4.14	3.73	3.48
960-3382	205-00	50k only	50 ohms thru 20k	5.65	5.37	5.09	4.80	4.52	4.07	3.80

FLAT-MOUNTING PRINTED-CIRCUIT POTENTIOMETERS



205-10. Same as MIL Style RT22C2P. Printed circuit pins arranged for mounting on flat side. Pins are located on 0.1 inch radius for mounting in conventional transistor sockets. Thru holes of .075 inch dia. on .523 inch centers for mounting. Screwdriver slot adjustment for resistance value. Overall size, ½x½x¼". 255-10. MIL Style RJ22BP. Infinite resolution metal glaze element. Pins are located on flat side on 0.1 inch radius for transistor socket mounting. .075 inch diameter mounting holes. Overall size, ½x½x¼". Av. shpg. wt., 2 oz.

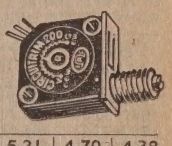
960C3384	205-10	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	Mil Style RT22C2P	4.72	4.48	4.25	4.01	3.78	3.39	3.16
960-3394	205-10	20k only		5.18	4.92	4.66	4.40	4.14	3.73	3.48
960-3395	205-10	50k only		5.65	5.37	5.09	4.80	4.52	4.07	3.80
960C3425	255-10	100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg		5.62	5.35	5.06	4.77	4.50	4.05	3.78

EDGE MOUNTING PRINTED-CIRCUIT POTENTIOMETERS

205-208. Precision wirewound potentiometer with 205 Series specs described above. Printed circuit pins on end to permit edge mounting. Three ½" long pins are in-line, 0.1" apart. 2 mounting holes on .523" centers. Screwdriver slot adjustment. Overall size, ½x½x3/16". 255-208. MIL Style RJ22BW. Metal glaze element. Same pin arrangement as 205-208. ½x½x3/16". Av. shpg. wt., 2 oz.

960C3400	205-208	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	Mil Style RT22C2W	4.72	4.48	4.25	4.01	3.78	3.39	3.16
960-3420	205-208	20k only		5.18	4.92	4.66	4.40	4.14	3.73	3.48
960-3421	205-208	50k only		5.65	5.37	5.09	4.80	4.52	4.07	3.80
960C3475	255-208	100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg		5.62	5.35	5.06	4.77	4.50	4.05	3.78

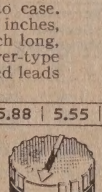
PANEL MOUNTING POTENTIOMETERS



255-60. MIL Style RJ22BL. Infinite resolution metal glaze pots. Ideal when entire circuitry must be vacuum encapsulated and still allow trimmer adjustment from exterior. Encapsulant cannot penetrate trimmer housing or seals. See specifications above. One-piece header and side flange is sealed to case. Occupy a minimal amount of panel space, only .276 by .558 inches, with depth behind panel of .550 inches. Mount by a ¼-inch long, 10-32 bushing. Mounting hardware included. Screwdriver-type slotted shaft for quick adjustment. 10" long. Teflon-insulated leads for standard point-to-point wiring. Shpg. wt., 2 oz.

960C3450	255-60	100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg		6.52	6.20	5.88	5.55	5.21	4.70	4.38

SERIES 500 AND 506 TRIMMER POTENTIOMETERS



500 550 506 556

CIRCUITRIM 500. Lightweight plastic case, fluted and slotted cover for choice of fingertip or screwdriver control. Top adjusted. Stands ¼" above board. Gold-plated PC pins on .100" radius. Positive stops at each end of its 320° electrical angle. Rated .5 watts at 25°C. Temp. range —55°C to +105°C. Tolerance ±10%. 2 oz.

CIRCUITRIM 506. As Circuitrim 500, but designed for front adjustment. Plastic case has fluted and slotted cover for fingertip or screwdriver control. Mounts 9/16" above board with gold-plated PC pins on .100" radius. Positive stops at each end of its 320° electrical angle. .5 watts at 25°C; —55°C to +105°C. Tolerance ±10%. 2 oz.

CIRCUITRIM 500 AND 506 ½"-ROUND WIREWOUND COMMERCIAL/INDUSTRIAL TRIMMERS

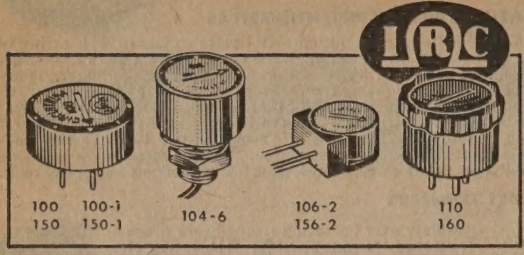
Stock No.	Mfr's Type No.	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
960C4100	500	10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k	2.30	2.09	1.88	1.71	1.60	1.45	1.30
960-4125	500	20k only	2.53	2.30	2.07	1.88	1.76	1.60	1.43
960-4126	500	50k only	2.88	2.61	2.35	2.14	2.00	1.81	1.63
960C4130	506	10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k	3.00	2.74	2.46	2.22	2.09	1.89	1.70
960-4150	506	20k only	3.30	3.01	2.71	2.44	2.30	2.08	1.87
960-4151	506	50k only	3.75	3.43	3.08	2.78	2.61	2.36	2.13

SERIES 550 AND 556 METAL GLAZE TRIMMER POTENTIOMETERS

TYPE 550. Same as series 500 above, but ½" round metal glaze. Offers essentially infinite resolution and excellent high-frequency characteristics. Molded terminals. High-static stop strength. Rated ½ watt at 70° C. Temp. range, —25° to +105° C. Tolerance, ±30%. Standard mount, ½x1 5/64x½" dia. Av. shpg. wt., 2 oz. Type 556. Same as 550, but vertical mount. ½x5/16x9/16". 2 oz.

Stock No.	Mfr's Type No.	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
960C4160	550	50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 500k, 1 meg	1.75	1.66	1.57	1.54	1.49	1.40	1.31
960C4180	556	10, 20, 50, 100, 200, 500, 1k, 2k, 5k, 10k, 20k, 50k, 100k, 500k, 1 meg, 2 meg	2.45	2.31	2.15	2.08	1.98	1.84	1.71

Precision Trimmer Potentiometers



SERIES 100 WIREWOUND. Direct trimming action for close, fast response. Unaffected by mechanical or thermal shock. Platinum-palladium or gold alloy moving contacts and sliders. Gold-plated PC pins or wire leads. Teflon® ins. flexible leads. Tol., ±5%; rated 1 watt at 50°C, temp. range, −55°C to +150°C; temp. coeff., ±70 PPM/°C; mechanical and electrical rotation, 320°. Meet MIL-R-27208A environ. req. Diallyl phthalate moisture-sealed cases meet MIL-STD-202B.

SERIES 150 METAL GLAZE. Above, but infinite resolution metal glaze element fused on ceramic. Rated ¾ watt at 70° C; resistance tol. ±10%; contact res. variation, 3% or 20 ohms, whichever is greater; temp. range, −55°C to +150°C; temp. coeff., +250 PPM/°C below 1k ±250 PPM/°C 1k to 1 meg. Meet MIL-R-220978 environ. req.

MODEL 100 AND 100-1 WIREWOUND, 150 AND 150-1 METAL GLAZE ½" ROUND TRIMMER POTENTIOMETERS

Moisture-sealed diallyl phthalate case, screwdriver-slot rotor. Models 150, 150-1 feature simplified design and close, fast response. Models 100, 100-1 have precision wirewound elements. Models 100 and 150 pins are .187" long for standard PC socket; 100-1 and 150-1 are .300" long for inserting into PC board and crimping. All pins on .100" radius. .225" above board. Av. wt., 2 oz.

Stock No.	Mfr's Type No.	Terminal Style or Mounting	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500 Up
960C3200	100	Tr. Socket	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	3.30	3.00	2.70	2.45	2.30	2.20	2.0
960-3215	100	Tr. Socket	20k only	3.90	3.55	3.19	2.89	2.72	2.60	2.4
960-3216	100	Tr. Socket	50k only	4.50	4.10	3.68	3.34	3.13	3.00	2.7
960C3217	100-1	PC	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	3.30	3.00	2.70	2.45	2.30	2.20	2.0
960-3230	100-1	PC	20k only	3.90	3.55	3.19	2.89	2.72	2.60	2.4
960-3231	100-1	PC	50k only	4.50	4.10	3.68	3.34	3.13	3.00	2.7
960C3275	150	Tr. Socket	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 Meg	4.50	4.05	3.75	3.52	3.38	3.22	3.0
960C3300	150-1	PC	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 Meg	4.50	4.05	3.75	3.52	3.38	3.22	3.0

MODEL 104-6 WIREWOUND BUSHING-MOUNT TRIMMER POTENTIOMETERS

Model 104-6 subminiature wirewound trimmer potentiometer. Bushing-mounted—extends only 5/16" beyond mounting panel. Has ¼"-32 by ⅜" long threaded bushing with hex nut. Nickeled brass housing. Screwdriver slot adjustment on cover top. Includes three flexible 10" long No. 30 teflon-insulated leads for point-to-point wiring. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type No.	Terminal Style or Mounting	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500 Up
960C3233	104-6	Tef. leads	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	4.55	4.10	3.79	3.56	3.41	3.25	3.1
960-3245	104-6	Tef. leads	20k only	5.15	4.64	4.30	4.04	3.86	3.68	3.5
960-3246	104-6	Tef. leads	50k only	5.75	5.17	4.80	4.50	4.31	4.11	3.9

MODEL 106-2 WIREWOUND AND 156-2 METAL GLAZE VERTICAL-MOUNT PC PIN TRIMMER POTENTIOMETERS

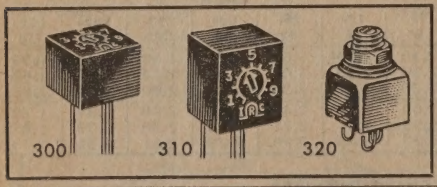
Models 106-2, 156-2 vertical-mount PC pin trimmers are similar to models 100 and 150. Designed for printed circuit applications where boards are stacked and adjustment from edge of board is required. In moisture-sealed diallyl phthalate case. Size, 3/16x1/2 5/16" deep when mounted. Gold-plated pins, .020" dia. on .10 spacing. Screwdriver-slot adjustment. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type No.	Terminal Style or Mounting	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500 Up
960C3248	106-2	PC	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	3.80	3.42	3.17	2.98	2.85	2.72	2.6
960-3260	106-2	PC	20k only	4.40	3.96	3.67	3.45	3.30	3.15	3.0
960-3261	106-2	PC	50k only	5.00	4.50	4.17	3.92	3.75	3.52	3.4
960C3335	156-2	PC	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 Meg	5.00	4.50	4.17	3.92	3.75	3.52	3.4

MODEL 110 WIREWOUND AND 160 METAL GLAZE FINGERTIP-ADJUST TRIMMER POTENTIOMETERS

Same as Models 100 and 150 except have round 3/16" knurled knob rotor in addition to screwdriver-slot adjustment. Wt., 2 oz.

Stock No.	Mfr's Type No.	Terminal Style or Mounting	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500 Up
960C3262	110	PC	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	3.50	3.18	2.86	2.60	2.30	2.20	2.0
960-3273	110	PC	20k only	4.10	3.73	3.35	3.04	2.72	2.60	2.4
960-3274	110	PC	50k only	4.70	4.28	3.84	3.49	3.13	3.00	2.7
960C3350	160	PC	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 Meg	4.70	4.23	3.92	3.68	3.52	3.36	3.2



300, 310 AND 320 WIREWOUND SUBMINIATURE TRIMMING POTENTIOMETERS

MODELS 300, 310. Single-turn, slotted rotor printed circuit controls, direct slider response. Sealed construction; positive stops. Electrical angle, 280° rotation, 300°; temp. range, −55°C to +150°C; rated .6 watt at 60°C. Tolerance ±5%. .016" pins on 0.1" grid. 300 has top screwdriver adjust; 5/16" square 1 15/64" high. 310, side adjust; 19/64" square by 11/32" high. Model 320. Like above but panel mount. Rated 1 watt at 60°C. .016" dia. dumet leads spaced .1". 10-32 bushing, ¼" long with screwdriver slot. ⅜" square by ⅜" long. All meet applicable environmental specs of MIL-R-27208A. Shpg. wt., 2 oz.

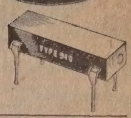
Stock No.	Mfr's Type	Screwdriver Adjust	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-U
875C4137	300	Top	50, 100, 200, 500, 1000, 2000, 5000	3.80	3.42	3.17	2.98	2.85	2.72	2.60
714-2625	300	Top	10k only	4.80	4.32	4.00	3.76	3.60	3.43	3.28
714-2650	300	Top	20k only	5.80	5.21	4.83	4.54	4.35	4.15	3.97
960C3520	310	Side	50, 100, 200, 500, 1000, 2000, 5000	3.95	3.56	3.29	3.10	2.96	2.83	2.70
734-0850	310	Side	10k only	4.95	4.45	4.12	3.88	3.71	3.55	3.38
734-0950	310	Side	20k only	5.95	5.36	4.95	4.67	4.47	4.27	4.07
960C3535	320	Shaft	50, 100, 200, 500, 1000, 2000, 5000	6.35	5.72	5.30	4.98	4.76	4.54	4.35
960-3545	320	Shaft	10k only	7.35	6.62	6.13	5.76	5.51	5.26	5.03
960-3546	320	Shaft	20k only	8.35	7.52	6.96	6.55	6.26	5.97	5.72

Precision Trimmers and Potentiometers

TYPE 940 WIREWOUND TRIMMERS IN DUAL-IN-LINE PACKAGE

ad-screw activated 18-turn wirewound trimmer in new dual in-e package for simplified PC board layout. Activating screw is sh mounted so the trimmer can be handled by the same automatic sembly equipment which is now used on dual in-line integrated cuits. Trimmers are tested to meet MIL-R-27208. Stands just .200" aximum off printed circuit board. Tolerance, ±10%.

Rated 1 watt at 40° C. Temperature range: −65° to +125° C. Coefficient: ±50 PPM/° C maximum. Dielectric strength: 500 volts AC. Shaft torque: 8 oz.-inches. **Be sure to specify both stock number and manufacturer's type number when ordering. Av. shpg. wt., 1 oz.**



Stock No.	Mfr's Type	Resistance Values in Ohms (Specify Values Wanted)	EACH						
			1-9	10-24	25-49	50-99	100-249	250-499	500-Up
960C4625	940	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	3.75	3.35	3.00	2.80	2.60	2.45	2.35
960-4650	940	20k only	4.12	3.68	3.30	3.08	2.86	2.70	2.58

TYPES 700 AND 750 ⅜" SQUARE MINIATURE TRIMMERS

0 SERIES. Rated 1 watt at 70° C. ¾ watt at 85° C. Meet environ-ental and life requirements of MIL-R-27208. 21 (±2) turns; torque, 0 oz.-in. max. Tol., ±5%. Temp. range; −65° to +175° C; efficient; ±50 PPM/° C. Ins. resistance: 1000 meg at 5000 VDC. Dielectric strength: 900 VAC. 700-10 (RT 24C2P), PC pins arranged for mounting on flat side. 700-307, PC pins for edge-mounting; side adjustment; 700-308-PC pins; top adjustment. 1 oz.

960C4340	700-10	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	6.90	6.39	5.75	5.46	5.11	4.86	4.55
960-4360	700-10	20k only	8.25	7.64	6.87	6.53	6.11	5.81	5.43
960-4361	700-10	50k only	9.60	8.89	8.00	7.59	7.11	6.76	6.32
960C4370	700-307	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	6.90	6.39	5.75	5.46	5.11	4.86	4.55
960-4390	700-307	20k only	8.25	7.64	6.87	6.53	6.11	5.81	5.43
960-4391	700-307	50k only	9.60	8.89	8.00	7.59	7.11	6.76	6.32
960C4400	700-308	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	6.90	6.39	5.75	5.46	5.11	4.86	4.55
960-4425	700-308	20k only	8.25	7.64	6.87	6.53	6.11	5.81	5.43
960-4426	700-308	50k only	9.60	8.89	8.00	7.59	7.11	6.76	6.32

0 SERIES. Infinite resolution metal glaze version of 700 series above. (±2) turns; torque, 5 oz.-in. maximum. Meet environmental d life requirements of MIL-R-22097, Characteristic "B". Temperature nge: −65° to +125° C. Rated ½ watt at 70° C, 0 at 125° C. TYPE 750-10 (RJ 248P) has PC pins arranged for flat mounting; Type 750-307 has PC pins for edge mounting with side adjustment; Type 750-308 has PC pins with top adjustment. Tolerance: ±10%. **Specify stock number and resistance value when ordering. 1 oz.**

Stock No.	Mfr's Type	Resistance Values in Ohms (Specify Values Wanted)	EACH						
			1-9	10-24	25-49	50-99	100-249	250-499	500-Up
960C4430	750-10	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	6.50	6.18	5.85	5.72	5.52	5.18	4.86
960C4460	750-307	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	6.50	6.18	5.85	5.72	5.52	5.18	4.86
960C4500	750-308	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	6.50	6.18	5.85	5.72	5.52	5.18	4.86

TYPE 800 AND 850 5/16" SQUARE SUBMINIATURE TRIMMERS

0 SERIES. Precision wirewound subminiature trimmer rated 0.6 att at 70° C. Meets following environmental tests of MIL-R-27208 tational life; load life; moisture; shock; vibration. Total of 15 ±2) turns. Torque, 3.0 oz.-inches maximum. Tolerance, ±5%. perating temperature range: −65° to +150° C. Temperature coefficient: ±50 PPM/° C maximum. Insulation resistance: 1000 megohms at 500 VDC. Dielectric strength: 900 VAC. PC pins for edge-mounting, screw adjustment on side. **Be sure to specify both stock number and resistance value. 1 oz.**

Stock No.	Mfr's Type	Resistance Values in Ohms (Specify Values Wanted)	EACH						
			1-9	10-24	25-49	50-99	100-249	250-499	500-Up
960C4525	800-20	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k	3.52	3.15	2.78	2.64	2.46	2.32	2.22
960-4550	800-20	20k only	4.04	3.68	3.31	3.15	2.98	2.83	2.73

0 SERIES. Infinite resolution metal glaze version of Series 800. ated ½ watt at 70° C. 13 (±2) turns; torque; 3 oz.-inches-maxi-um. Meets the following environmental tests of MIL-R-22097: rotational life; load life; moisture; shock and vibration. Temperature range; −65° to +125° C, PC pins for edge-mounting, screw adjustment on side. Tolerance, ±10%. Average wt., 1 oz.

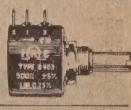
960C4575	850-20	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 200k, 500k, 1 meg	5.06	4.77	4.50	3.95	3.74	3.54	3.42

TYPE 900 MINIATURE RECTANGULAR WIREWOUND TRIMMER

Iiniature rectangular package. Meets MIL-STD-202, Method 103B umidity requirements. Silver brazed terminations provide 0.5% inimum resistance setting. Clutch lifts threaded wiper block f lead screw at each end of travel. Sealed housing. Rated 1 watt at 40° C. Tol.: ±10%. Temperature range: −65° to +125° C. Coefficient: ±50 PPM/° C max. Dielectric strength: 1000 VAC. Gold-plated PC pins. Total turns, 20. .85x.31x.16". 2 oz.

960C4600	900-20	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k	1.75	1.62	1.46	1.39	1.30	1.23	

TYPE 8403 ⅞" WIREWOUND POTENTIOMETER



YPE 8403 THREE-TURN. ⅝" deep behind pan-. Tolerance, ±5%. Rated 2 watts at 40°C, watt at 105°C. Operating temperature range: 55°C to +105°C. Coefficient; ±70 PPM/°C. Has screwdriver adjustment slot; ¼" diameter shaft with ⅜" bush-ing. Torque, 1 oz.-in. maximum. Insulation resistance at 500 VDC-1000 megohms. Turret-type terminals are molded in, gold plated for easy soldering. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Resistance Values in Ohms (Specify Values Wanted)	EACH					
			1-9	10-24	25-49	50-99	100-249	250-Up
960C4850	8403	50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 30k, 50k	8.25	7.15	6.90	6.55	6.05	5.77

TYPE 8500 10-TURN WIREWOUND POTENTIOMETER

YPE 8500 10-TURN. For wide industrial nd commercial applications. "Heated core" vinding prohibits turn shifting. Tolerance, ±5%. Rated 3.0 watts at 25°C ambient. Temperature range: −55°C to +105°C. Coefficient: ±70 PPM/°C maximum. Screwdriver adjustment slot, .030" wide by .045" deep on ⅛" diameter shaft. 5/64" diameter holes in gold-plated terminals. Torque: 1 oz.-in. max. Insul. res. at 500 VDC, 1000 meg min. 2 oz.

Stock No.	Mfr's Type	Resistance Values in Ohms (Specify Values Wanted)	EACH					
			1-9	10-24	25-49	50-99	100-249	250-Up
960C4875	8500	100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k	8.25	7.15	6.90	6.55	6.05	5.77

Trimmer Potentiometers

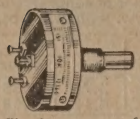
TYPE 7300 COMMERCIAL/INDUSTRIAL POT

2 0" Winding Provides Better Resolution, Increased Reliability

Miniature 10-turn wirewound pot rated two watts at 40°C. Brass bushing and front plate, black mirror-finish phenolic case. Precision drawn alloy wire wound on copper mandrel. Moving contacts are made of precious metal alloys. 1½" long by ¾" diameter. 1¾4" rear terminals and ⅜"-32 by 5/16" long bushing save front panel space, allow greater packaging density. ¼x½" long screwdriver shaft. Resistance tolerance, ±.25%; linearity, ±.5% (100-2000 ohms), ±.25% (5000 ohms and up). Temp. range, −50°C to +85°C. Stop-mechanism, independent of mechanical elements. Resistances Available: 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k ohms—specify. Shpg. wt. 4 oz.

960C4730. 1-9.Ea. 7.50 10-24.Ea. 6.50
25-99.....Ea. 6.00 100-Up.....Ea. 5.50

TYPE 151 SINGLE-TURN ROTARY TRIMMER POT

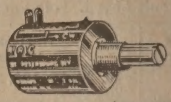


For High Temperature Conditions, Rated 3½ Watts at 40°C. Smart Simplified Design

Single-turn pot for industrial requirements, meets MIL-R-27208. Sturdy nickel-plated brass case, 1½" diameter, ½" deep. Panel mounting, 7/32" terminals. ¼" diameter stainless steel shaft with clear passivation extends ½" beyond ⅜"-32 by ½" bushing. Resistance tolerance, ±5%. Linearity, ±.5%. Insul. Res., 1000 meg. min. Torque, 2 oz.-in. max. Resistances Available: 100, 500, 1000, 2500, 5000, 10k, 25k ohms. Specify Resistance. Operating temperature range, −55°C to +125°C. Continuous rotation—stops available on Special Order only. Av. shpg. wt. 2 oz.

960C3325. 1-9.....Each 8.75
10-24.....Ea. 8.31 25-99.....Ea. 7.88
100-199....Ea. 7.44 200-Up.....Ea. 7.00

TYPE 8400 PRECISION 10-TURN POTENTIOMETE



Projects Only 1⅛ Behind Panel, Features Precision Molded Nylon Housing and End Plate

Miniature wirewound pot has only ⅞ diameter. Grooved interior for 0.25% independent linearity. 20" winding. Precious metal wiper, gold-plated center terminal contact. Ribbon welded, multi-wire terminals. Screwdriver adjustment. Retaining "C"-ring. Rated 3 watts at 40°C ambient. Tolerance, ±5%. Temp. range, −55°C to +105°C. Temp. coefficient, ±70 PPM/°C. Resolution, .070 to .013%. Takes 10 vibration, 55-2000 cycles; 55g shock. Specify Resistance: 100, 200, 500 ohms, 1000, 2000, 5000, 10k, 20k, 50k, 100k 2 oz.

960C4825. 1-9.....Each 7.
10-24.....Ea. 6.50 25-49.....Ea. 6.
50-99.....Ea. 5.95 100-249.....Ea. 5.
350-Up.....Ea. 5.

LABORATORY AND INSTRUMENT POTENTIOMETERS

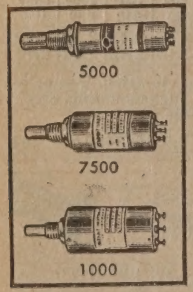
TYPE HD-150. Highly stable, critical adjustment control meets requirements of industrial, military, and computer instrumentation. 10-turn, 5 watt controls featuring high resolution and availability in high precision linearity up to ±0.1%. Power rating based on 40°C ambient. Operating temperature range, −55°C to +100°C. Resistance tolerance, ±3%. Patented metal-to-metal stop system with mounting bushing prevents damage if excessive force is applied against stops. Torque, 2 oz.-in. maximum. Phenolic case 1½" diameter x 2" long; ¼" diameter nickel-plated brass shaft extends ½" beyond ⅜"-32x3/16"-long bushing. Av. shpg. wt. 4

HD-150

Stock No.	Linearity	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-
960C2300	±0.25%	500, 1000, 2000, 5000, 10k, 20, 30k, 50k, 100k, 200k	10.00	9.50	9.00	8.50	8.00	7.5
960C2350	±0.1%	1000, 2000, 5000, 10k, 20,k 30k, 50k, 100k, 200k	12.00	11.40	10.80	10.20	9.60	9.0

METAL-CASED POTENTIOMETERS

TYPES 5000, 7500, 1000. Extraordinarily rugged, metal encased 10-turn controls designed specifically for use in airborne and mobile equipment that is subject to extreme shock and vibration. Feature one-piece bushing and front header of nickel-plated brass with moisture and dust-resistant bonding of case to headers. Shaft is moisture sealed by means of an "O" ring. Patented metal-to-metal stop system prevents damage at ends of travel of contact. Separate electrical and mechanical sections assure long rotation life. Gold-plated turret terminals for high reliability, excelle conductivity, and ease of soldering. Operating temp. range, −55° to +125°C. Maximum starting and running torque is 2 oz.-i Power ratings based on 40°C ambient. Shpg. wt. 4 oz.



5000

7500

1000

TYPE 5000

10-turn potentiometer with 1½-watt power rating. ½" dia. by 11 31/32" long. Res. tol. ±5%, linearity, ±0.5%. ¼" shaft extends ½" beyond ⅜-32x½" bushing.

TYPE 7500

10-turn potentiometer with 3-watt power rating. ⅜ dia. by 12 1/32" long. Resistance tolerance ±5%. ¼" d shaft extending ½" beyond ⅜-32 bushing. ½" bushin

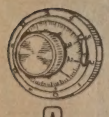
TYPE 1000

10-turn potentiometer with 3-watt power rating. 1" diameter by 1 1½" long. Resistance tolerance is ±5% and linearity is ±.5%. Has ¼" dia. shaft extending ½ beyond ⅜"-32 bushing. Bushing is ½" long.

Stock No.	Mfr's Type	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-49	50-99	100-249	250-U
960C4715	5000	100, 500, 1000, 5000, 10k, 25k, 50k	10.00	9.50	9.00	8.50	8.00	7.50

Stock No.	Mfr's Type	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	25-99	100-199	200-U
960C4800	7500	100, 250, 500, 1000, 5000, 10k, 25k, 50k, 100k	12.50	11.88	11.25	10.63	10.0
960C4700	1000	500, 1000, 2500, 5000, 10k, 25k, 50k, 100k, 200k	12.50	11.88	11.25	10.63	10.0

REVODEX DIALS FOR PRECISION POTENTIOMETERS

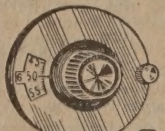


A

B

SERIES 400

1" dia. turn-counting dial for controls with shafts of ⅛" or ¼" diameter. Optional brake system allows positive locking without dial shift. Body mounts on panel; knob attaches to shaft extension up to .8" from panel. Calibrated 000-999. Anodized aluminum. 3 oz.



C

SERIES RD-1 AND RD-6

1⅞" dials with numbers grouped for easy rea ing. Calibrated 000-999. With zero backlash locks without shift of dial setting. Mtg. pla fastens to pot mtg. nut; knob fastens with s screw to pot shaft. Black or clear anodized a minum finish. Use on ¼" dia. shafts up to long from front of panel. Av. shpg. wt., 3 oz.

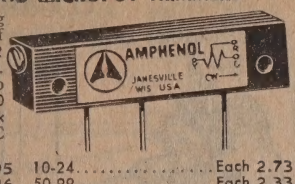
Stock No.	Mfr's Type With Brake	Mfr's Type Without Brake	Fig.	Fits Shaft	Finish	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
960-3100	RD-1	....	C	¼"	Black	5.75	5.46	5.18	4.89	4.60	4.31
960-3101	RD-6	....	C	¼"	Clear	5.75	5.46	5.18	4.89	4.60	4.31
960-3102	....	RD-411	B	¼"	Black	7.65	7.27	6.89	6.89	6.50	6.12
960-3103	RD-412	....	A	¼"	Black	8.25	7.84	7.43	7.43	7.01	6.60
960-3104	....	RD-421	B	⅜"	Black	7.65	7.27	6.89	6.89	6.50	6.12
960-3105	RD-422	....	A	⅜"	Black	8.25	7.84	7.43	7.43	7.01	6.60
960-3106	....	RD-461	B	¼"	Clear	7.65	7.27	6.89	6.89	6.50	6.12
960-3107	RD-462	....	A	¼"	Clear	8.25	7.84	7.43	7.43	7.01	6.60
960-3108	....	RD-471	B	⅜"	Clear	7.65	7.27	6.89	6.89	6.50	6.12
960-3109	RD-472	....	A	⅜"	Clear	8.25	7.84	7.43	7.43	7.01	6.60

Specify Stock No., Mfr's Type and Resistance Value When Ordering Contro

Amphenol Micropot Trimmer Potentiometers

SERIES 992 WIREWOUND MICROPOT TRIMMERS

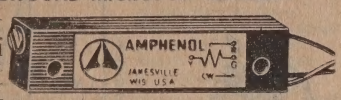
2-turn pot with ratcheting clutch mechanism, shiftproof wiper. Meets MIL-STD-202 steady-state humidity specs. Tol., ±5%. Temp., −55°C to +105°C. Values: 50, 100, 200, 500, 1000, 2000, 5000, 10k ohms—Specify. Gold-plated PC pins. Shpg. wt. 2 oz.



714C0600 1-9.....Each 2.95 10-24.....Each 2.73
25-49.....Each 2.46 50-99.....Each 2.33
100-249...Each 2.18 250-499...Each 2.07 500-Up...Each 2.04

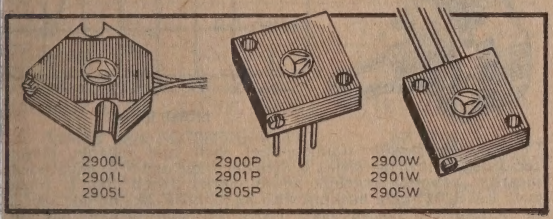
SERIES 2850 WIREWOUND MICROPOT TRIMMERS

2-turn pot meets and exceeds MIL-R-27208, RT11. Window design case and silicon "O" ring seals out humidity and dust. Extra-long high temperature ceramic mandrel, diallyl phthalate case. −65°C to +175°C. Tol., ±5%. *Suffixes: P, printed circuit pins; L, Teflon insulated stranded leads; SL, solder lugs. Values: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k—specify Shpg. wt. 2 oz.



Stock No.	*Mfr's Type	EACH						
		1-9	10-24	25-49	50-99	100-249	250-499	500-Up
714C2025	2850P	5.21	4.83	4.53	4.27	4.04	3.78	3.59
714C2000	2850L	5.21	4.83	4.53	4.27	4.04	3.78	3.59
714C2050	2850SL	5.21	4.83	4.53	4.27	4.04	3.78	3.59

SERIES 2900 SQUARE MICROPOT TRIMMERS



2900L 2900P 2900W
2901L 2901P 2901W
2905L 2905P 2905W

TYPE 2900 WIREWOUND MICROPOT TRIMMERS

Precision 25-turn trimmer with non-slip wiper adjustment. Minimum number of internal components for increased reliability. Humidity-proof. Meets or exceeds MIL-R-27208, RT22. Tol., ±5%. Temp. range, −65°C to +175°C. ½" square. *Suffixes: L, color-coded Teflon insulated leads; P, gold-plated PC pins; W, uninsulated gold-plated leads. Values: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k—specify. Av. shpg. wt. 2 oz.

Stock No.	*Mfr's Type	EACH						
		1-9	10-24	25-49	50-99	100-249	250-499	500-Up
714C2500	2900L	5.43	5.04	4.72	4.45	4.21	3.94	3.73
714C2525	2900P	4.87	4.52	4.24	3.98	3.77	3.53	3.12
714C2550	2900W	5.43	5.04	4.72	4.45	4.21	3.94	3.73

TYPE 2901 METAL-FILM MICROPOT TRIMMERS

Humidity-proof 25-turn trimmers for a variety of industrial and military applications. 100% metallic element offers infinite resolution with excellent low noise characteristics. Tol., ±10%. Temp. range, −55°C to +150°C. ½" square. *Suffixes: L, color-coded Teflon insulated leads; P, gold-plated PC pins; W, uninsulated gold-plated leads. Values: 50, 100, 200, 500, 1000, 2000, 5000, 10k—specify. Av. shpg. wt. 2 oz.

Stock No.	*Mfr's Type	EACH						
		1-9	10-24	25-49	50-99	100-249	250-499	500-Up
714C2600	2901L	7.35	6.95	6.60	6.25	5.85	5.50	5.30
714C2625	2901P	7.35	6.95	6.60	6.25	5.85	5.50	5.30
714C2650	2901W	7.35	6.95	6.60	6.25	5.85	5.50	5.30

TYPE 2905 CERMET ELEMENT MICROPOT TRIMMERS

Infinite resolution cermet element with directly-welded gold strap terminations, carbon-tipped precious metal contact. Meets MIL-R-22097, RJ22. ±10%. −55°C to +150°C. *Suffixes: L, color-coded Teflon insulated gold plated leads; P, gold-plated PC pins; W, uninsulated gold-plated leads. Values: 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 25k, 50k, 100k, 250k, 500k, 1 meg, 2.5 meg, 5 meg, 10 megohms—specify. Av. shpg. wt. 2 oz.

Stock No.	*Mfr's Type	EACH						
		1-9	10-24	25-49	50-99	100-249	250-499	500-Up
714C2700	2905L	6.48	6.01	5.64	5.31	5.02	4.69	4.20
714C2725	2905P	6.48	6.01	5.64	5.31	5.02	4.69	4.20
714C2750	2905W	6.48	6.01	5.64	5.31	5.02	4.69	4.20

SERIES 2851 METAL-FILM MICROPOT TRIMMERS

Has performance characteristics compatible with other metal film components. 100% metallic element offers infinite resolution with excellent low-noise characteristics unsurpassed by other infinite resolution elements. 22 turns. Tolerance, ±10%. Temp. range, −55°C to +150°C. Low 100 ppm/°C temperature coefficient. Printed circuit pins. Values: 20, 50, 100, 200, 500, 1000, 2000, 5000, 10k—specify. *See 2850 description left. Shpg. wt. 2 oz.

Stock No.	*Mfr's Type	EACH						
		1-9	10-24	25-49	50-99	100-249	250-499	500-Up
714C2075	2851P	7.02	6.50	5.85	5.56	5.20	4.94	4.77

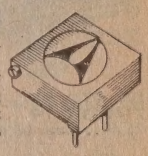
SERIES 2855 CERMET ELEMENT MICROPOT TRIMMERS

Humidity-proof 1¼" rectangular pot with Cermet element for high resolution. Carbon-tipped precious metal contact; gold-plated PC pins. 22 turns. Tol., ±10%. Temp. range, −55°C to +150°C. Meets or exceeds MIL-R-22097, RJ11. Values: 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 500k, 1 megohm—specify. Av. shpg. wt. 2 oz.

714C2200 1-9.....Each 5.72 10-24.....Each 5.26
25-49.....Each 4.81 50-99.....Each 4.51
100-249...Each 4.28 250-499...Each 4.05 500-Up....Each 3.79

SERIES 3600 WIREWOUND MICROPOT TRIMMER

Precision 23-turn trimmer with printed circuit pins. Low-mass shock and vibration proof wiper. Up to 85% better resolution than specified by MIL-R-27208B, RT24. Circuit pins silver brazed and gold plated for corrosion proofing. Damage proof ratcheting clutch mechanism. Res. tol: ±10%. Electrical output: linear with shaft adj. Values: 100, 200, 500, 1000, 2000, 5000, 10k, 20k ohms. Specify. Wt. 2 oz.

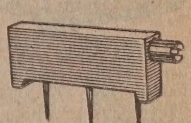


Stock No.	Mfr's Type	EACH						
		1-9	10-24	25-49	50-99	100-249	250-499	500-Up
714C3200	3600P	2.95	2.73	2.46	2.33	2.18	2.07	1.97

SERIES 3800 MICROPOT COMMERCIAL TRIMMERS

TYPE 3800 WIREGROUND MICROPOT TRIMMERS

Actual size



3800P
3805P
3811P

High-quality, low-cost trimmer for general use. Commercial ¾" rectangular style with solvent-resistant nylon case and popular PC pin spacing. 20 turns. Full length mandrel provides optimum resolution. Power rating: 1 watt at 40°C. Temperature range, −65°C to +125°C. Resistance tolerance, ±10%. Corrosion-proof, gold-plated circuit pins are silver-brazed to resistance element for long life. Insulation resistance is 1,000 megohms minimum. Continuous and unidirectional continuity maintained for full mechanical range. Contact idles with no discontinuity. Resolution: .22 to 1.78%. Resistance values: 10, 20, 50, 100, 200, 500, 1000, 5000, 10k, 20k ohms—specify. Av. shpg. wt. 2 oz.

714C3400 1-9.....Each 1.75 10-24.....Each 1.62
25-49.....Each 1.46 50-99.....Each 1.39
100-249...Each 1.30 250-499...Each 1.23 500-Up....Each 1.14

TYPE 3805 CERMET ELEMENT MICROPOT TRIMMER

Commercial ¾" rectangular style Cermet-element trimmer offers infinite resolution. 15-turn shaft adjustment. Carbon-tipped precious metal contact reduces CRV to a minimum and enhances rotational life. Solvent-resistant nylon case, popular printed circuit pin spacing. Tolerance, ±10%. Temperature range, −55°C to +125°C. Power rating, ¾-watt at 40°C derated to zero at 125°C. Dielectric strength, 900 volts rms at room temperature. Shaft torque, 8.0 oz. in. maximum. Values: 100, 200, 500, 1000, 2000, 5000, 10k, 20k, 50k, 100k, 500k—specify. Av. shpg. wt. 2 oz.

714C3425 1-9.....Each 2.08 10-24.....Each 1.93
25-49.....Each 1.72 50-99.....Each 1.66
100-249...Each 1.55 250-499...Each 1.46 500-Up....Each 1.26

TYPE 3811 METAL-FILM ELEMENT MICROPOT TRIMMERS

100% metallic element offers infinite resolution with excellent low noise characteristics; performance characteristics compatible with other metal film components. ¾" rectangular solvent-resistant nylon case. Silicon "O" ring seals out dust and humidity. Popular PC pin spacing. Tolerance, ±10%. Temperature range, −55°C to +125°C. 15 turns. Shaft torque, 8.0 oz. in. max. Values: 50, 100, 200, 500, 1000, 2000, 5000, 10k, 20k—specify. Av. shpg. wt. 2 oz.

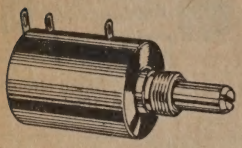
714C3450 1-9.....Each 2.94 10-24.....Each 2.77
25-49.....Each 2.59 50-99.....Each 2.44
100-249...Each 2.31 250-499...Each 2.16 500-Up....Each 1.95

SEE PAGE 142 FOR ADDITIONAL AMPHENOL PRODUCTS

Amphenol and Clarostat Potentiometers

AMPHENOL

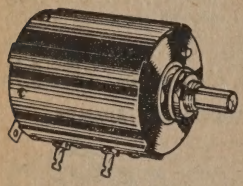
SERIES 4101B ⅞" DIA. TEN-TURN 2-WATT MICROPOT



High-performance wirewound Micropot has backlash-free wiper drive mechanism for precise repeat settings. Precious metal wiper and pickup contacts eliminate noise and corrosion problems. Resistance element is welded directly to the gold-plated terminal lugs. Rated 2 watts at 40°C for 1000 hours. Tolerance, ±5%. Temperature range, −55°C to +125°C. Rotational life, 200,000 revolutions. Starting torque, 1.5 oz. in.; running torque, 1.0 oz. in. Size: ⅞" dia., 1 3/16" length. Values: 100, 200, 1000, 2000, 5000, 10k, 20k, 50k, 100k ohms—specify. Av. shpg. wt. 3 oz.

714C3600 1-9.....Each 5.95 10-24.....Each 5.65
25-49....Each 5.35 50-99....Each 5.05 100-Up.....Each 4.75

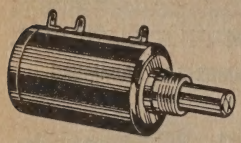
SERIES 205 1¾" DIA. TEN-TURN 5-WATT MICROPOT



Wirewound linear pots have resistance proportional to shaft rotation. 0.1% zero-based linearity. Extra-long resistance element for up to 64% better resolution. Anti-backlash drive mechanism. Rated 5 watts at 40°C. Tolerance, ±3%, except *±10%. Temperature range, −55°C to +105°C. Rotational life, 1,000,000 revs. Torque: starting, 3 oz. in.; running, 1.5 oz. in. Size: 1¾" dia., 2⅛" length. Values: *25, 50, 100, 500, 1000, 5000, 10k, 20k, 50k, 100k—specify. Av. shpg. wt. 5 oz.

714C0300 1-9.....Each 18.50 10-24.....Each 17.55
25-49...Each 16.65 50-99...Each 15.70 100-Up....Each 14.80

SERIES 2151B ⅞" DIA. TEN-TURN 3-WATT MICROPOT



Ten-turn potentiometer has wirewound resistance element inside high-temperature molded phenolic case. Special wiper drive mechanism eliminates backlash. Terminations are welded directly to the gold-plated terminal lugs. ¼" common shaft assures unit-to-unit indexing accuracy and high reliability when ganging. Rated 3 watts at 40°C. Tolerance, ±3%. Temperature range, −55°C to +105°C. Rotational life, 2,000,000 revolutions. ⅞" dia., 1½" length. Values: 100, 500, 1000, 5000, 10k, 20k, 30k, 50k, 100k—specify. Av. shpg. wt., 5 oz.

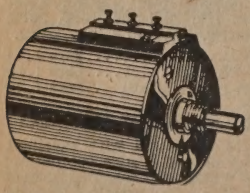
714C1400 1-9.....Each 10.00 10-24.....Each 9.50
25-49.....Each 9.00 50-99.....Each 8.50
100-Up.....Each 8.00

SERIES 2201B 1 13/16" DIA. TEN-TURN 5-WATT MICROPOT

Precision extra-long life 10-turn potentiometer has wirewound element wrapped around center core under maximum tension for absolute wiper-to-element concentricity. Dual brass bearing shaft support. Anti-backlash carrier. Rated 5 watts at 40°C. Tolerance, ±3%, except *±5%. Temp. range, −55°C to +105°C. Rotational life, 5,000,000 revs. 1 13/16" dia. 2⅛" length. Values: *25, *50, 100, 500, 1000, 5000, 10k, 20k, 50k, 100k, *200k—specify. 5 oz.

714C1600 1-9.....Each 10.00 10-24.....Each 9.50
25-49.....Each 9.00 50-99.....Each 8.50
100-Up.....Each 8.00

SERIES 2251B MICROPOT

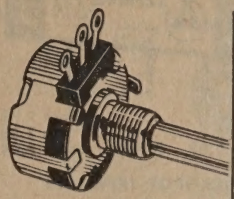


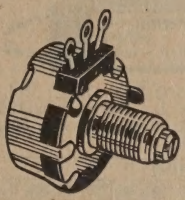
Ten-turn 1 13/16" dia. wirewound potentiometer provides good linear accuracy and long life. Precious metal wiper and anchored pickup contact for absolute continuity. Anti-backlash carrier in drive mechanism assures precise, repeat settings. Tension-wound element for high linear accuracy and longer rotational life. Dual brass bearing shaft support. Rated 5 watts at 40°C. Tolerance, ±3%, except *±5%. Temperature range, −55°C to +105°C. Rotational life, 5,000,000 revs. 2⅛" length. Values: *25, *50, 100, 500, 1000, 5000, 10k, 20k, 50k, 100k—specify. 5 oz.

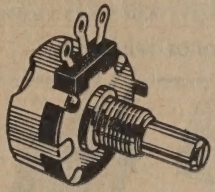
714C1800 1-9.....Each 10.00 10-24.....Each 9.50
25-49.....Each 9.00 50-99.....Each 8.50
100-Up.....Each 8.00

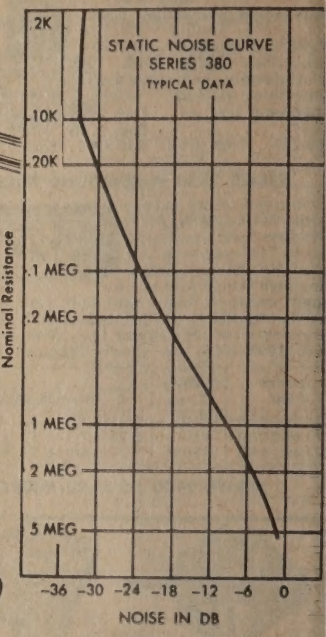
CLAROSTAT

"QUIET ONE" 2-WATT SERIES 380 POTS









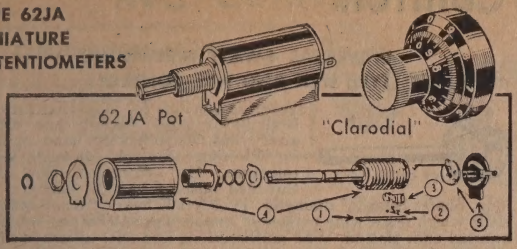
Two-watt pots with stainless-steel shaft and reliable, strain-free resistant element with 1% dynamic noise and 5% independent linearity; precision machine finish. Series 380C1 has 2" round shaft FMS, ⅜"-long bushing with ⅜-32-NEF-2A thread; 380C2, ⅝" screwdriver slotted shaft FMS, ½" split locking bushing; 380C3, ⅞" screwdriver slotted shaft FMS, ⅜"-long bushing with ⅜-32-NEF-2A thread. Resistance tolerance: up to 1 megohm, ±10%, above 1 megohm, ±20%. Linear taper. Dielectric strength, 1000 VAC. 1 3/32" maximum diameter x 9/16" deep. *Ohms. Av. shpg. wt. 2 oz.

Stock No.	Type 380-	Allen Bradley Equiv.	*	EACH 1-9	10-49	50-99	100-Up
753-8100	C1-100-S	JA1N200P101UA	100	1.95	1.75	1.62	1.46
753-8101	C1-250-S	JA1N200P251UA	250	1.95	1.75	1.62	1.46
753-8102	C1-500-S	JA1N200P501UA	500	1.95	1.75	1.62	1.46
753-8103	C1-1000-S	JA1N200P102UA	1000	1.95	1.75	1.62	1.46
753-8104	C1-2500-S	JA1N200P252UA	2500	1.95	1.75	1.62	1.46
753-8105	C1-5000-S	JA1N200P502UA	5000	1.95	1.75	1.62	1.46
753-8106	C1-10K-S	JA1N200P103UA	10k	1.95	1.75	1.62	1.46
753-8107	C1-25K-S	JA1N200P253UA	25k	1.95	1.75	1.62	1.46
753-8108	C1-50K-S	JA1N200P503UA	50k	1.95	1.75	1.62	1.46
753-8109	C1-100K-S	JA1N200P104UA	100k	1.95	1.75	1.62	1.46
753-8110	C1-500K-S	JA1N200P500UA	500k	1.95	1.75	1.62	1.46
753-8111	C1-1 Meg-S	JA1N200P105MA	1 meg	1.95	1.75	1.62	1.46
753-8112	C2-100-S	JA1L040S101UC	100	2.25	2.02	1.87	1.69
753-8113	C2-250-S	JA1L040S251UC	250	2.25	2.02	1.87	1.69
753-8114	C2-500-S	JA1L040S501UC	500	2.25	2.02	1.87	1.69
753-8115	C2-1000-S	JA1L040S102UC	1000	2.25	2.02	1.87	1.69
753-8116	C2-2500-S	JA1L040S252UC	2500	2.25	2.02	1.87	1.69
753-8117	C2-5000-S	JA1L040S502UC	5000	2.25	2.02	1.87	1.69
753-8118	C2-10K-S	JA1L040S103UC	10k	2.25	2.02	1.87	1.69
753-8119	C2-25K-S	JA1L040S253UC	25k	2.25	2.02	1.87	1.69
753-8120	C2-50K-S	JA1L040S503UC	50k	2.25	2.02	1.87	1.69
753-8121	C2-100K-S	JA1L040S104UC	100k	2.25	2.02	1.87	1.69
753-8122	C2-500K-S	JA1L040S504UC	500k	2.25	2.02	1.87	1.69
753-8123	C2-1 Meg-S	JA1L040S105MC	1 meg	2.25	2.02	1.87	1.69
753-8124	C3-100-S	JA1N056S101UA	100	1.95	1.75	1.62	1.46
753-8125	C3-250-S	JA1N056S251UA	250	1.95	1.75	1.62	1.46
753-8126	C3-500-S	JA1N056S501UA	500	1.95	1.75	1.62	1.46
753-8127	C3-1000-S	JA1N056S102UA	1000	1.95	1.75	1.62	1.46
753-8128	C3-2500-S	JA1N056S252UA	2500	1.95	1.75	1.62	1.46
753-8129	C3-5000-S	JA1N056S502UA	5000	1.95	1.75	1.62	1.46
753-8130	C3-10K-S	JA1N056S103UA	10k	1.95	1.75	1.62	1.46
753-8131	C3-25K-S	JA1N056S253UA	25k	1.95	1.75	1.62	1.46
753-8132	C3-50K-S	JA1N056S503UA	50k	1.95	1.75	1.62	1.46
753-8133	C3-100K-S	JA1N056S104UA	100k	1.95	1.75	1.62	1.46
753-8134	C3-500K-S	JA1N056S504UA	500k	1.95	1.75	1.62	1.46
753-8135	C3-1 Meg-S	JA1N056S105MA	1 meg	1.95	1.75	1.62	1.46

Specify Stock No., Type No., and Resistance When Ordering Controls

Clarostat Potentiometers and Controls

TYPE 62JA MINIATURE POTENTIOMETERS



EXTRA-QUALITY FEATURES DIAGRAMMED ABOVE:

- (1) Collector rail of gold-plated alloy
- (2) High conductivity, low noise contact
- (3) 4-finger carrier reduces wobble
- (4) Tough, thermal plastic construction for Case, Contact Carrier and Drum
- (5) Slip rings have 2 contact fingers at 180° position for positive contact

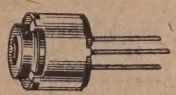
Accurate 10-turn pots with resistance tolerance of ±5%. High power rating in a miniature size—2 watts @ 25°C. Have dielectric strength of 1000 volts AC with absolute linearity of ±0.25%; except 100, 200 and 250 ohms, ±0.5%. Overall length, 2 11/16", with 3/8" mtg. bushing 3/8-32 threaded. Shafts are 1/4" dia. x 9/16" long, fit Clarodials, below. Shpg. wt., 3½ oz.

Stock No.	Mfr's Type	Resistances (Ohms) Specify When Ordering	EACH 1-9	10-24	25-99	100-Up
753C7400	62JA	100, 200, 250, 500, 1000, 2000, 5000, 10k, 20k, 30k, 50k, 100k	7.50	6.50	6.00	5.50

CLARODIALS. For 62JA above. 5/8" knob, 1" dial. Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-Up
753-8400	411	Black, no lock	7.75	7.30	6.95
753-8401	412	Black, with lock	8.95	8.50	8.05
753-8402	461	Clear, no lock	8.25	7.80	7.40
753-8403	462	Clear, with lock	9.45	8.95	8.50

SERIES 63M POTENTIOMETERS



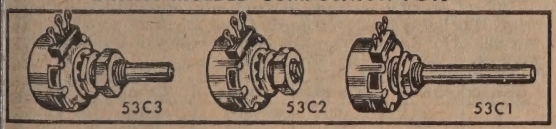
Low profile design permits extremely close printed-circuit board-to-board, spacing. Metal shaft and faceplate with wire terminal leads for excellent flexible mounting facilities. Rated 0.25 watts at 70°C. Resistance tolerance: ±20%. Working voltage is 350 VDC, voltage breakdown, 750 VAC. Shpg. wt. 4 oz.

TABLE "A" RESISTANCES AVAILABLE—SPECIFY WHEN ORDERING

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
100	500	2.5k	10k	25k	100k	200k	500k
250	1k	5k	15k	50k	150k	250k	1 meg

Stock No.	Mfr's Type	Ohms (See Table "A" above)	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
753C8136	63M5	100 to 1 meg	3.56	2.60	1.56	1.35	1.25	1.14

2-WATT MOLDED COMPOSITION POTS



Totally enclosed and sealed against moisture. Tol.: ±10% to 1 megohm; ±20% above 1 megohm. Type 53C1 has 1 5/8" long by 1/4" dia. round shaft beyond bushing; 3/8" long bushing with 3/8-32-NEF thread. Type 53C2 has 1/8" by 1/4" dia. screwdriver slotted shaft with 1/2" long locking bushing. Type 53C3 has 7/8" long by 1/4" dia. round shaft FMS; 3/8" long bushing with 3/8-32-NEF-2 thread. Types 53C2 and 53C3 are fabricated to meet MIL-R-94 Style RV4. Shpg. wt., 4 oz.

TABLE "B" RESISTANCES AVAILABLE—SPECIFY WHEN ORDERING

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Meg
50	500	2000	10k	50k	200k	750k	3
100	1000	2500	20k	100k	250k	1 meg	5
250	.....	5000	25k	150k	500k	2 meg	10

Stock No.	Mfr's Type	Ohms (See Table "B" Above)	EACH 1-9	10-49	50-99	100-249	250-UP
753C6800	53C1	50 ohms to 10 meg	1.95	1.60	1.50	1.25	.92
753C6900	53C2	50 ohms to 10 meg	2.25	1.90	1.58	1.33	.99
753C7000	53C3	50 ohms to 10 meg	1.95	1.60	1.50	1.25	.92

SERIES 371 MOLDED POTENTIOMETERS

- Economy Hot-Molded Construction
- Rated 3/8-Watt • 20% Tolerance
- Pressure Spring and Cover

WITH WIRE LEADS OR SOLDER LUGS

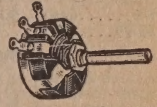
Have hot-molded carbon element, carbon contact brush, pressure spring and cover. Rating, 3/8-watt at 70° C, derating to zero at 120° C. Tol. ±20%. Wkg. V, 350 VAC. Diel. strength, 750 V rms. Torque, 6 oz.-inch max. operating; 1 lb.-inch stop. Rotation, 290° (±5°). Resistance range, 100 ohms to 1 meg. Specify resistance. Av. shpg. wt., 2 oz.

TABLE "C" RESISTANCES AVAILABLE—SPECIFY WHEN ORDERING

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
100	500	2500	10k	25k	100k	200k	500k
250	1000	5000	15k	50k	150k	250k	1 meg

Stock	Leads	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
753C8000	Solder Lugs	2.37	1.70	1.02	.88	.81	.75
753C8025	Wire Leads	2.37	1.70	1.02	.88	.81	.75

TYPE 58 4-WATT WIREWOUND CONTROLS



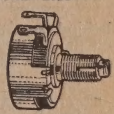
Designed to provide extremely smooth, quiet operation as voltage dividers, bias controls, etc. Have linear windings; resistance tolerance of ±10%. Insulation tested to 1000 VAC. Control size: 2 5/32 x 1 21/32" dia. Shaft size: 2"x1/4" dia. Molded phenolic body. Shpg. wt., 4 oz.

TABLE "D" RESISTANCES AVAILABLE—SPECIFY WHEN ORDERING

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	15	50	300	2000	20k	40k
4	20	100	500	5000	25k	50k
10	30	200	1000	10k	30k	.....

Stock No.	Mfr's Type	Resistances Available (See Table "D" Above)	EACH
753C7300	58	1 ohm to 10k	1.31
753C7325	58	20k and 25k	1.60
753C7350	58	30k, 40k, 50k	2.05

TYPE 43C2 2-WATT WIREWOUND POTENTIOMETERS



Available in a wide range of resistances. Have corrosion-proof finish, moisture and dust-proof construction. Resistance tolerance is ±5%. Linearity is ±2%. Require 1 5/32" O.D.; 5/8" depth behind mounting surface. With 1/4" slotted shaft and 3/8" dia., 1/2" long locking bushing. Shpg. wt., 5 oz.

TABLE "E" RESISTANCES AVAILABLE—SPECIFY WHEN ORDERING

Ohms	Ohms	Ohms	Ohms	Ohms
5	75	400	2000	15k
10	100	500	2500	10k
20	150	750	3000	20k
25	200	1000	4000	25k
50	300	1500	5000	50k

Stock No.	Mfr's Type	Resistances Available (See Table "E" Above)	EACH
753C6200	43C2	5 ohms to 10k	2.63
753C6225	43C2	15k to 25k	2.95
753C6226	43C2	50k	3.47

SERIES U39 "HUMDINGER" CONTROLS

Versatile 2-watt wirewound controls for above-chassis or printed-circuit board mounting. All have linear taper. Resistance tolerance is ±20%. Have no shafts, slot is provided for screwdriver adjustment. 3/4" diameter; 1 1/4" long; 1" mtg. centers. With insulated mounting plate. Shpg. wt., 2 oz.

TABLE "F" RESISTANCES AVAILABLE—SPECIFY WHEN ORDERING

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
5	75	150	500	700	1500	4000
8	100	200	600	800	2000	5000
50	125	300	650	1000	3000	

Stock No.	Mfr's Type	Ohms (See Table "F" Above)	EACH
753C2800	U39	5 to 5000	.63

Industrial Controls

Q CONTROLS WITH UNIVERSAL SHAFTS

Have 3" shafts—knurled, flatted and slotted. Resistance element is permanently bonded to a phenolic laminate. Contactor is a one-piece dual contactor of thin, high-stress alloy. Body diameter is 1⅝". Bushing is ¼" long. Less switches (below). Explanation of tapers is as follows: **Taper A is linear for uniform resistance change; Taper C is logarithmic for audio application.** Shpg. wt., 4 oz.

Stk. No.	Type	Ohms	Taper	Stk. No.	Type	Ohms	Taper
961-1723	Q11-201	250	A	961-1729	Q13-128	100k	C
961-1700	Q11-103	500	A	961-1711	Q11-129	200k	A
961-1701	Q11-108	1000	A	961-1712	Q11-130	250k	A
961-1702	Q11-109	1500	A	961-1730	Q13-130	250k	C
961-1703	Q11-110	2000	A	961-1714	Q11-133	500k	A
961-1725	Q13-111	2500	C	961-1731	Q13-133	500k	C
961-1704	Q11-112	3000	A	961-1717	Q11-137	1 meg	A
961-1705	Q11-114	5000	A	961-1732	Q13-137	1 meg	C
961-1726	Q13-114	5000	C	961-1718	Q11-138	1.5 meg	A
961-1706	Q11-116	10k	A	961-1719	Q11-139	2 meg	A
961-1707	Q11-119	20k	A	961-1733	Q13-139	2 meg	C
961-1708	Q11-120	25k	A	961-1724	Q11-239	2.5 meg	A
961-1727	Q13-120	25k	C	961-1720	Q11-140	3 meg	A
961-1709	Q11-123	50k	A	961-1721	Q11-141	5 meg	A
961-1728	Q13-123	50k	C	961-1722	Q11-143	10 meg	A
961-1710	Q11-128	100k	A				

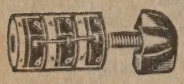
1-9 ..... Each 1.50 10-24 ..... Each 1.35 25-49 ..... Each 1.26
50-99 ..... Each 1.19 100-Up ..... Each 1.14

SWITCHES FOR Q CONTROLS

Attachable power switch is easily installed—just remove tab-held cover of Q control to mount switch. Type 76-4 (SPDT) is make-one, break-one. U.L. Component-Program Recognized. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Action	EACH				
			1-9	10-24	25-49	50-99	100-Up
961-5400	76-1	SPST	.99	.89	.83	.78	.75
961-5401	76-2	DPST	.99	.89	.83	.78	.75
961-5402	76-4	SPDT	.99	.89	.83	.78	.75

L-PAD AND T-PAD SPEAKER CONTROLS



Dependable speaker controls for a wide variety of audio applications. Handle up to 15 watts audio (5 watts DC). L-pad attenuators provide constant input-impedance. T-pad attenuators constant input and output impedance. 1⅝" diameter. Depth required behind panel: L-pad, 1", T-pad, 1½". ⅜" bushing permits mounting on panels up to ¾" thick. Includes knob for making easy adjustments. Av. shpg. wt., 6 oz.

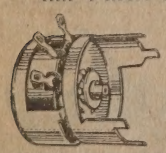
L-PAD CONTROLS

Stock No.	Mfr's Type	Ohms	EACH				
			1-9	10-24	25-49	50-99	100-Up
961-0600	LP4A	4	3.60	3.25	3.10	2.85	2.72
961-0700	LP8A	8	3.60	3.25	3.10	2.85	2.72
961-0800	LP15A	15	3.60	3.25	3.10	2.85	2.72

T-PAD CONTROLS

Stock No.	Mfr's Type	Ohms	EACH				
			1-9	10-24	25-49	50-99	100-Up
961-2500	TP4A	4	4.00	3.60	3.34	3.16	3.02
961-1200	TP8A	8	4.00	3.60	3.34	3.16	3.02
961-2700	TP500A	500	4.00	3.60	3.34	3.16	3.02

WM 4-WATT MULTISECTION "ADD-ON" CONTROLS



Easily attached to Types WPK, WPS, WP and WPRL controls to form dual control units. Multisections are ruggedly constructed for long life; handle up to 4 watts power. Linear taper design for uniform resistance change over entire operating range. 300° rotation. Multisection adds ⅝" to control mounting depth. **When ordering, specify type WM, and ohms from table below.** Shpg. wt., 2 oz.

Stock No.	Ohms (Specify)	EACH				
		1-9	10-24	25-49	50-99	100-Up
961 C 4000	50, 100, 200, 500, 1k, 2k, 2.5k, 5k, 10k	1.59	1.43	1.33	1.25	1.19

UNIVERSAL 4-WATT WIREWOUND TYPE WPK AND WPS CONTROLS

Versatile controls for industrial uses. A have linear taper, except type with after ohms, which has left-hand log tape for TV focus control. All have ±10% tolerance, 1¼" diameter, 23/32" deep threaded bushing has ⅜" diameter, ¾ long. Shafts have ¼" diameter. Type WPK has 3" shaft which fits a wide variety of knobs. Type WPS has ¾" shaft knurled end, slotted. WM multisections (see left) attach easily t all controls. Use for 2, 3, and 4-watt audio requirements. Contacto and connector are of a long-wearing alloy that makes direct contact Resistance element withstands high temperatures without shrink ing. **When ordering, be sure to specify Type No. and Ohms.** Av. shpg wt. 4 oz.

TYPE WPK CONTROLS WITH 3" SHAFT

Ohms	Ohms	Ohms	Ohms
10	100	500	2500
20	200	750L	3000
30	250	1000	5000
50	300	2000	10k

Stock No.	Ohms (Specify)	EACH				
		1-9	10-24	25-49	50-99	100-Up
961 C 4100	10 to 10k	1.80	1.60	1.40	1.30	1.20
961-4700	25k only	1.80	1.60	1.40	1.30	1.20
961-4701	50k only	2.15	190	1.70	1.60	1.50

TYPE WPS CONTROLS WITH ¾" SLOTTED SHAFT

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
25	250	500	1000	2000	2500	5000

Stock No.	Ohms (Specify)	EACH				
		1-9	10-24	25-49	50-99	100-Up
961 C 5100	25 to 5000	1.59	1.43	1.33	1.25	1.19

TYPE WPRL WIREWOUND CONTROLS WITH LOCKING-TYPE BUSHING

Selection of controls with screwdriver-slot shafts Shafts are ½" in diameter and approximately ½ long from the mounting face. Has ⅜" locking typ bushing and lock nut. Can be set and locked—idea for controls that need only infrequent adjustment TV sets, test instruments, other electronic equip ment. Has linear taper. For applications requiring power handlin capabilities of 2, 3 and 4 watts. Specify Type and Ohms. Av. shpg wt. 4 oz.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
2	20	100	500	2500	7500
5	25	200	750	3000	10k
8	30	250	1000	4000	.....
10	50	400	2000	5000	.....

Stock No.	Ohms (Specify)	EACH				
		1-9	10-24	25-49	50-99	100-Up
961 C 4800	2 to 10k	1.80	1.60	1.45	1.40	1.25

Stock No.	Ohms Available (Specify)	EACH				
		1-9	10-24	25-49	50-99	100-Up
961 C 4900	15k, 20k, 25k	1.80	1.60	1.45	1.40	1.25
961 C 5000	30k, 50k	2.10	1.90	1.70	1.60	1.45

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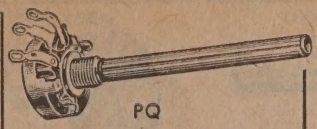
IRC Controls and Control Switches

EXPLANATION OF TAPERS

Taper A. Linear for uniform change of resistance.

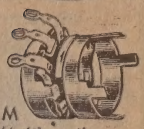
Taper C. Logarithmic for audio circuit or antenna shunt control.



PQ

INDUSTRIAL CONTROLS

RQ
RQL



M
Multi-sections

TYPE PQ, RQ, RQL CONTROLS AND TYPE M MULTISECTIONS

Excellent quality controls with "cushioned trim" are carefully designed and manufactured of premium materials for reliability. These versatile controls have a smooth carbon base element and "two-finger" wiper arm of thin, high-stress alloy—assures good contact and low noise. Type M multisections can easily be added to PQ, RQ or RQL types; permit exact "tailoring" of dual, triple and quadruple units. Special-purpose controls can be made up by using a type PQ, RQ or RQL with several M multisections and a Type 76 switch (listed below). Types PQ, RQ and RQL have ⅜" threaded bushing.

Body diameter less terminals is 15/16" maximum; body diameter including terminals is 5/8" maximum; depth behind panel, 33/64". Each Type M multisection adds 19/32" to the depth. Type PQ, RQ, RQL and M sections feature 300 degree arc of rotation—with or without switch. Power rating is ½ watt, 500 volt maximum. PQ types have shaft 3" long, ¼" diameter. RQ and RQL types have short shaft with screwdriver slot; shaft extends ⅛" beyond threaded bushing.

Types RQ and RQL are identical except for RQL having a split bushing and locking nut for permanent, vibration-proof settings. Tolerance of all types is ±10%. Conservatively rated for long dependable service. The terminals are heavily tinned for easy soldering. Ground plate on Types PQ, RQ and RQL has 2 locating tabs that may be bent down if not needed when installing in equipment. See Explanation of Tapers above. Specify Stock No., Mfr's Type and Ohms. Av. shpg. wt. 4 oz.

Mfr's Type	Ohms	Taper	Stock No. PQ	Stock No. RQ	Stock No. RQL	Stock No. M
11-103	500	A	961-1500	961-1800	961-2000	961-1100
11-108	1000	A	961-1501	961-1801	961-2001	961-1101
11-110	2000	A	961-1502	961-1802	961-2002	961-1102
11-112	3000	A	961-1503	951-1803	.....	.....
11-114	5000	A	961-1504	961-1804	961-2003	961-1103
11-115	7500	A	961-1505	.....	.....	.....
11-116	10k	A	961-1506	961-1805	961-2004	961-1104
13-116	10k	C	961-1518	.....	.....	.....
11-119	20k	A	961-1507	.....	961-2005	.....
11-120	25k	A	961-1508	.....	961-2006	961-1105
11-123	50k	A	961-1509	961-1806	961-2007	961-1106
13-123	50k	C	961-1519	.....	.....	.....
11-128	100k	A	961-1510	961-1807	961-2008	961-1107
13-128	100k	C	961-1520	.....	.....	961-1112
11-129	200k	A	.....	.....	961-2009	.....
11-130	250k	A	961-1511	961-1808	961-2010	961-1108
13-130	250k	C	961-1521	.....	.....	.....
11-133	500k	A	961-1512	961-1809	961-2011	961-1109
13-133	500k	C	961-1522	961-1814	961-2014	961-1113
11-137	1.0 meg	A	961-1513	961-1810	961-2012	961-1110
13-137	1.0 meg	C	961-1523	.....	961-2015	.....
11-139	2.0 meg	A	961-1514	.....	961-2013	.....
11-140	3.0 meg	A	961-1515	961-1811	.....	.....
13-140	3.0 meg	C	961-1524	.....	.....	961-1114
11-141	5.0 meg	A	961-1516	961-1812	.....	.....
11-143	10.0 meg	A	961-1517	961-1813	.....	961-1111

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
See above Table	PQ and RQ Controls	2.00	1.80	1.67	1.58	1.51
See above Table	M Multisections	1.74	1.57	1.45	1.38	1.32
See above Table	RQL Controls	2.20	1.98	1.84	1.74	1.66

TYPE 76 ATTACHABLE SWITCHES FOR PQ, RQ, RQL AND M CONTROLS

Can be easily attached to the controls listed above by bending down four metal tabs. Switch housings are made of arc-resistant material. Terminals are hydraulically staked—no openings for solder to run into the switch. Units have silver-plated alloy contacts. Type 76-1 handles up to 5 amps at 125 volts; Type 76-2 is rated 1 amp at 125 volts. Type 76-4 is make-one, break-one type for CRT spot killing. U.L. Component-Program Recog. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-Up
961-5400	76-1	SPST	.99	.89	.83	.78	.75
961-5401	76-2	DPST	.99	.89	.83	.78	.75
961-5402	76-4	SPDT	.99	.89	.83	.78	.75

CTS U-201 AND X-201 CARBON TRIMMERS

Miniature ¼-watt carbon trimmers for limited-space application. Ideal for printed circuit boards where an occasionally adjusted variable resistance is required. PC type terminals; easy-to-install, snap-in self-supporting bracket mount. U-201 mounts with adjusting knob parallel to PC board; X-201 with knob perpendicular to board. Blue nylon knurled knob, 19/32" dia.; slotted for easy front and rear adjustment. Linear taper; 260° ±5% rotation; max. voltage 500 VDC; ±20% tolerance. Av. wt., 2 oz.

U-201

X-201

Stock No.	Type U-201	Ohms	Stock No.	Type X-201	Ohms
745-3200	R101B	100	745-3600	R101B	100
745-3201	R251B	250	745-3601	R251B	250
745-3202	R501B	500	745-3602	R501B	500
745-3203	R102B	1000	745-3603	R102B	1000
745-3204	R252B	2500	745-3604	R252B	2500
745-3205	R502B	5000	745-3605	R502B	5000
745-3206	R103B	10k	745-3606	R103B	10k
745-3207	R253B	25k	745-3607	R253B	25k
745-3208	R503B	50k	745-3608	R503B	50k
745-3209	R104B	100k	745-3609	R104B	100k
745-3210	R254B	250k	745-3610	R254B	250k
745-3211	R504B	500k	745-3611	R504B	500k
745-3212	R105B	1 Meg	745-3612	R105B	1 Meg

1-24 . . Ea. .39 25-49 . . Ea. .35 50-99 . . Ea. .33 100-Up . . . Ea. .29

CTS 117 AND P-115 WIREWOUND TRIMMERS

Miniature wirewound trimmers with fully enclosed construction; protects resistance unit and adjustable arm from dust and foreign objects. Assures longer life and silent operation with minimum power loss. Insulated rotor isolates tuning device from shock and prevents external interference or damage to circuit during adjustment. Cross-slot in nylon rotor permits adjustment by screwdriver or adjusting tool. Simple to mount—P-115 is twist-tab mounted; 117 is rivet-ear mounted. Printed circuit type terminals. Linear taper ±10% tolerance; rated 2 watts; 270° ±5° rotation; maximum voltage 500 VDC. Long rotational life. Av. wt., 2 oz.

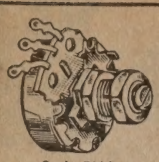
117

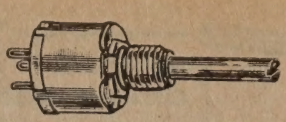
P-115

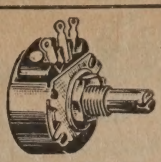
Stock No.	Type 117	Ohms	Stock No.	Type P-115	Ohms
745-4600	R5R0A	5	745-1600	R5R0A	5
745-4601	R100A	10	745-1601	R100A	10
745-4602	R250A	25	745-1602	R250A	25
745-4603	R500A	50	745-1603	R500A	50
745-4604	R101A	100	745-1604	R101A	100
745-4605	R251A	250	745-1605	R251A	250
745-4606	R501A	500	745-1606	R501A	500
745-4607	R102A	1000	745-1607	R102A	1000
745-4608	R252A	2500	745-1608	R252A	2500
745-4609	R502A	5000	745-1609	R502A	5000
745-4610	R103A	10K	745-1610	R103A	10k

1-24 . . Ea. 1.25 25-49 . . Ea. 1.00 50-99 . . Ea. .75 100-Up . . .60 Ea.

Potentiometers and Wirewound Controls


Style RV4


Style RV6


Style RA20

MILITARY-APPROVED COMPOSITION AND WIREWOUND POTENTIOMETERS

MIL-R-94B STYLE RV4 3-WATT COMPOSITION

Provides long life, low noise. 1 1/16" diameter. Rated 3 watts. Completely enclosed construction. Reliable carbon-ceramic element. Choice of 4 shaft styles, plain or locking bushings. CTS-Type 320LT/321LT: *5/8" slotted shaft, §7/8" shaft, 1/2" long locking bushing. 320/321: †7/8" slotted shaft, ‡2 1/2"shaft, 3/8" bushing. 4 oz.

Stock No.	MIL Type RV4LAYS-	Ohms	Stock No.	MIL Type RV4NAYS-	Ohms
745-2500	A103A*	10k	745-2509	D102A†	1000
745-2501	A104A*	100k	745-2510	D103A†	10k
745-2502	A252A*	2500	745-2511	D104A†	100k
745-2503	A254A*	250k	745-2512	D253A†	25k
745-2504	A503A*	50k	745-2513	D501A†	500
745-2505	D102A§	1000	745-2514	D502A†	5000
745-2506	D103A§	10k	745-2515	K102A‡	1000
745-2507	D252A§	2500	745-2516	K103A‡	10k
745-2508	D501A§	500	745-2517	K502A‡	5000

1-9.....Each 1.95 10-49.....Each 1.75 50-99.....Each 1.62
100-249.....Each 1.46 250-Up.....Each 1.20

MIL-R-94B RV6 1/2-WATT COMPOSITION

1/2" diameter variable resistors. Require only 3/8" mounting space behind panel. Have 1/8" diameter slotted shafts and 1/4" bushings. *Type 300LT has 5/8" long slotted shaft and 1/2" long locking bushing. †Type 300 has 7/8" slotted shaft and 1/4" long bushing. Both have linear resistance taper; provide excellent stability, high resolution. Reliable carbon-ceramic element. Av. shpg. wt 4 oz.

Stock No.	MIL Type RV6LAYSA-	Ohms	Stock No.	MIL Type RV6NAYSD-	Ohms
745-2900	101A*	100	745-2909	101A†	100
745-2901	102A*	1000	745-2910	102A†	1000
745-2902	103A*	10k	745-2911	103A†	10k
745-2903	104A*	100k	745-2912	252A†	2500
745-2904	251A*	250	745-2913	253A†	25k
745-2905	252A*	2500	745-2914	501A†	500
745-2906	501A*	500	745-2915	502A†	5000
745-2907	502A*	5000	745-2916	503A†	50k
745-2908	503A*	50k	745-2917	504A†	500k

1-9.....Each 4.10 10-49.....Each 3.70 40-99.....Each 2.76
100-249.....Each 2.37 250-Up.....Each 1.99

MIL-R-19A RA20 2-WATT WIREWOUND

Wirewound variable resistors in insulated housings. All are 1 17/64" dia. and require 5/8" behind panel. Have 1/4" dia. slotted shafts and 3/8"-32 threaded bushings. *252LT has 5/8" slotted shaft and 1/2" locking bushing. †252 has 7/8" slotted shaft, 3/8" bushing. 4 oz.

Stock No.	MIL Type RA20LASB-	Ohms	Stock No.	MIL Type RA20NASD-	Ohms
745-1900	100A*	10	745-1910	100A†	10
745-1901	102A*	1000	745-1911	101A†	100
745-1902	103A*	10k	745-1912	102A†	1000
745-1903	201A*	200	745-1913	103A†	10k
745-1904	250A*	25	745-1914	153A†	15k
745-1905	251A*	250	745-1915	201A†	200
745-1906	252A*	2500	745-1916	252A†	2500
745-1907	500A*	50	745-1917	500A†	50
745-1908	501A*	500	745-1918	501A†	500
745-1909	502A*	5000	745-1919	502A†	5000

1-9.....Each 2.55 10-49.....Each 2.30 50-99.....Each 1.73
100-249.....Each 1.29 250-Up.....Each 1.21

HOW TO READ MIL NUMBERS

MIL-R-19A is the military specification covering wirewound potentiometers and MIL-R-94B is the military specification covering carbon composition potentiometers. Approval to either military specification assures extremely high quality.

"MIL" DESIGNATION FOR RV4-RV6 POTENTIOMETERS PER MIL-R-94

RV( )	N	A	Y	SB	104	B
STYLE	BUSHING	SWITCH	TEMP. & MOISTURE RESIST. CHAR.*	OPERATING SHAFT**	RESISTANCE (OHMS)	RESIST. CHAR. & OVERALL RESIST. TOLERANCE

STYLE: RV4-2 WATT; RV6-0.5 WATT
BUSHING: N-STANDARD; L-LOCKING
SWITCH: A-NONE

TEMP. & MOISTURE RESIST. CHAR.*

	Max. Oper. Temp.	Ambient Temp.	Max. Resistance Change due to humidity test	Min. Insulation Resistance during humidity test
X	120°C	40°C	± 14%	50 Megohms
Y	120°C	40°C	± 10%	100 Megohms

RESIST. CHAR. & OVERALL RESIST. TOLERANCE: A-Linear ± 10%, B-Linear ± 20%

RESISTANCE (OHMS): First two digits are significant and last one is number of zeros to follow.

OPERATING SHAFT:** 1ST Letter = Style; 2ND Letter = Lgth. from mtg. surface

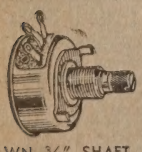
MIL-R-94

Style		
Symbol	—	Style
F	—	Flatted
S	—	Slotted

Length			
Symbol	RV4 Flatted	RV4 Slotted	RV6 Slotted
A	1/4" Dia.	1/4" Dia.	1/4" Dia.
B	—	3/8*	3/8*
C	—	1/2**	—
D	—	3/4	3/4
G	—	1 1/4	—
K	2 1/2	2 1/2	—
L	—	—	3/4***

*Used only with RV4L & RV6L Type
**Used only with RV4N Type
***Used only with RV6N Type
Shaft lengths measured from mounting surface.

CENTRALAB 5-WATT WIREWOUND CONTROLS


WN 3/4" SHAFT
WW 3" SHAFT

Rated five-watt wirewound controls that are smaller than two-watt units. Meets most sections of MIL-R-19B. 10% tolerance; 5-watt rating up to 40° C ambient temperature. Dielectric strength: 900 VAC-RMS to ground. Mounting bushing 3/8" long, 3/8" dia., 32 NEF-2A threads, with nut, lock washer. Body, 1 5/32" dia., 9/16" deep. Shaft, 1/4" dia. *Length mounting surface. Shpg. wt. 4 oz.

STOCK VALUES (OHMS)—SPECIFY VALUES WANTED

2	15	50	200	500	1500	3000	10k	25k
5	25	75	300	750	2000	5000	15k	50k
10	30	100	400	1000	2500	7500	20k	100k

TYPE WW—3" ROUND SHAFT*

Stock No.	Values (Ohms) Specify from Table	EACH				
		1-9	10-24	25-49	50-99	100-Up
748C2300	2 ohms thru 7500	1.32	1.19	1.10	1.05	.99
748C2400	10k thru 25k	1.59	1.43	1.33	1.26	1.19
748-2000	50k only	2.01	1.81	1.68	1.59	1.51
748-2000	100k only	2.46	2.22	2.05	1.95	1.85

TYPE WN—3/4" KNURLED AND SLOTTED SHAFT*

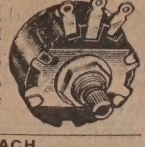
748C1900	2 ohms thru 7500	1.32	1.19	1.10	1.05	.99
748C2000	10k thru 25k	1.50	1.43	1.33	1.26	1.19
748-2100	50k only	2.01	1.81	1.68	1.59	1.51
748-2200	100k only	2.46	2.22	2.05	1.95	1.85

Specify Stock No., Resistance and Mfr's Type No. When Ordering Controls

Mallory Controls

TYPE R 3-WATT WIREWOUND CONTROLS

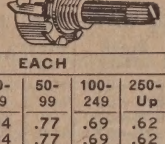
hree-watt wirewound potentiometers. Excellent or use as voltage dividers and bias controls. Insulated-contact arm type, linear taper. Special dual-contactor mechanism. 900 volts AC insulation between resistance element and chassis. 290° otation. Linear taper. 1²⁵⁄₆₄″ dia. All have thumb nurled, screwdriver-slotted stub shaft. All have ⅜″ bushing. Av. shpg. wt., 4 oz.



Stock No.	Mfr's Type	Ohms	EACH 1-9	10-49	50-99	100-249	250-Up
54-4100	R20L	20	.93	.84	.78	.70	.62
54-4101	R25L	25	.93	.84	.78	.70	.62
54-4102	R30L	30	.93	.84	.78	.70	.62
54-4103	R50L	50	.93	.84	.78	.70	.62
54-4104	R100L	100	.93	.84	.78	.70	.62
54-4105	R250L	250	.93	.84	.78	.70	.62
54-4106	R500L	500	.93	.84	.78	.70	.62
54-4107	R1000L	1000	.93	.84	.78	.70	.62
54-4108	R1500L	1500	.93	.84	.78	.70	.62
54-4109	R2500L	2500	.93	.84	.78	.70	.62
54-4110	R3000L	3000	.93	.84	.78	.70	.62
54-4111	R5000L	5000	.93	.84	.78	.70	.62
54-4112	R10ML	10k	1.08	.97	.90	.81	.72
54-4113	R20ML	20k	1.08	.97	.90	.81	.72

TYPE MRB 3-WATT WIREWOUND CONTROLS

IR controls ¾″ diameter are used in AGC, onvergence, hum-balance circuits, etc. All-netal construction, fully enclosed case. Bush-ng mount: bushings ⅜″-32x¼″. Shaft: ¼″ ia.x1¼″ long. Wattage: 3 at 40°C. Rotation: 50° mechanical; 248° electrical. Tol.: ±20%. oltage breakdown: 900 VAC rms. 2 oz.

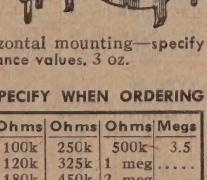


Stock No.	Mfr's Type	Ohms	EACH 1-9	10-49	50-99	100-249	250-Up
854-2500	MR10B	10	.93	.84	.77	.69	.62
854-2501	MR50B	50	.93	.84	.77	.69	.62
854-2502	MR100B	100	.93	.84	.77	.69	.62
854-2503	MR250B	250	.93	.84	.77	.69	.62
854-2504	MR500B	500	.93	.84	.77	.69	.62
854-2505	MR1000B	1000	.93	.84	.77	.69	.62
854-2506	MR2500B	2500	.93	.84	.77	.69	.62
854-2507	MR5000B	5000	.93	.84	.77	.69	.62
854-2508	MR10KB	10k	1.08	.97	.90	.81	.72
854-2509	MR15KB	15k	1.08	.97	.90	.81	.72

MINIATURE TRIMMER CONTROLS

MTC-L1

MTC-L4



Miniature ¼-watt trimmers designed specially for printed circuits. Can be sed in transistorized or tube circuits—herever an occasionally adjusted, ariable resistance is needed. Have ush, open, crossed slot; adjustments an be made with either blade or Phillips ype screwdriver. All have linear taper; 70° rotation; 500 V max. rating. All re ⅜″ dia. In 2 types—vertical or horizontal mounting—specify ype wanted. See table "A" below for resistance values. 3 oz.

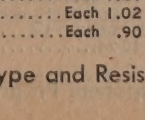
ABLE "A"—RESISTANCES AVAILABLE—SPECIFY WHEN ORDERING

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs
100	300	1000	3000	6800	20k	100k	250k	500k	3.5
200	500	1500	5000	10k	25k	120k	325k	1 meg	.....
250	750	2000	6000	15k	50k	180k	450k	2 meg	.....

YPE MTC-L1 Terminals arranged for stand-up, vertical mounting.
54 C 5019. 1-24. . Each .39 25-49. . . Each .35 50-99. . . Each .33
00-299. . . . . Each .29 300-Up. . . . . Each .26

YPE MTC-L4. Terminals arranged for flat, horizontal mounting.
54 C 5020. 1-24. . Each .39 25-49. . . . . Each .35 50-99. . . Each .33
00-299. . . . . Each .29 300-Up. . . . . Each .26

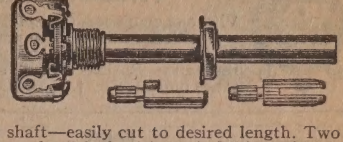
YPE TSA-10 THEATER SPEAKER CONTROL



ugged speaker control especially designed for rive-in theaters. Completely weatherproofed to ithstand severe climatic conditions. Unit is L-ad type; has durable steel construction. Has 10-hm input impedance; 4-ohm output impedance. With 1⅛″ diameter case, ½″ long shaft. Supplied ith mounting nut. Av. shpg. wt., 4 oz.

54-4069. 1-9. . . . . Each 1.35 10-24. . . . . Each 1.26
5-49. . . . . Each 1.13 50-99. . . . . Each 1.02
00-249. . . . . Each .97 250-Up. . . . . Each .90

TYPE U METAL-SHAFT MIDGETROL CONTROLS

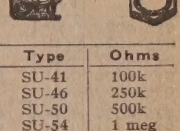


For audio, tone and similar control circuits in home receivers, audio amplifiers, portables, TV sets, and industrial electronic equipment. Available in a full line of resistances, tapers, and taps. Round, hollow shaft—easily cut to desired length. Two spline-shank knob adapters furnished with each Midgetrol—see illustration above. Taper No. 1: for audio or antenna shunt circuits (½ watt). Taper No. 4: Linear (1 watt). For voltage control. With nut and lockwasher. 1⅝″ diameter. Brass shaft, 2⅜″ long, ¼″ dia. Less switch (below). Av. shpg. wt., 4 oz.

Stock No.	Type	Ohms	Taper	Stock No.	Type	Ohms	Taper
854-5000	U-1	100	4	854-5013	U-35	50k	4
854-5001	U-2	500	4	854-5014	U-39	100k	1
854-5002	U-4	1000	4	854-5015	U-41	100k	4
854-5003	U-8	3000	4	854-5016	U-42	150k	1
854-5004	U-12	5000	1	854-5017	U-44	250k	1
854-5005	U-14	5000	4	854-5018	U-46	250k	4
854-5006	U-18	10k	1	854-5019	U-48	500k	1
854-5007	U-20	10k	4	854-5020	U-50	500k	4
854-5008	U-21	15k	1	854-5021	U-53	1 meg	1
854-5009	U-26	20k	4	854-5022	U-54	1 meg	4
854-5010	U-28A	25k	1	854-5023	U-56	2 meg	4
854-5011	U-29	25k	4	854-5024	U-82	10 meg	4
854-5012	U-33	50k	1				

1-24. . . . . Each 1.02 25-49. . . . . Each .92 50-99. . . . . Each .85
100-174. . . Each .77 175-299. . . . Each .73 300-Up. . . . . Each .68

TYPE SU MIDGETROLS



For use as exact replacements in television sets and special applications. Have ⅝″ long x ¼″ dia. fixed, knurled and slotted phenolic shaft extending ¼″ beyond bushing. 1⅝″ dia. Rated ½-watt. Linear taper. With washer and nut. Av. shpg. wt., 4 oz.

Stock No.	Type	Ohms	Stock No.	Type	Ohms
854-4400	SU-6	1500	854-4406	SU-41	100k
854-4401	SU-8	3000	854-4407	SU-46	250k
854-4402	SU-14	5000	854-4408	SU-50	500k
854-4403	SU-20	10k	854-4409	SU-54	1 meg
854-4404	SU-29	25k	854-4410	SU-67	5 meg
854-4405	SU-35	50k			

1-24. . . . . Each .93 25-49. . . . . Each .84 50-99. . . . . Each .78
100-174. . . . Each .70 175-299. . . . . Each .66 300-Up. . . . . Each .62

SWITCHES FOR MIDGETROLS (EXCEPT TYPE SU)

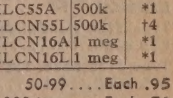
"Push-on, stay-on" switches for Midgetrols. Av. wt., 2 oz.
854-5025. US-26 SPST Switch. 1-24. . . . . Each .42
25-49. . . . . Each .38 50-99. . . . . Each .35 100-174. . . . . Each .32
175-299. . . . . Each .30 300-Up. . . . . Each .28

854-5026. US-27 DPST Switch. 1-24. . . . . Each .51
25-49. . . . . Each .46 50-99. . . . . Each .43 100-174. . . . . Each .38
175-299. . . . . Each .36 300-Up. . . . . Each .34

854-5027. US-28 SPDT Switch. 1-24. . . . . Each .51
25-49. . . . . Each .46 50-99. . . . . Each .43 100-174. . . . . Each .38
175-299. . . . . Each .36 300-Up. . . . . Each .34

TYPE USB-29 CIRCUIT BREAKER. High-quality combination AC line switch (SPST) and circuit breaker for TV, radio, etc. Carries 1.6 amps, breaks at 2.5 amps. Resets by turning to "OFF" position. Fits all Mallory U type controls. Shpg. wt., 4 oz.
854-5028. . . . . Each .98

MLC ½″ DIAMETER SUBMINIATURE CONTROLS



Rated ¼-W linear, ⅛-W audio. ¼″-32 bushing, nut. Shaft: steel, ⅛″ dia.x1 7⁄16″. *Taper No. 1 for audio, antenna shunts. †Taper No. 4 is Linear, for voltage control. Bushing mount. Av. shpg. wt., 1 oz.

Stock No.	Type	Ohms	Taper	Stock No.	Type	Ohms	Taper
854-2400	MLC13L	1000	†4	854-2403	MLC15L	100k	†4
854-2409	MLC252A	2500	*1	854-2404	MLC25L	200k	†4
854-2405	MLC53A	5000	*1	854-2410	MLC254L	250k	†4
854-2406	MLC53L	5000	†4	854-2408	MLC55A	500k	*1
854-2401	MLC14L	10k	†4	854-2414	MLCN55L	500k	†4
854-2407	MLC54L	50k	†4	854-2412	MLCN16A	1 meg	*1
854-2402	MLC15A	100k	†1	854-2413	MLCN16L	1 meg	*1

1-24. . . . . Each 1.14 25-49. . . . Each 1.03 50-99. . . . Each .95
100-174. . . . Each .86 175-299. . . . Each .81 300-Up. . . . . Each .76

TYPE 1910K KNOB. For use with type MLC series subminiature control. Size, ¾″x¾″. Shpg. wt., 1 oz.
854-2411. . . . . Each .20

Memcor/Ohmite Wirewound Rheostats

VITREOUS-ENAMELED RHEOSTATS FROM 7½ WATTS TO 300 WATTS

Vitreous enameled, (except Types 4200, —1, —2, —3, and —4), silicone-ceramic. Cannot smoke, char, shrink or shift. Metal-graphite contact brushes, varied to fit current and resistance. Ratings at full setting. ‡ U.L. Recog. except types indicated by †. Types H, J, K, and L mount on panels up to ¼" thick. Type N on panels up to 1¼" thick. Depth behind panel (and dia.): Type H, 1⅜" (1⅛"); Type J, 1⅜" (2⅝"); Type K, 1¾" (3⅛"); Type L, 2" (4"); Type N, 2⅜" (6"). Less knobs; see knobs, dial plates, and coupling kits at bottom of page. Av. shpg. wt., 8 oz.

PRICE LOCATOR

Price Code	EACH 1-4	5-9	10-24	25-49	50-Up
A	5.50	4.68	3.69	3.03	2.26
B	4.80	4.08	3.22	2.64	1.97
C	5.80	4.93	3.89	3.19	2.38
D	6.00	5.10	4.02	3.30	2.46
E	6.60	5.61	4.42	3.63	2.71
F	7.30	6.21	4.89	4.02	2.99
G	8.10	6.89	5.43	4.46	3.32
H	6.30	5.36	4.22	3.47	2.58
J	8.70	7.40	5.83	4.79	....
K	9.20	7.82	6.16	5.06	....
L	9.80	8.33	6.57	5.39	....
M	11.10	9.44	7.44	6.11	....
N	5.70	4.85	3.82	3.14	2.34
P	11.60	9.86	7.77	6.38	....
R	14.70	12.50	9.85	7.84	
S	9.50	8.08	5.20	.....	
T	11.60	8.93	6.26	.....	
W	18.75	15.93	.....	.....	
..	.....	.....	.....	.....	
..	.....	.....	.....	.....	

7½ WATT—TYPE C

Rugged ceramic and metal construction. Operate at max. hot spot temp. of 340°C. .515" dia., 7/8" behind panel. ⅛" dia. shaft, ⅝" long. §Locking shaft. 2¼ oz.

Stock No.	Mfr's Type	Ohms	Price Code
875-8001	4908†	10	S
875-8002	4909†	15	S
875-8009	4919†	500	S
875-8020	4952§†	50	T

12½-WATT—TYPE E MINIATURE RHEOSTATS

For high temperature applications; operate at maximum hot spot temperature of 340°C. Resistance ±10%. ⅞" diameter. 1 1/16" behind panel. ⅛" dia. shaft, ⅜" long. Less knob, below left. 2½ oz.

Stock No.	Type	Ohms	Code
875-4001	0101†	1	A
875-4002	0102†	2	A
875-4003	0103†	3	A
875-4005	0105†	8	A
875-4006	0106†	10	A
875-4007	0107†	15	B
875-4008	0108†	25	B
875-4010	0110†	50	B
875-4011	0111†	75	B
875-4012	0112†	100	B
875-4014	0114†	175	B
875-4015	0115†	250	B
875-4017	0117†	500	B
875-4018	0118†	750	B
875-4019	0119†	1000	A
875-4020	0120†	1500	A
875-4021	0121†	2500	A
875-4022	0122†	3500	C
875-4023	0123†	5000	C
875-4135	4190†	7500	D
875-4136	4191†	10k	D
875-4137	4193†	15k	E

25 WATT—TYPE H

Stock No.	Mfr's Type	Ohms	Price Code
875-4025	0140	1	A
875-4026	0141	2	A
875-4027	0142	3	A
875-4028	0143	6	A
875-4029	0144	8	A
875-4030	0145	10	A
875-4031	0146	15	B
875-4032	0147	25	B
875-4033	0148	35	B
875-4034	0149	50	B
875-4035	0150	75	B
875-4036	0151	100	B
875-4037	0152	125	B
875-4038	0153	175	B
875-4039	0154	250	B
875-4040	0155	350	B
875-4041	0156	500	B
875-4042	0157	750	B
875-4043	0158	1000	A
875-4044	0159	1500	A
875-4045	0160	2500	A
875-4046	0161	3500	C
875-4047	0162	5000	C
875-4138	4200†	7500	D
875-4139	4201†	10k	D

25 WATT—TYPE H (Cont'd)

Stock No.	Mfr's Type	Ohms	Price Code
875-4140	4202†	15k	E
875-4141	4203†	20k	F
875-4142	4204†	25k	G

50 WATT—TYPE J

Stock No.	Mfr's Type	Ohms	Price Code
875-4048	0308	0.5	H
875-4049	0309	1	H
875-4050	0310	2	H
875-4051	0311	4	H
875-4052	0312	6	H
875-4053	0313	8	N
875-4054	0314	12	N
875-4055	0315	16	N
875-4056	0316	22	N
875-4057	0317	35	N
875-4058	0318	50	N
875-4059	0319	80	N
875-4060	0320	125	N
875-4061	0321	150	N
875-4062	0322	225	N
875-4063	0323	300	N
875-4064	0324	500	N
875-4065	0325	800	D
875-4066	0326	1000	D
875-4067	0327	1600	D

50 WATT—TYPE J (Cont'd)

Stock No.	Mfr's Type	Ohms	Price Code
875-4068	0328	2500	D
875-4069	0329	3500	H
875-4070	0330	5000	H
875-4071	0331	8000	H
875-4072	0332	10k	H

100 WATT—TYPE K

Stock No.	Mfr's Type	Ohms	Price Code
875-4073	0440	0.5	K
875-4074	0441	1	K
875-4075	0442	2	K
875-4076	0443	3	K
875-4077	0444	5	K
875-4078	0445	7.5	K
875-4079	0446	10	K
875-4080	0447	16	J
875-4081	0448	25	J
875-4082	0449	50	J
875-4083	0450	75	J
875-4084	0451	100	J
875-4085	0452	200	J
875-4086	0453	300	J
875-4087	0455	500	J
875-4088	0456	750	J
875-4089	0457	1000	K

100 WATT—TYPE K (Cont'd)

Stock No.	Mfr's Type	Ohms	Price Code
875-4090	0459	2000	K
875-4091	0461	5000	L
875-4092	0463	10k	M

150 WATT—TYPE L

Stock No.	Mfr's Type	Ohms	Price Code
875-4093	0524	0.5	P
875-4094	0525	1	P
875-4095	0528	5	P
875-4096	0529	7.5	P
875-4097	0530	10	P
875-4098	0531	15	P
875-4099	0532	25	M
875-4100	0533	35	M
875-4101	0534	50	M
875-4102	0535	75	M
875-4103	0536	100	M
875-4104	0537	150	M
875-4105	0538	200	M
875-4106	0539	250	M
875-4107	0540	350	M
875-4108	0541	500	M
875-4109	0542	750	P
875-4110	0543	1250	P
875-4111	0549	10k	R

300 WATT—TYPE N

Stock No.	Type	Ohms	Code
875-4112	0650	1	W
875-4114	0652	3	W
875-4115	0654	5	W
875-4116	0655	7.5	W
875-4117	0656	10	W
875-4118	0657	15	W
875-4119	0658	25	W
875-4120	0659	50	W
875-4121	0661	100	W
875-4122	0662	150	W
875-4123	0663	200	W
875-4124	0664	300	W
875-4125	0665	400	W
875-4126	0666	700	W
875-4127	0668	1200	W
875-4128	0669	1500	W
875-4129	0671	2500	W

DIAL PLATES AND KNOB

Type 5000 Dial Plate. For Type H, J, K and L rheostats. 2 3/16" diameter. Handsomely finished with bright figures and lines on etched black background. 0-100 scale. Shpg. wt., 2 oz.
875-8030. 1-4.....Ea. .30

Type 5001 Dial Plate. For Type N. 5½" dia. 0-100. Shpg. wt., 2 oz.
875-8031. 1-2.....Ea. .74 3-4.....Ea. .63

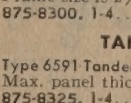
Type 5104 Handwheel. With pointer. For Type N. 3¼" dia. 2 oz.
875-8050. 1-2.....Ea. 1.45

Type 5150 Knob. 1½" finger-grip type for H, J, K and L. 2 oz.
875-8060. 1-4.....Ea. .30 5-9.....Ea. .26 10-Up....Ea. .20

DIAL PLATE AND KNOB FOR TYPE E

Type 5007 Dial Plate. For Type E. 1¼" dia. Black backgrnd. 1 oz.
875-8035. 1-4.....Ea. .30 5-9.....Ea. .26 10-Up.....Ea. .20

Type 5151 Knob. ¾" finger-grip type for E rheostats. Black. 1 oz.
875-061. 1-4.....Ea. .30 5-9.....Ea. .26 10-Up.....Ea. .20



TANDEM COUPLING KITS

Include steel "U" frame, mica washer, coupling Allen wrench and instructions. Maximum pane thickness with standard rheostat is 1/8".

Type 6533 Tandem Coupling Kit. Large frame fo Types G, K, or L in front, Types H, J, G, K o L behind. Frame size, 2 9/16" long by 1¼" wide. Shpg. wt., 8 oz
875-8301. 1-4. Ea. 2.90 5-9. Ea. 2.47 10-Up. Ea. 1.9

Type 6532 Tandem Coupling Kit. Compact frame for Types H or in front; accommodates Types H, J, G, K or L in rear position Frame size is 2 5/32" long by 1¼" wide. Shpg. wt., 4 oz.
875-8300. 1-4.....Ea. 2.30 5-9.....Ea. 1.96 10-Up.....Ea. 1.5

TANDEM COUPLING KIT FOR TYPE E

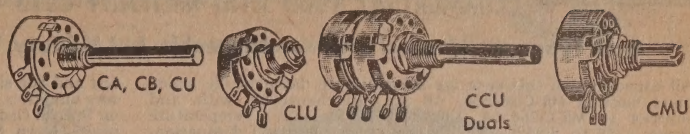
Type 6591 Tandem Coupling Kit. For assembling two Type E rheostats Max. panel thickness, 1/16". Frame 1 7/16". long, ¾" wide. 2 oz.
875-8325. 1-4.....Ea. 2.30 5-9.....Ea. 1.9
10-24.....Ea. 1.54 25-Up.....Ea. 1.2

*Recognized Under the Component Program of Underwriter's Laboratories, Inc

Ohmite Potentiometers

TYPE "AB" MOLDED COMPOSITION 2-WATT POTENTIOMETERS

ngle units are 5/8x1 1/2" dia.; double units are 7/64x1 1/2" dia. Mount in 3/8" hole in panels to 1/4" ick. 2" long 1/4" round shafts except CLU, otted shaft and locking nut; CMU, 7/8" slotted aft. CU, CCU, CMU and CLU Types linear per; CA Types, CW log; CB Types, CCW log. 10% tol. except * ±20%. Av. shpg. wt., 3 1/2 oz.



STYLE CA, CB, CU, CCU PRICE LOCATOR

Price Code	EACH 1-9	10-49	50-99	100-Up
A	1.95	1.76	1.62	1.46
B	2.25	2.03	1.87	1.69
C	5.85	5.27	4.86	4.39

Stock No.	Mfr's Type	Ohms	Code
875-1327	CU5001	50	A
875-1301	CU1011	100	A
875-1306	CU1511	150	A
875-1316	CU2511	250	A
875-1321	CU3511	350	A
875-1328	CU5011	500	A
875-1333	CU7511	750	A
875-1302	CU1021	1000	A
875-1307	CU1521	1500	A
875-1317	CU2521	2500	A
875-1322	CU3521	3500	A
875-1329	CU5021	5000	A
875-1334	CU7521	7500	A
875-1303	CU1031	10k	A
875-1200	CB1031	10k	B
875-1308	CU1531	15k	A
875-1318	CU2531	25k	A
875-1201	CB2531	25k	B
875-1323	CU3531	35k	A
875-1330	CU5031	50k	A
875-1202	CB5031	50k	B
875-1335	CU7531	75k	A
875-1304	CU1041	100k	A
875-0700	CA1041	100k	B
875-1309	CU1541	150k	A
875-1319	CU2541	250k	A
875-0702	CA2541	250k	B
875-1325	CU3541	350k	A
875-1331	CU5041	500k	A
875-0704	CA5041	500k	B
875-1336	CU7542	750k*	A
875-1305	CU1052	1 meg*	A
875-0701	CA1052	1 meg*	B
875-1310	CU1552	1.5 meg*	A
875-1315	CU2052	2.0 meg*	A
875-1320	CU2552	2.5 meg*	A
875-0703	CA2552	2.5 meg*	B
875-1326	CU3552	3.5 meg*	A
875-1332	CU5052	5 meg*	A
875-1301	CCU1031	10k	C
875-1304	CCU2531	25k	C
875-1306	CCU5031	50k	C
875-1302	CCU1041	100k	C
875-1305	CCU2541	250k	C
875-1307	CCU5041	500k	C
875-1303	CCU1052	1 meg*	C

TYPE CS-1 SPST SWITCH FOR "AB" SERIES

ingle-pole single-throw switch for Ohmite "AB" potentiometers sted above. For single-unit type potentiometers only. Wt., 2 oz.

875-1900. 1-9.....Each .66 10-49.....Each .59
50-99.....Each .55 100-Up.....Each .50

STYLE CLU LOCKING-SHAFT TYPES—MEET MIL-R-94B (±10% tol. except *±20%, Av. shpg. wt., 2 oz.)

EXPLANATION OF MIL NOS. Example: RV4NAYSB104B.
V4, variable composition control. N, bushing—N for std., L for ocking, S for shaft and panel seal. A, switch—A for none, B for PST. Y, temperature and moisture resistance: X for 120° C max. mbient temperature, ±14% max. resistance change in humidity est, 50 megohm min. insulation resistance in humidity test; Y for 20° ambient, ±10% resistance change, 100 megohms insulation test. SB, operating shaft: First letter for style—F for flatted, S for slotted; second letter for length from mtg. surface—A-5/8, B-1/2 D-7/8, G-1 1/4, K-2 1/2" (flatted all K). 104, ohms resistance—first two digits are significant figures, third is zeros to add. B, resistance characteristic and tolerance: A, linear ±10%; B, linear ±20%; C, 10% res. at 50% CW ±10%; D, 10% res. at 50% CW ±20%; E, 10% res. at 50% CCW ±10%; F, 10% res. at 50% CCW ±20%.

Stock No.	Type	MIL Type	Ohms
875-1640	CLU5001	RV4LAYSA500A	50
875-1601	CLU1011	RV4LAYSA101A	100
875-1626	CLU2511	RV4LAYSA251A	250
875-1641	CLU5011	RV4LAYSA501A	500
875-1602	CLU1021	RV4LAYSA102A	1000
875-1627	CLU2521	RV4LAYSA252A	2500
875-1642	CLU5021	RV4LAYSA502A	5000
875-1603	CLU1031	RV4LAYSA103A	10k
875-1628	CLU2531	RV4LAYSA253A	25k
875-1643	CLU5031	RV4LAYSA503A	50k
875-1604	CLU1041	RV4LAYSA104A	100k
875-1629	CLU2541	RV4LAYSA254A	250k
875-1644	CLU5041	RV4LAYSA504A	500k
875-1605	CLU1052	RV4LAYSA105B	1 meg*
875-1625	CLU2052	RV4LAYSA205B	2 meg*
875-1630	CLU2552	RV4LAYSA255B	2.5 meg*
875-1645	CLU5052	RV4LAYSA505B	5 meg*

-9.....Each 2.55 10-49.....Each 2.30
0-99.....Each 2.12 100-Up.....Each 1.91

1-9.....Each 2.55 10-49.....Each 2.30
50-99.....Each 2.12 100-Up.....Each 1.91

STYLE CMU SLOTTED-SHAFT TYPES—MEET MIL-R-94B (±10% tol. except *±20%, Av. shpg. wt., 2 oz.)

875-1812	CMU5001	RV4NAYSD500A	50
875-1801	CMU1011	RV4NAYSD101A	100
875-1807	CMU2511	RV4NAYSD251A	250
875-1813	CMU5011	RV4NAYSD501A	500
875-1802	CMU1021	RV4NAYSD102A	1000
875-1808	CMU2521	RV4NAYSD252A	2500
875-1814	CMU5021	RV4NAYSD502A	5000
875-1803	CMU1031	RV4NAYSD103A	10k
875-1809	CMU2531	RV4NAYSD253A	25k
875-1818	CMU5031	RV4NAYSD503A	50k
875-1804	CMU1041	RV4NAYSD104A	100k
875-1810	CMU2541	RV4NAYSD254A	250k
875-1816	CMU5041	RV4NAYSD504A	500k
875-1805	CMU1052	RV4NAYSD105B	1 meg*
875-1806	CMU2052	RV4NAYSD205B	2 meg*
875-1811	CMU2552	RV4NAYSD255B	2.5 meg*
875-1817	CMU5052	RV4NAYSD505B	5 meg*

-9.....Each 1.95 10-49.....Each 1.76
50-99.....Each 1.62 100-Up.....Each 1.46

1-9.....Each 1.95 10-49.....Each 1.76
50-99.....Each 1.62 100-Up.....Each 1.46

"AS" ½-WATT MINIATURE CONTROLS

Linear-taper controls with molded composition resistance and collector tracks, dustproof sealed enclosures, specially plated terminals. Available in 5/8" screwdriver slotted, locking types or standard bushing types with 7/8" slotted shaft. Rated 350 V. 1/4" dia. 11/16" long. Meet QQ-M-151, MIL-R-94, MIL Type RV6LAYSA (locking type) or RV6NAYSD (7/8" shaft) and EIA specs. ±10% except *, ±20%. Av. shpg. wt., 3 oz.

Stock No.	Locking, 5/8" Shaft Mfr's Type	Ohms	Stock No.	St. Bush., 7/8" Shaft Mfr's Type	Stock No.	Locking, 5/8" Shaft Mfr's Type	Ohms	Stock No.	St. Bush, 7/8" Shaft Mfr's Type
875-0301	AS3601	100	875-0501	ASM6661	875-0309	AS3609	50k	875-0509	ASM6669
875-0302	AS3602	250	875-0502	ASM6662	875-0310	AS3610	100k	875-0510	ASM6670
875-0303	AS3603	500	875-0503	ASM6663	875-0311	AS3611	250k	875-0511	ASM6671
875-0304	AS3604	1000	875-0504	ASM6664	875-0312	AS3612	500k	875-0512	ASM6672
875-0305	AS3605	2500	875-0505	ASM6665	875-0313	AS3613*	1.0 meg	875-0513	ASM6673*
875-0306	AS3606	5000	875-0506	ASM6666	875-0320	AS3684*	2.0 meg	875-0514	ASM6674*
875-0307	AS3607	10k	875-0507	ASM6667	875-0314	AS3614*	2.5 meg	875-0515	ASM6675*
875-0308	AS3608	25k	875-0508	ASM6668	875-0315	AS3615*	5.0 meg	875-0516	ASM6676*

1-9.....Each 5.10 10-49.....Each 4.59 50-99.....Each 4.23 100-Up.....Each 3.57

SPRAGUE — Polarized Solid Tantalums, ± 10% Tolerance

COMMERCIAL 150D AND MILITARY CS13 WITH PLASTIC INSULATING SLEEVI

Both types are *identical and interchangeable*, but Military Type has MIL-C-26655B marking

All capacitors on this page are subminiature, hermetically sealed units meeting MIL-C-26655B. All are interchangeable with, and superior to MIL-C-26655A. Life test: 2000 hours. Temperature range: —55 to +85°C. Tighter leakage current and dissipation-factor characteristics over MIL-C-26655A. High-frequency performance; impedance remains low above 1 MHz. 2000-cycle vibration test and 50g shock test without any adverse effects. Withstand se vere humidity. NOTE: CS12 with uninsulated bare can is availabl on Special Order in same values listed below; deduct 2¢ each, fror prices shown. See facing page for note on ordering, and note on in terchangeability of MIL-C-26655B and MIL-C-26655A. 1 oz. Fo price and size, see Code (*), then refer to Price and Size Locator.

NOTE: Allied reserves the right to ship the Military CS13 types in all instances where this listing shows both Military and Commercial designations. The Military types are directly interchangeable with the corresponding Commercial types.

PRICE AND SIZE LOCATOR

Price & Size Code	Diameter x Length Inches	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.135x.286	1.25	1.00	.76	.64	.52	.46
B	.135x.286	1.05	.84	.64	.54	.44	.39
C	.135x.286	1.25	1.00	.76	.64	.52	.46
C♯	.135x.286	1.35	1.08	.82	.69	.56	.50
D	.185x.474	1.15	.92	.70	.59	.48	.43
E	.185x.474	1.35	1.08	.82	.69	.56	.50
F	.289x.686	2.30	1.84	1.39	1.17	.94	.82
G	.289x.686	3.25	2.60	1.96	1.64	1.32	1.16
G♯	.289x.686	3.45	2.76	2.08	1.74	1.40	1.23
H	.351x.786	4.50	3.60	2.71	2.27	1.82	1.60
J	.351x.786	6.70	5.36	4.03	3.37	2.70	2.37

Stock No.	Military CS13 MIL-C-26655B	Commercial Type 150D	µF	WV DC	Price & Size Code*
926-6372	.....	150D472X9035A2	.0047	35	A
926-6383	.....	150D562X9035A2	.0056	35	A
926-6366	.....	150D103X9035A2	.01	35	A
926-6323	.....	150D153X9035A2	.015	35	A
926-6324	.....	150D153X9050A2	.015	50	C♯
926-6344	.....	150D223X9035A2	.022	35	A
926-6345	.....	150D223X9050A2	.022	50	C♯
926-6363	.....	150D333X9035A2	.033	35	B
926-6370	.....	150D393X9035A2	.039	35	B
926-6377	.....	150D473X9035A2	.047	35	B
926-6378	.....	150D473X9050A2	.047	50	C
926-6387	.....	150D563X9035A2	.056	35	B
926-6388	.....	150D563X9050A2	.056	50	C
926-6392	.....	150D683X9035A2	.068	35	B
926-6405	.....	150D823X9035A2	.082	35	B
926-6314	.....	150D104X9035A2	.1	35	B
926-6315	.....	150D104X9050A2	.1	50	C
926-6320	.....	150D124X9050A2	.12	50	C
926-6330	.....	150D154X9035A2	.15	35	B
926-6335	.....	150D184X9035A2	.18	35	B
926-6336	.....	150D184X9050A2	.18	50	C
926-6351	.....	150D224X9035A2	.22	35	B
926-6352	.....	150D224X9050A2	.22	50	C
926-6357	.....	150D274X9035A2	.27	35	B
926-6358	.....	150D274X9050A2	.27	50	C
926-0306	CS13BF334K	150D334X9035A2	.33	35	B
926-6368	.....	150D334X9050A2	.33	50	C
926-0332	CS13BF394K	150D394X9035A2	.39	35	B
926-6369	.....	150D394X9050A2	.39	50	C
926-0341	CS13BF474K	150D474X9035A2	.47	35	B
926-6384	.....	150D474X9050A2	.47	50	C
926-0361	CS13BF564K	150D564X9035A2	.56	35	B
926-6385	.....	150D564X9050A2	.56	50	C
926-0370	CS13BF684K	150D684X9035A2	.68	35	B
926-6402	.....	150D684X9050A2	.68	50	C
926-0389	CS13BF824K	150D824X9035A2	.82	35	B
926-6409	.....	150D824X9050A2	.82	50	C
926-0204	CS13BF105K	150D105X9035A2	1.0	35	B
926-0206	CS13BG105K	150D105X9050A2	1.0	50	C
926-0225	CS13BE125K	150D125X9020A2	1.2	20	B
926-0226	CS13BF125K	150D125X9035B2	1.2	35	D
926-0236	CS13BE155K	150D155X9020A2	1.5	20	B
926-0238	CS13BF155K	150D155X9035B2	1.5	35	D
926-0240	CS13BG155K	150D155X9050B2	1.5	50	E
926-0260	CS13BE185K	150D185X9020A2	1.8	20	B
926-0261	CS13BF185K	150D185X9035B2	1.8	35	D
926-0273	CS13BE225K	150D225X9020A2	2.2	20	B
926-0275	CS13BF225K	150D225X9035B2	2.2	35	D
926-0277	CS13BG225K	150D225X9050B2	2.2	50	E
926-0295	CS13BD275K	150D275X9015A2	2.7	15	B
926-0297	CS13BF275K	150D275X9035B2	2.7	35	D

Stock No.	Military CS13 MIL-C-26655B	Commercial Type 150D	µF	WV DC	Price & Size Code*
926-0311	CS13BD335K	150D335X9015A2	3.3	15	B
926-0314	CS13BF335K	150D335X9035B2	3.3	35	D
926-0316	CS13BG335K	150D335X9050B2	3.3	50	E
926-0334	CS13BC395K	150D395X9010A2	3.9	10	B
926-0335	CS13BF395K	150D395X9035B2	3.9	35	D
926-0336	CS13BG395K	150D395X9050B2	3.9	50	E
926-0346	CS13BC475K	150D475X9010A2	4.7	10	B
926-0348	CS13BF475K	150D475X9035B2	4.7	35	D
926-0350	CS13BG475K	150D475X9050B2	4.7	50	E
926-0363	CS13BB565K	150D565X9006A2	5.6	6	B
926-0364	CS13BF565K	150D565X9035B2	5.6	35	D
926-0365	CS13BG565K	150D565X9050R2	5.6	50	G
926-0377	CS13BB685K	150D685X9006A2	6.8	6	B
926-0379	CS13BF685K	150D685X9035B2	6.8	35	D
926-0391	CS13BE825K	150D825X9020B2	8.2	20	D
926-0392	CS13BF825K	150D825X9035R2	8.2	35	F
926-0393	CS13BG825K	150D825X9050R2	8.2	50	G
926-0212	CS13BE106K	150D106X9020B2	10.0	20	D
926-0214	CS13BF106K	150D106X9035R2	10.0	35	F
926-0216	CS13BG106K	150D106X9050R2	10.0	50	G
926-0228	CS13BE126K	150D126X9020B2	12.0	20	D
926-0229	CS13BF126K	150D126X9035R2	12.0	35	F
926-0230	CS13BG126K	150D126X9050R2	12.0	50	G♯
926-0245	CS13BE156K	150D156X9020B2	15.0	20	D
926-0247	CS13BF156K	150D156X9035R2	15.0	35	F
926-0250	CS13BG156K	150D156X9050R2	15.0	50	G♯
926-0263	CS13BD186K	150D186X9015B2	18.0	15	D
926-0265	CS13BF186K	150D186X9035R2	18.0	35	F
926-0266	CS13BG186K	150D186X9050R2	18.0	50	G♯
926-0285	CS13BD226K	150D226X9015B2	22.0	15	D
926-0287	CS13BF226K	150D226X9035R2	22.0	35	F
926-0289	CS13BG226K	150D226X9050 S2	22.0	50	J
926-0300	CS13BC276K	150D276X9010B2	27.0	10	D
926-0301	CS13BE276K	150D276X9020R2	27.0	20	F
926-0302	CS13BF276K	150D276X9035 S2	27.0	35	H
926-0321	CS13BC336K	150D336X9010B2	33.0	10	D
926-0324	CS13BE336K	150D336X9020R2	33.0	20	F
926-0326	CS13BF336K	150D336X9035 S2	33.0	35	H
926-0337	CS13BC396K	150D396X9010B2	39.0	10	D
926-0338	CS13BE396K	150D396X9020R2	39.0	20	F
926-0339	CS13BF396K	150D396X9035 S2	39.0	35	H
926-0354	CS13BB476K	150D476X9006B2	47.0	6	D
926-0356	CS13BE476K	150D476X9020R2	47.0	20	F
926-0358	CS13BF476K	150D476X9035 S2	47.0	35	H
926-0367	CS13BB566K	150D566X9006B2	56.0	6	D
926-0368	CS13BD566K	150D566X9015R2	56.0	15	F
926-0388	CS13BD686K	150D686X9015R2	68.0	15	F
926-0387	CS13BE686K	150D686X9020 S2	68.0	20	H
926-0396	CS13BC826K	150D826X9010R2	82.0	10	F
926-0220	CS13BC107K	150D107X9010R2	100.0	10	F
926-0222	CS13BE107K	150D107X9020 S2	100.0	20	H
926-0233	CS13BC127K	150D127X9010R2	120.0	10	F
926-0234	CS13BD127K	150D127X9015 S2	120.0	15	H
926-0255	CS13BB157K	150D157X9006R2	150.0	6	F
926-0257	CS13BD157K	150D157X9015R2	150.0	15	H
926-0268	CS13BB187K	150D187X9006R2	180.0	6	F
926-0269	CS13BC187K	150D187X9010 S2	180.0	10	H
926-0292	CS13BC227K	150D227X9010 S2	220.0	10	H
926-0304	CS13BB277K	150D277X9006 S2	270.0	6	H
926-0329	CS13BB337K	150D337X9006 S2	330.0	6	H

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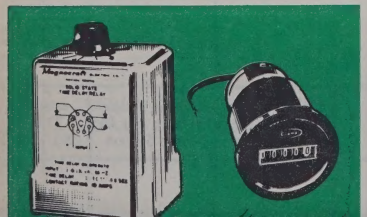

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Polarized Solid Tantalums, ± 10% Tolerance

COMMERCIAL 150D AND MILITARY CS13 WITH PLASTIC INSULATING SLEEVI

Both types are *identical and interchangeable*, but Military Type has MIL-C-26655B marking

All capacitors on this page are subminiature, hermetically sealed units meeting MIL-C-26655B. All are interchangeable with, and superior to MIL-C-26655A. Life test: 2000 hours. Temperature range: —55 to +85°C. Tighter leakage current and dissipation-factor characteristics over MIL-C-26655A. High-frequency performance; impedance remains low above 1 MHz. 2000-cycle vibration test and 50g shock test without any adverse effects. Withstand se vere humidity. NOTE: CS12 with uninsulated bare can is availabl on Special Order in same values listed below; deduct 2¢ each, fror prices shown. See facing page for note on ordering, and note on in terchangeability of MIL-C-26655B and MIL-C-26655A. 1 oz. Fo price and size, see Code (*), then refer to Price and Size Locator.

NOTE: Allied reserves the right to ship the Military CS13 types in all instances where this listing shows both Military and Commercial designations. The Military types are directly interchangeable with the corresponding Commercial types.

PRICE AND SIZE LOCATOR

Price & Size Code	Diameter x Length Inches	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.135x.286	1.25	1.00	.76	.64	.52	.46
B	.135x.286	1.05	.84	.64	.54	.44	.39
C	.135x.286	1.25	1.00	.76	.64	.52	.46
C♯	.135x.286	1.35	1.08	.82	.69	.56	.50
D	.185x.474	1.15	.92	.70	.59	.48	.43
E	.185x.474	1.35	1.08	.82	.69	.56	.50
F	.289x.686	2.30	1.84	1.39	1.17	.94	.82
G	.289x.686	3.25	2.60	1.96	1.64	1.32	1.16
G♯	.289x.686	3.45	2.76	2.08	1.74	1.40	1.23
H	.351x.786	4.50	3.60	2.71	2.27	1.82	1.60
J	.351x.786	6.70	5.36	4.03	3.37	2.70	2.37

Stock No.	Military CS13 MIL-C-26655B	Commercial Type 150D	µF	WV DC	Price & Size Code*
926-6372	.....	150D472X9035A2	.0047	35	A
926-6383	.....	150D562X9035A2	.0056	35	A
926-6366	.....	150D103X9035A2	.01	35	A
926-6323	.....	150D153X9035A2	.015	35	A
926-6324	.....	150D153X9050A2	.015	50	C♯
926-6344	.....	150D223X9035A2	.022	35	A
926-6345	.....	150D223X9050A2	.022	50	C♯
926-6363	.....	150D333X9035A2	.033	35	B
926-6370	.....	150D393X9035A2	.039	35	B
926-6377	.....	150D473X9035A2	.047	35	B
926-6378	.....	150D473X9050A2	.047	50	C
926-6387	.....	150D563X9035A2	.056	35	B
926-6388	.....	150D563X9050A2	.056	50	C
926-6392	.....	150D683X9035A2	.068	35	B
926-6405	.....	150D823X9035A2	.082	35	B
926-6314	.....	150D104X9035A2	.1	35	B
926-6315	.....	150D104X9050A2	.1	50	C
926-6320	.....	150D124X9050A2	.12	50	C
926-6330	.....	150D154X9035A2	.15	35	B
926-6335	.....	150D184X9035A2	.18	35	B
926-6336	.....	150D184X9050A2	.18	50	C
926-6351	.....	150D224X9035A2	.22	35	B
926-6352	.....	150D224X9050A2	.22	50	C
926-6357	.....	150D274X9035A2	.27	35	B
926-6358	.....	150D274X9050A2	.27	50	C
926-0306	CS13BF334K	150D334X9035A2	.33	35	B
926-6368	.....	150D334X9050A2	.33	50	C
926-0332	CS13BF394K	150D394X9035A2	.39	35	B
926-6369	.....	150D394X9050A2	.39	50	C
926-0341	CS13BF474K	150D474X9035A2	.47	35	B
926-6384	.....	150D474X9050A2	.47	50	C
926-0361	CS13BF564K	150D564X9035A2	.56	35	B
926-6385	.....	150D564X9050A2	.56	50	C
926-0370	CS13BF684K	150D684X9035A2	.68	35	B
926-6402	.....	150D684X9050A2	.68	50	C
926-0389	CS13BF824K	150D824X9035A2	.82	35	B
926-6409	.....	150D824X9050A2	.82	50	C
926-0204	CS13BF105K	150D105X9035A2	1.0	35	B
926-0206	CS13BG105K	150D105X9050A2	1.0	50	C
926-0225	CS13BE125K	150D125X9020A2	1.2	20	B
926-0226	CS13BF125K	150D125X9035B2	1.2	35	D
926-0236	CS13BE155K	150D155X9020A2	1.5	20	B
926-0238	CS13BF155K	150D155X9035B2	1.5	35	D
926-0240	CS13BG155K	150D155X9050B2	1.5	50	E
926-0260	CS13BE185K	150D185X9020A2	1.8	20	B
926-0261	CS13BF185K	150D185X9035B2	1.8	35	D
926-0273	CS13BE225K	150D225X9020A2	2.2	20	B
926-0275	CS13BF225K	150D225X9035B2	2.2	35	D
926-0277	CS13BG225K	150D225X9050B2	2.2	50	E
926-0295	CS13BD275K	150D275X9015A2	2.7	15	B
926-0297	CS13BF275K	150D275X9035B2	2.7	35	D

Stock No.	Military CS13 MIL-C-26655B	Commercial Type 150D	µF	WV DC	Price & Size Code*
926-0311	CS13BD335K	150D335X9015A2	3.3	15	B
926-0314	CS13BF335K	150D335X9035B2	3.3	35	D
926-0316	CS13BG335K	150D335X9050B2	3.3	50	E
926-0334	CS13BC395K	150D395X9010A2	3.9	10	B
926-0335	CS13BF395K	150D395X9035B2	3.9	35	D
926-0336	CS13BG395K	150D395X9050B2	3.9	50	E
926-0346	CS13BC475K	150D475X9010A2	4.7	10	B
926-0348	CS13BF475K	150D475X9035B2	4.7	35	D
926-0350	CS13BG475K	150D475X9050B2	4.7	50	E
926-0363	CS13BB565K	150D565X9006A2	5.6	6	B
926-0364	CS13BF565K	150D565X9035B2	5.6	35	D
926-0365	CS13BG565K	150D565X9050R2	5.6	50	G
926-0377	CS13BB685K	150D685X9006A2	6.8	6	B
926-0379	CS13BF685K	150D685X9035B2	6.8	35	D
926-0391	CS13BE825K	150D825X9020B2	8.2	20	D
926-0392	CS13BF825K	150D825X9035R2	8.2	35	F
926-0393	CS13BG825K	150D825X9050R2	8.2	50	G
926-0212	CS13BE106K	150D106X9020B2	10.0	20	D
926-0214	CS13BF106K	150D106X9035R2	10.0	35	F
926-0216	CS13BG106K	150D106X9050R2	10.0	50	G
926-0228	CS13BE126K	150D126X9020B2	12.0	20	D
926-0229	CS13BF126K	150D126X9035R2	12.0	35	F
926-0230	CS13BG126K	150D126X9050R2	12.0	50	G♯
926-0245	CS13BE156K	150D156X9020B2	15.0	20	D
926-0247	CS13BF156K	150D156X9035R2	15.0	35	F
926-0250	CS13BG156K	150D156X9050R2	15.0	50	G♯
926-0263	CS13BD186K	150D186X9015B2	18.0	15	D
926-0265	CS13BF186K	150D186X9035R2	18.0	35	F
926-0266	CS13BG186K	150D186X9050R2	18.0	50	G♯
926-0285	CS13BD226K	150D226X9015B2	22.0	15	D
926-0287	CS13BF226K	150D226X9035R2	22.0	35	F
926-0289	CS13BG226K	150D226X9050 S2	22.0	50	J
926-0300	CS13BC276K	150D276X9010B2	27.0	10	D
926-0301	CS13BE276K	150D276X9020R2	27.0	20	F
926-0302	CS13BF276K	150D276X9035 S2	27.0	35	H
926-0321	CS13BC336K	150D336X9010B2	33.0	10	D
926-0324	CS13BE336K	150D336X9020R2	33.0	20	F
926-0326	CS13BF336K	150D336X9035 S2	33.0	35	H
926-0337	CS13BC396K	150D396X9010B2	39.0	10	D
926-0338	CS13BE396K	150D396X9020R2	39.0	20	F
926-0339	CS13BF396K	150D396X9035 S2	39.0	35	H
926-0354	CS13BB476K	150D476X9006B2	47.0	6	D
926-0356	CS13BE476K	150D476X9020R2	47.0	20	F
926-0358	CS13BF476K	150D476X9035 S2	47.0	35	H
926-0367	CS13BB566K	150D566X9006B2	56.0	6	D
926-0368	CS13BD566K	150D566X9015R2	56.0	15	F
926-0388	CS13BD686K	150D686X9015R2	68.0	15	F
926-0387	CS13BE686K	150D686X9020 S2	68.0	20	H
926-0396	CS13BC826K	150D826X9010R2	82.0	10	F
926-0220	CS13BC107K	150D107X9010R2	100.0	10	F
926-0222	CS13BE107K	150D107X9020 S2	100.0	20	H
926-0233	CS13BC127K	150D127X9010R2	120.0	10	F
926-0234	CS13BD127K	150D127X9015 S2	120.0	15	H
926-0255	CS13BB157K	150D157X9006R2	150.0	6	F
926-0257	CS13BD157K	150D157X9015R2	150.0	15	H
926-0268	CS13BB187K	150D187X9006R2	180.0	6	F
926-0269	CS13BC187K	150D187X9010 S2	180.0	10	H
926-0292	CS13BC227K	150D227X9010 S2	220.0	10	H
926-0304	CS13BB277K	150D277X9006 S2	270.0	6	H
926-0329	CS13BB337K	150D337X9006 S2	330.0	6	H

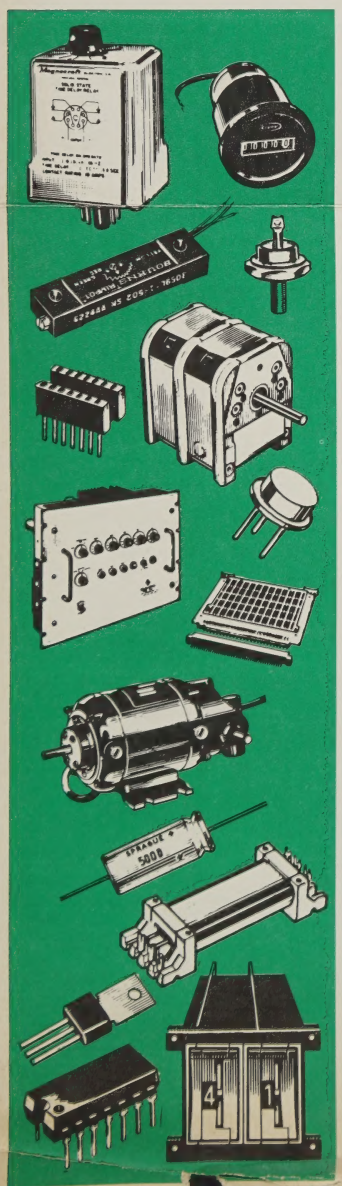
ONE ORDER FILLS THE BILL

Cut costs by making "one order" purchases from Allied. You lower handling expense by reducing paperwork in purchasing and receiving. You also get prompt shipment from the world's largest stock of electronic equipment.

ALLIED is the world's largest electronics distributor

- Highest percentage of filled orders in the country
- Fast same-day shipment from our own warehouse
- Complete one-order supply cuts handling costs
- Every sales facility is linked by direct lines
- Factory OEM quantity price schedules
- Select from the world's most complete inventory
- Exclusive Allied Electronics products and special offers
- Allied Radio Shack products also available

Here's why buying from Allied saves time and money



Allied stocks just about everything in electronics

Allied's giant warehouse, the biggest in the electronics supply industry, covers two city blocks and is three stories high. Its 450,000 square feet of space stores a $20,000,000 inventory of some 75,000 products from over 700 manufacturers. No one else can match Allied's complete in-depth inventory. We can also arrange drop-shipments directly from manufacturer to you. If you need anything in electronics, you'll find it at Allied.

Allied sells more products at OEM prices

Because Allied has such vast purchasing power, you can get more products at factory OEM prices. Because Allied has the industry's largest warehouse and inventory, you can fill your needs with a single order. No need to order from several distributors or manufacturers. You pay no more than when you order from the factory, but you get much more in convenience. You save time, money and headaches when you do business with Allied.

Your order is shipped out the same day it arrives

Orders received as late as 4 P.M. are shipped out to you the same day. This is routine at Allied. You should see what we can do with a *rush* order! Orders from Los Angeles, New York or Miami, for example, can be delivered by air the next morning. In many cases the salesperson who takes your order also services your account. He knows your requirements. He will expedite your order to make sure it's filled fast, filled right and billed right.

You have the convenience of one-order supply from Allied

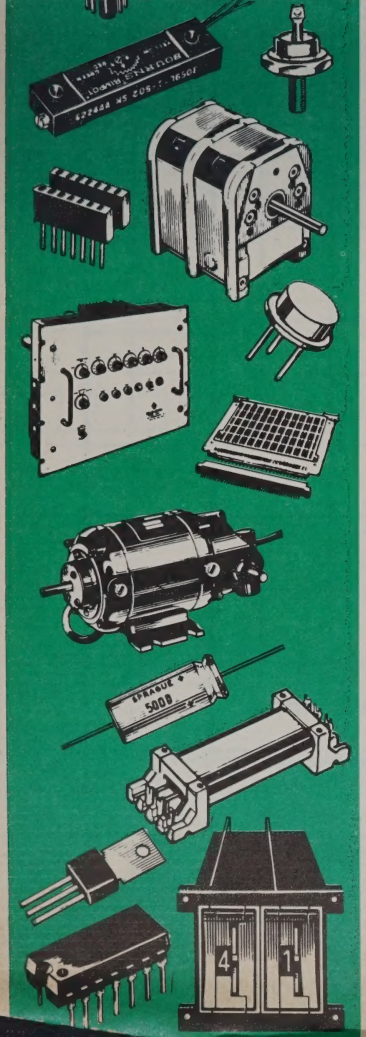
No need to order from several electronics distributors or manufacturers. Eliminate time-consuming paperwork and additional handling costs. Allied gives you speedy delivery at the lowest possible price, with the fewest complications. You get all three benefits with convenient one-order handling from the biggest distributor in the industry.

Nationwide sales facilities mean better service to you

Allied has 16 nationwide sales facilities and 100 sales engineers, the largest sales organization in the industry, ready and willing to help you with your order. In Chicago alone, a staff of 40 is ready to take your call. This "people power" plus a modern communications network enables us to give you faster and more efficient *personal* service.

Allied has products you can't buy anywhere else

Allied is the only industrial electronics distributor with its own line of tubes and transformers, meters and relays, tools, public address amplifiers, speakers, mikes, and money-saving prices on complete PA systems. Allied also offers exclusive money-saving prices on products from some of America's other leading electronics manufacturers.



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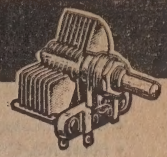
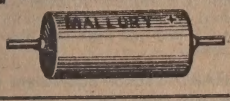
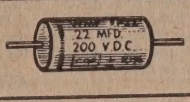
HANDY INDEX TO CAPACITORS

ALLIED ELECTRONICS CARRIES THE LARGEST STOCK OF CAPACITORS FOR IMMEDIATE DELIVERY







✓ All Capacitors Are in Stock **✓ Unlimited Quantities** **✓ Factory Prices**

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ALLIED ORDER BLANK

ALLIED ELECTRONICS CORPORATION • a subsidiary of **TANDY CORPORATION**
2400 W. WASHINGTON BLVD., CHICAGO, ILLINOIS 60680 TELEX: 25-3492, 25-3749 PHONE: (312) 829-9121—After Jan. 15, 1971 (312) 421-2400

Please Print Name, Address, and Phone Number

Date_____ 19____

Name _____ Phone Number_____
FIRST MIDDLE INITIAL LAST

Street Address_____ Route_____ Box_____

City _____ State_____ Zip Code

Ship to Another Address? Give directions here:

Name_____
FIRST MIDDLE INITIAL LAST

Shipping Address_____ Route_____ Box_____

City_____ State_____ Zip Code

Depend on us to ship the best way. Items with letters U, W, or Z in the Stock No. must be shipped Truck or Express. Use the line below for special instructions, if required.

_____

If You Have Moved Since Your Last Order
print your old address here

Street Address_____

Post Office_____

State_____ Zip Code

Please do not write in this space.

DO NOT WRITE HERE	Stock Number	Quantity: Foot, Set, Pair, Roll, Pkg., Etc.	Manufacturer's Type Number	Description	Do Not Write Here	Price Each Foot, Set, Pair Roll, Pkg., Etc.	Total Price Put Here and Add This Column	Shipping Weight LBS.	Shipping Weight OZ.

THIS ORDER BLANK IS FOR CASH AND C.O.D. ORDERS

For Open Account Ordering Information see page 604

If you want an extra catalog, simply ask for one as you enter your order.

Enter Amount Enclosed

Note: If you send currency, be sure to register letter. (No stamps please.)

☐ **Cash Order** $.....

☐ **C.O.D.** (Minimum $50.00) A 20% deposit required No back orders on C.O.D. items. $.....

		Total LBS.	Total OZS.
AMOUNT FOR GOODS			
Handling Charge—Strike out if order is $10.00 or More	1.00		
SHIPPING CHARGES			
INSURANCE			
DUE ALLIED From Previous Cash Order			
TOTAL AMOUNT			

Please Remit for next Full Pound

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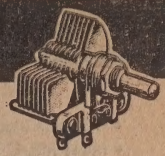

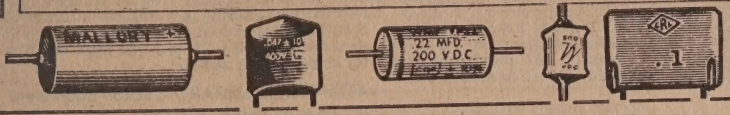

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MALLORY Solid Tantalum Capacitors

MILITARY CS13 SOLID ELECTROLYTE TANTALUM CAPACITORS

- Ultraminiature Hermetically Sealed Case
- Meet MIL-C-26655B, Replacing MIL-C-26655A
- 10% Tolerance
- Plastic Insulating Sleeve
- Temperature Range, −55° to +85° C

Subminiature, hermetically sealed capacitors meet MIL-C-26655B interchangeable with, and superior to MIL-C-26655A. Temperature range: −55° to +85° C. Provide tighter leakage current and dissipation-factor characteristics over MIL-C-26655A. Low DCL and long storage life. At high frequencies, impedance remains low above 1 MHz. Withstands 2000-cycle vibration test and 50g shock test without adverse effects. Also withstands severe humidity conditions.

NOTE: CS12 with uninsulated bare can is available on Special Order in same values listed below; deduct 2¢ each from prices shown.

Values listed generally combine highest voltages with smallest sizes, for each capacity. Higher voltages offer greater surge pro tion without altering performance at lower voltages, and at no e cost. Prices are based on case size, through 35 WVDC. For price size, see Case Size (*), then see Price and Size Locator. † Write or for large quantity prices.

ATTENTION MILITARY USERS: Equivalent Solid Tantalum pacitors to Latest MIL Spec 39003—Established Reliability Failure M (1%) and L (2%) Are Available at Allied.

PRICE AND SIZE LOCATOR

Price & Size Code*	Diameter x Length Inches	EACH 1-24	25-49	50-99	100-499	500-Up
A	.135x.322	1.47	1.07	.75	.62	†
B	.135x.322	2.71	1.99	1.68	1.45	†
C	.185x.510	1.70	1.25	.77	.64	†
D	.185x.510	2.88	2.10	1.77	1.52	†
E	.289x.722	2.45	1.79	1.35	1.12	†
F	.289x.722	2.80	2.05	1.42	1.16	†

Price & Size Code*	Diameter x Length Inches	EACH 1-24	25-49	50-99	100-499	500-Up
G	.289x.722	4.69	3.42	2.90	2.47	†
H	.351x.822	4.95	3.55	2.34	1.91	†
J	.351x.822	5.00	3.65	2.53	2.05	†
K	.351x.822	5.22	3.80	2.80	2.29	†
L	.351x.822	8.76	6.37	5.37	4.60	†

Stock No.	Commercial Mfr's Type TAS-	Military Mil-C-26655B Type CS13-	Cap., µF	WV DC	Case Size*
852-1108	565K006P1A	BB565K	5.6	6	A
852-1111	685K006P1A	BB685K	6.8	6	A
852-1106	476K006P1C	BB476K	47	6	C
852-1109	566K006P1C	BB566K	56	6	C
852-1101	157K006P1F	BB157K	150	6	E
852-1102	187K006P1F	BB187K	180	6	E
852-1103	277K006P1G	BB277K	270	6	H
852-1104	337K006P1G	BB337K	330	6	H
852-1122	395K010P1A	BC395K	3.9	10	A
852-1125	475K010P1A	BC475K	4.7	10	A
852-1119	276K010P1C	BC276K	27	10	C
852-1120	336K010P1C	BC336K	33	10	C
852-1123	396K010P1C	BC396K	39	10	C
852-1127	826K010P1F	BC826K	82	10	E
852-1114	107K010P1F	BC107K	100	10	E
852-1115	127K010P1F	BC127K	120	10	E
852-1116	187K010P1G	BC187K	180	10	H
852-1117	227K010P1G	BC227K	220	10	H
852-1136	275K015P1A	BD275K	2.7	15	A
852-1137	335K015P1A	BD335K	3.3	15	A
852-1133	186K015P1C	BD186K	18	15	C
852-1134	226K015P1C	BD226K	22	15	C
852-1139	566K015P1F	BD566K	56	15	E
852-1140	686K015P1F	BD686K	68	15	E
852-1130	127K015P1G	BD127K	120	15	H
852-1131	157K015P1G	BD157K	150	15	H
852-1146	125K020P1A	BE125K	1.2	20	A
852-1149	155K020P1A	BE155K	1.5	20	A
852-1152	185K020P1A	BE185K	1.8	20	A
852-1154	225K020P1A	BE225K	2.2	20	A
852-1164	825K020P1C	BE825K	8.2	20	C
852-1143	106K020P1C	BE106K	10	20	C
852-1147	126K020P1C	BE126K	12	20	C
852-1150	156K020P1C	BE156K	15	20	C
852-1156	276K020P1F	BE276K	27	20	E
852-1158	336K020P1F	BE336K	33	20	E
852-1159	396K020P1F	BE396K	39	20	E
852-1160	476K020P1F	BE476K	47	20	E
852-1161	566K020P1G	BE566K	56	20	H
852-1162	686K020P1G	BE686K	68	20	H
852-1165	826K020P1G	BE826K	82	20	H
852-1144	107K020P1G	BE107K	100	20	H
852-5700	472K035P1A	.....	.0047	35	A
852-5728	562K035P1A	.....	.0056	35	A
852-5755	682K035P1A	.....	.0068	35	A
852-5506	103K035P1A	.....	.01	35	A
852-5557	153K035P1A	.....	.015	35	A
852-5629	273K035P1A	.....	.027	35	A
852-5654	333K035P1A	.....	.033	35	A
852-5654	393K035P1A	.....	.039	35	A
852-5705	473K035P1A	.....	.047	35	A
852-5511	104K035P1A	.....	.1	35	A
852-5536	124K035P1A	.....	.12	35	A
852-5562	154K035P1A	.....	.15	35	A
852-5586	184K035P1A	.....	.18	35	A
852-5608	224K035P1A	.....	.22	35	A
852-5634	274K035P1A	.....	.27	35	A

Stock No.	Commercial Mfr's Type TAS-	Military CS13 Mil-C-26655B Type CS13-	Cap., µF	WV DC	Case Size*
852-1185	334K035P1A	BF334K	.33	35	A
852-1189	394K035P1A	BF394K	.39	35	A
852-1193	474K035P1A	BF474K	.47	35	A
852-1197	564K035P1A	BF564K	.56	35	A
852-1200	684K035P1A	BF684K	.68	35	A
852-1203	824K035P1A	BF824K	.82	35	A
852-1168	105K035P1A	BF105K	1.0	35	A
852-1170	125K035P1C	BF125K	1.2	35	C
852-1173	155K035P1C	BF155K	1.5	35	C
852-1176	185K035P1C	BF185K	1.8	35	C
852-1179	225K035P1C	BF225K	2.2	35	C
852-1182	275K035P1C	BF275K	2.7	35	C
852-1186	335K035P1C	BF335K	3.3	35	C
852-1190	395K035P1C	BF395K	3.9	35	C
852-1194	475K035P1C	BF475K	4.7	35	C
852-1198	565K035P1C	BF565K	5.6	35	C
852-1201	685K035P1C	BF685K	6.8	35	C
852-1204	825K035P1F	BF825K	8.2	35	F
852-1169	106K035P1F	BF106K	10	35	F
852-1171	126K035P1F	BF126K	12	35	F
852-1174	156K035P1F	BF156K	15	35	F
852-1177	186K035P1F	BF186K	18	35	F
852-1180	226K035P1F	BF226K	22	35	F
852-1183	276K035P1G	BF276K	27	35	J
852-1187	336K035P1G	BF336K	33	35	J
852-1191	396K035P1G	BF396K	39	35	J
852-1195	476K035P1G	BF476K	47	35	J
852-5683	394K050P1A	.....	.39	50	A
852-1207	105K050P1A	BG105K	1.0	50	B
852-1210	125K050P1C	BG125K	1.2	50	D
852-1213	155K050P1C	BG155K	1.5	50	D
852-1216	185K050P1C	BG185K	1.8	50	D
852-1219	225K050P1C	BG225K	2.2	50	D
852-1222	275K050P1C	BG275K	2.7	50	D
852-1223	335K050P1C	BG335K	3.3	50	D
852-1224	395K050P1C	BG395K	3.9	50	D
852-1225	475K050P1C	BG475K	4.7	50	D
852-1226	565K050P1F	BG565K	5.6	50	G
852-1227	685K050P1F	BG685K	6.8	50	G
852-1228	825K050P1F	BG825K	8.2	50	G
852-1208	106K050P1F	BG106K	10	50	G
852-1211	126K050P1F	BG126K	12	50	G
852-1214	156K050P1F	BG156K	15	50	G
852-1217	186K050P1F	BG186K	18	50	G
852-1220	226K050P1G	BG226K	22	50	J

ATTENTION INDUSTRIAL BUYERS

Allied maintains complete stocks of Mallory capacitors. For complete information on any types not listed in this catalog and for larger lot quantities, simply contact the Allied facility nearest you. Depend on Allied for reliable service, and OEM prices on all your electronic needs.

Specify Stock No., Mfr's Type No. and Capacitance on Capacitor Orde

Tantalum Capacitors

MALLORY

TIM AND TAC PRICE AND SIZE LOCATOR

Type	Price & Size Code*	Tolerance	Size, Inches	3-35 VOLT TYPES, EACH 1-9	10-24	25-49	50-99	100-499	500-Up	50 VOLT TYPES, EACH 1-9	10-24	25-49	50-99	100-499	500-Up
TIM	A	±10%	.225x.285x.170	1.63	1.31	1.05	.72	.59	.49	2.02	1.62	1.30	.90	.73	.59
	B	±10%	.225x.285x.170	1.66	1.33	1.07	.74	.61	.51	2.18	1.75	1.40	.97	.78	.63
	C	±10%	.335x.360x.170	1.66	1.33	1.07	.74	.61	.51	2.18	1.75	1.40	.97	.78	.63
	D	±10%	.335x.360x.170	3.15	2.52	2.02	1.39	1.13	.95	5.18	4.15	3.32	2.49	2.01	1.62
TAC	2	±10%	.105 dia. x .295	.78	.63	.53	.48	.43	.35	.85	.68	.55	.50	.45	.37
	3	±10%	.137 dia. x .340	.78	.63	.53	.48	.43	.35	.85	.68	.55	.50	.45	.37
	4	±10%	.187 dia. x .530	.81	.65	.55	.50	.45	.37	.88	.71	.57	.52	.47	.39

TIM SERIES RECTANGULAR SOLID TANTALUM CAPACITORS

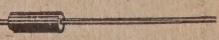
-miniature tantalum capacitors in molded epoxy case with d nickel radial leads, precisely positioned for PC board mount- High stability, long shelf life, excellent performance in severe environments. Uniform size for automatic assembly. Temperature range, —55° to +85° C. Tolerance, ±10%. Lead spacing, .200". Av. shpg. wt., 2 oz.

ock o.	Type TIM-	Cap., µF	WV DC	Case Code*
6447	186K006P0X	18	6	B
6460	226K006P0X	22	6	B
6518	566K006P0Y	56	6	C
6530	686K006P0Y	68	6	C
6542	826K006P0Y	82	6	D
6412	106K010P0X	10	10	B
6435	156K010P0X	15	10	B
6480	336K010P0Y	33	10	C
6494	396K010P0Y	39	10	C
6405	104K035P0X	0.1	35	A
6417	124K035P0X	0.12	35	A
6426	154K035P0X	0.15	35	A
6440	184K035P0X	0.18	35	A
6451	224K035P0X	.22	35	A
6465	274K035P0X	.27	35	A
6473	334K035P0X	.33	35	A
6485	394K035P0X	.39	35	A

Stock No.	Type TIM-	Cap., µF	WV DC	Case Code*
852-6501	474K035P0X	.47	35	A
852-6511	564K035P0X	.56	35	A
852-6522	684K035P0X	.68	35	A
852-6535	824K035P0X	.82	35	A
852-6409	105K035P0X	1.0	35	A
852-6421	125K035P0X	1.2	35	A
852-6431	155K035P0X	1.5	35	B
852-6444	185K035P0X	1.8	35	B
852-6457	225K035P0X	2.2	35	B
852-6469	275K035P0X	2.7	35	B
852-6477	335K035P0X	3.3	35	B
852-6490	395K035P0X	3.9	35	B
852-6506	475K035P0Y	4.7	35	C
852-6515	565K035P0Y	5.6	35	C
852-6526	685K035P0Y	6.8	35	C
852-6539	825K035P0Y	8.2	35	D

Stock No.	Type TIM-	Cap., µF	WV DC	Case Code*
852-6414	106K035P0Y	10	35	D
852-6406	104K050P0X	.1	50	A
852-6418	124K050P0X	.12	50	A
852-6427	154K050P0X	.15	50	A
852-6441	184K050P0X	.18	50	A
852-6452	224K050P0X	.22	50	A
852-6466	274K050P0X	.27	50	A
852-6502	474K050P0X	.47	50	A
852-6410	105K050P0X	1.0	50	A
852-6445	185K050P0X	1.8	50	B
852-6458	225K050P0X	2.2	50	B
852-6470	275K050P0Y	2.7	50	C
852-6478	335K050P0Y	3.3	50	C
852-6491	395K050P0Y	3.9	50	C
852-6507	475K050P0Y	4.7	50	C
852-6516	565K050P0Y	5.6	50	D

TAC SERIES SUBMINIATURE TUBULAR SOLID TANTALUM CAPACITORS



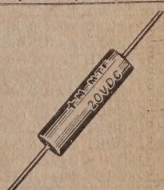
h-reliability axial-lead capacitors in ision-molded epoxy case. Excellent en- vironmental protection. Rated for —55° C to +85° C. Tolerance, ±10%. 1/10 oz.

tock No.	Type TAC-	Cap., µF	WV DC	Case Code*
-5328	156K003P02	15	3	2
-5341	186K003P02	18	3	2
-5438	686K003P04	68	3	4
-5455	826K003P04	82	3	4
-5448	825K006P02	8.2	6	2
-5307	106K006P02	10	6	2
-5319	126K006P02	12	6	2
-5410	476K006P04	47	6	4
-5424	566K006P04	56	6	4
-5386	395K010P02	3.9	10	2
-5403	475K010P02	4.7	10	2
-5417	565K010P02	5.6	10	2
-5431	685K010P02	6.8	10	2
-5368	276K010P04	27	10	4
-5378	336K010P04	33	10	4
-5394	396K010P04	39	10	4
-5303	105K202P02	1.0	20	2

Stock No.	Type TAC-	Cap., µF	WV DC	Case Code*
852-5349	225K020P02	2.2	20	2
852-5413	564K035P02	.56	35	2
852-5427	684K035P02	.68	35	2
852-5445	824K035P02	.82	35	2
852-5316	125K035P03	1.2	35	3
852-5365	275K035P04	2.7	35	4
852-5374	335K035P04	3.3	35	4
852-5390	395K035P04	3.9	35	4
852-5407	475K035P04	4.7	35	4
852-5421	565K035P04	5.6	35	4
852-5435	685K035P04	6.8	35	4
852-5451	825K035P04	8.2	35	4
852-5446	823K050P02	.082	50	2
852-5302	104K050P02	.1	50	2
852-5312	124K050P02	.12	50	2
852-5322	154K050P02	.15	50	2
852-5333	184K050P02	.18	50	2

Stock No.	Type TAC-	Cap., µF	WV DC	Case Code*
852-5345	224K050P02	.22	50	2
852-5360	274K050P02	.27	50	2
852-5370	334K050P02	.33	50	2
852-5382	394K050P02	.39	50	2
852-5400	474K050P02	.47	50	2
852-5414	564K050P03	.56	50	3
852-5428	684K050P03	.68	50	3
852-5446	824K050P03	.82	50	3
852-5305	105K050P03	1.0	50	3
852-5317	125K050P04	1.2	50	4
852-5326	155K050P04	1.5	50	4
852-5339	185K050P04	1.8	50	4
852-5351	225K050P04	2.2	50	4
852-5366	275K050P04	2.7	50	4
852-5375	335K050P04	3.3	50	4
852-5391	395K050P04	3.9	50	4
852-5408	475K050P04	4.7	50	4

MTP SERIES ULTRAMINIATURE TANTALUM CAPACITORS



itered tantalum anode, polar wet slug its offer higher capacity-voltage than linary wet slug, solid or foil tantalum pacitors. Meet MIL-STD-202 for high fre- ency vibration, shock, temperature pling moisture resistance, sleeve strength. ver case, closed on elastomer end seal. sulated sleeve. —55° C to +85° C. 20%. Max. DC leakage, 2 µA at 25° C. r. shpg. wt., 1 oz.

PRICE AND SIZE LOCATOR

Case Size†	Diameter x Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.115 x .400"	2.59	2.28	1.99	1.71	1.37	1.25
B	.145 x .590"	3.11	2.74	2.39	2.06	1.64	1.51
C	.225 x .775"	3.62	3.18	2.78	2.39	1.91	1.75
D	.115 x .312"	2.57	2.26	1.97	1.69	1.35	1.23

- Higher Capacity-Voltage Product Than Ordinary Wet Slug, Tantalum Capacitors
- Meets MIL-STD-202 Specifications for High-Frequency Vibration and Rigid Construction

Stock No.	Type MTP-	Cap. µF	WV DC	Case Size†
52-2757	335M060P1D	3.3	60	D
52-2768	405M050P1D	4	50	D
52-2775	475M035P1D	4.7	35	D
52-2777	475M060P1A	4.7	60	A
52-2790	605M030P1D	6	30	D
52-2801	685M020P1D	6.8	20	D
52-2803	685M050P1A	6.8	50	A
52-2804	685M060P1A	6.8	60	A
52-2705	106M010P1D	10	10	D
52-2707	106M030P1A	10	30	A
52-2708	106M035P1A	10	35	A
52-2710	106M060P1B	10	60	B
52-2725	156M006P1D	15	6	D
52-2727	156M020P1A	15	20	A
52-2730	156M060P1B	15	60	B

Stock No.	Type MTP-	Cap. µF	WV DC	Case Size†
852-2744	226M015P1A	22	15	A
852-2747	226M060P1B	22	60	B
852-2752	306M050P1B	30	50	B
852-2759	336M010P1A	33	10	A
852-2762	336M050P1B	33	50	B
852-2763	336M060P1C	33	60	C
852-2770	456M030P1B	45	30	B
852-2779	476M006P1A	47	6	A
852-2781	476M020P1B	47	20	B
852-2783	476M060P1C	47	60	C
852-2792	606M020P1B	60	20	B
852-2807	686M015P1B	68	15	B
852-2810	686M050P1C	68	50	C
852-2813	786M050P1C	78	50	C

Stock No.	Type MTP-	Cap., µF	WV DC	Case Size†
852-2816	806M015P1B	80	15	B
852-2713	107M010P1B	100	10	B
852-2716	107M035P1C	100	35	C
852-2720	127M010P1B	120	10	B
852-2733	157M006P1B	150	6	B
852-2735	157M020P1C	150	20	C
852-2722	127M030P1C	120	30	C
852-2738	187M006P1B	180	6	B
852-2741	207M015P1C	200	15	C
852-2749	227M015P1C	220	15	C
852-2755	307M010P1C	300	10	C
852-2765	337M010P1C	330	10	C
852-2772	457M006P1C	450	6	C
852-2785	477M006P1C	470	6	C

Aluminum Electrolytic Capacitors

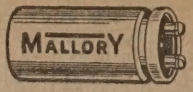
TYPE CGS 65°C COMPUTER GRADE ELECTROLYTICS

*Size Code	Dia. x Lgth. (Inches)	*Size Code	Dia. x Lgth. (Inches)	*Size Code	Dia. x Lgth. (Inches)
BB	1 25/64 x 2 9/64	DD	2 1/64 x 3 9/64	FF	3 1/64 x 4 9/64
BD	1 25/64 x 3 9/64	DF	2 1/64 x 4 9/64	FH	3 1/64 x 5 9/64
BF	1 25/64 x 4 9/64	DI	2 1/64 x 5 41/64	FJ	3 1/64 x 5 57/64

High-reliability use in computer-type equipment for both military and commercial applications. Feature same quality construction and design as Type CG capacitors listed at right, but are designed for operation at +65° C. The lower temperature rating makes it possible to provide a greater capacitance in a given can size for a given working voltage. All have plastic insulating sleeve. 7/32" high terminal posts, with #10-32 binding head screws and integral washers. Temp. range, —40° C to +65° C. Capacitance tolerance: —10, +75% for units to 150 WVDC; —10, +50%, 250 WVDC. Av. shpg. wts: BB thru BF, ¾ lb.; DD thru DI, 1¼ lbs.; FF thru FJ, 2 lbs.

Stock No.	Type CGS-	µF	WV DC	*Size Code	EACH 1-9	10-24	25-49	50-Up
852-0994	722U010BB1	7200	10	BB	3.01	2.41	1.92	1.69
852-0829	133U010BD1	13,000	10	BD	3.56	2.85	2.28	2.00
852-0869	203U010BF1	20,000	10	BF	4.28	3.42	2.74	2.40
852-0905	303U010DD1	30,000	10	DD	5.53	4.42	3.54	3.10
852-0951	443U010DF1	44,000	10	DF	6.75	5.40	4.32	3.79
852-0985	663U010DI1	66,000	10	DI	9.23	7.38	5.91	5.18
852-0808	104U010FF1	100,000	10	FF	12.90	10.32	8.26	7.24
852-0835	134U010FH1	130,000	10	FH	15.13	12.10	9.68	8.48
852-0854	164U010FJ1	160,000	10	FJ	17.33	13.86	11.09	9.71
852-0966	552U015BB1	5500	15	BB	2.83	2.26	1.81	1.58
852-0805	103U015BD1	10,000	15	BD	3.61	2.89	2.31	2.02
852-0844	153U015BF1	15,000	15	BF	4.38	3.50	2.80	2.45
852-0884	233U015DD1	23,000	15	DD	5.64	4.51	3.61	3.16
852-0917	343U015DF1	34,000	15	DF	6.99	5.59	4.47	3.92
852-0957	503U015DI1	50,000	15	DI	9.23	7.38	5.91	5.18
852-0905	803U015FF1	80,000	15	FF	12.38	9.90	7.92	6.94
852-0811	104U015FH1	100,000	15	FH	15.26	12.21	9.77	8.56
852-0826	124U015FJ1	120,000	15	FJ	17.69	14.15	11.32	9.92
852-0902	302U025BB1	3000	25	BB	2.96	2.37	1.89	1.66
852-0926	356U025BD1	5600	25	BD	3.51	2.81	2.25	1.97
852-0911	822U025BF1	8200	25	BF	4.05	3.24	2.59	2.27
852-0823	123U025DD1	12,000	25	DD	5.01	4.01	3.21	2.81
852-0860	183U025DF1	18,000	25	DF	6.50	5.20	4.16	3.64
852-0893	273U025DI1	27,000	25	DI	8.60	6.88	5.51	4.82
852-0944	433U025FF1	43,000	25	FF	11.70	9.36	7.49	6.56
852-0969	573U025FH1	57,000	25	FH	15.15	12.12	9.69	8.50
852-0988	673U025FJ1	67,000	25	FJ	16.84	13.47	10.77	9.44
852-0875	222U040BB1	2200	40	BB	3.13	2.50	2.00	1.75
852-0938	422U040BD1	4200	40	BD	3.59	2.87	2.29	2.01
852-0975	622U040BF1	6200	40	BF	4.51	3.61	2.89	2.53
852-0917	932U040DD1	9300	40	DD	5.76	4.61	3.69	3.23
852-0832	133U040DF1	13,000	40	DF	7.03	5.62	4.50	3.94
852-0872	203U040DI1	20,000	40	DI	9.33	7.46	5.96	5.23
852-0911	323U040FF1	32,000	40	FF	13.41	10.73	8.58	7.52
852-0947	433U040FH1	43,000	40	FH	16.76	13.41	10.73	9.40
852-0960	503U040FJ1	50,000	40	FJ	18.91	15.13	12.11	10.61
852-0847	162U050BB1	1600	50	BB	3.01	2.41	1.92	1.69
852-0896	292U050BD1	2900	50	BD	3.70	2.96	2.37	2.08
852-0941	432U050BF1	4300	50	BF	4.38	3.50	2.80	2.45
852-0981	652U050DD1	6500	50	DD	5.63	4.50	3.60	3.15
852-1020	962U050DF1	9600	50	DF	6.99	5.59	4.47	3.92
852-0838	143U050DI1	14,000	50	DI	9.25	7.40	5.92	5.19
852-0878	223U050FF1	22,000	50	FF	12.60	10.08	8.07	7.07
852-0908	303U050FH1	30,000	50	FH	16.08	12.86	10.29	9.01
852-0923	353U050FJ1	35,000	50	FJ	18.04	14.43	11.54	10.12
852-0908	821U075BB1	820	75	BB	2.96	2.37	1.89	1.66
852-0841	152U075BD1	1500	75	BD	3.43	2.74	2.19	1.92
852-0881	232U075BF1	2300	75	BF	4.00	3.20	2.56	2.24
852-0914	342U075DD1	3400	75	DD	5.09	4.07	3.26	2.85
852-0954	502U075DF1	5000	75	DF	6.20	4.96	3.97	3.48
852-0997	752U075DI1	7500	75	DI	8.10	6.48	5.18	4.54
852-0978	651U100BB1	650	100	BB	3.19	2.55	2.04	1.79
852-0820	122U100BD1	1200	100	BD	3.94	3.15	2.52	2.20
852-0857	182U100BF1	1800	100	BF	4.84	3.87	3.09	2.71
852-0890	272U100DD1	2700	100	DD	6.15	4.92	3.94	3.45
852-0935	402U100DF1	4000	100	DF	7.98	6.38	5.11	4.47
852-0972	592U100DI1	5900	100	DI	10.64	8.51	6.81	5.97
852-0932	401U150BB1	400	150	BB	3.15	2.52	2.01	1.76
852-0991	721U150BD1	720	150	BD	3.70	2.96	2.37	2.08
852-0814	112U150BF1	1100	150	BF	4.58	3.66	2.93	2.57
852-0851	162U150DD1	1600	150	DD	5.74	4.59	3.67	3.22
852-0887	252U150DF1	2500	150	DF	7.40	5.92	4.74	4.15
852-0920	352U150DI1	3500	150	DI	9.60	7.68	6.14	5.38
852-0866	201T250BB1	200	250	BB	2.89	2.31	1.85	1.62
852-0929	381T250BD1	380	250	BD	3.48	2.78	2.22	1.95
852-0963	551T250BF1	550	250	BF	4.05	3.24	2.59	2.27
852-0914	851T250DD1	850	250	DD	5.09	4.07	3.26	2.85
852-0817	122D250DF1	1200	250	DF	6.39	5.11	4.08	3.58
852-0863	192T250DI1	1900	250	DI	8.98	7.18	5.74	5.03

TYPE CG 85°C COMPUTER GRADE ELECTROLYTICS



*Size Code	Dia. x Lgth. (Inches)	*Size Code	Dia. x Lgt (Inches)
A	1 3/8 x 2 1/4	E	3x5 5/8
B	1 3/8 x 4 1/8	F	2x3 1/8
C	2x4 1/8	G	1 25/64 x 3 9/
D	3x4 1/8	H	1 49/64 x 3 3/

Type CG electrolytics are high-quality aluminum electrolytic capa itors designed to provide high reliability in power supplies of bo military and commercial computer-type equipment. Pressure-sen tive safety-vent design for extended life. Special design preve electrolyte leakage. All have high-dialectric polyester film insulati sleeve with 7/32" terminal posts. Electrolytics are designed to ta momentary surge higher than working voltage. Temperature ran —20°C to +85°C. Capacity tolerance, —10% to +75% for un rated up to 150 working volts DC; —10% to +50% for un rated to 450 working volts DC. For mounting clamps, see page 1 of this catalog. Av. shpg. wt. for size code A through C, ¾ lb.; size code D through F, 2 lbs.

Stock No.	Mfr's Type CG	µF	WV DC	*Size Code	EACH 1-9	10-49	50-
852-0517	15U5G1	100,000	5	E	11.73	9.39	7.3
852-0705	822U10C1	8200	10	B	3.55	2.84	2.2
852-0723	1352U10K1	13,500	10	F	4.65	3.72	2.9
852-0632	183U10D1	18,000	10	C	5.73	4.59	3.6
852-0760	4352U10F1	43,500	10	D	10.31	8.25	6.4
852-0693	683U10G1	68,000	10	E	12.07	9.66	7.5
852-0641	252U15A1	2500	15	A	2.46	1.97	1.5
852-0690	642U15C1	6400	15	B	3.36	2.69	2.1
852-0557	83U15H1	8000	15	H	3.83	3.07	2.4
852-0717	1052U15K1	10,500	15	F	4.22	3.38	2.6
852-0611	143U15D1	14,000	15	C	5.58	4.47	3.5
852-0657	343U15F1	34,000	15	D	8.89	7.11	5.5
852-0681	533U15G1	53,000	15	E	11.63	9.30	7.3
852-0617	152U25A1	1500	25	A	2.15	1.72	1.3
852-0651	282U25B1	2800	25	G	2.65	2.12	1.6
852-0666	382U25C1	3800	25	B	3.25	2.60	2.0
852-0672	452U25H1	4500	25	H	3.46	2.77	2.1
852-0541	63U25K1	6000	25	F	4.04	3.23	2.5
852-0714	852U25D1	8500	25	C	4.88	3.90	3.0
852-0526	24U25F1	20,000	25	D	8.19	6.55	5.1
852-0747	3152U25G1	31,500	25	E	10.98	8.78	6.9
852-0554	82U50A1	800	50	A	2.18	1.74	1.3
852-0620	152U50B1	1500	50	G	2.56	2.05	1.6
852-0523	23U50C1	2000	50	B	2.86	2.29	1.8
852-0644	252U50H1	2500	50	H	3.15	2.52	1.9
852-0654	332U50K1	3300	50	F	4.06	3.25	2.5
852-0675	452U50D1	4500	50	C	4.34	3.47	2.7
852-0514	14U50F1	10,000	50	D	8.38	6.70	5.2
852-0735	1652U50G1	16,500	50	E	11.50	9.20	7.2
852-0538	62U75A1	600	75	A	2.51	2.01	1.5
852-0623	152U75C1	1500	75	B	3.55	2.84	2.2
852-0647	252U75K1	2500	75	F	4.63	3.70	2.9
852-0754	3451U75D1	3450	75	C	5.04	4.03	3.1
852-0708	822U75F1	8200	75	D	9.06	7.25	5.7
852-0720	1252U75G1	12,500	75	E	11.81	9.45	7.4
852-0532	42U100A1	400	100	A	2.51	2.01	1.5
852-0511	13U100C1	1000	100	B	3.41	2.73	2.1
852-0732	1651U100K1	1650	100	F	3.96	3.17	2.4
852-0738	2251U100D1	2250	100	C	5.15	4.12	3.2
852-0678	532U100F1	5300	100	D	8.43	6.74	5.3
852-0711	832U100G1	8300	100	E	12.10	9.68	7.6
852-0744	2750U150A1	275	150	A	2.04	1.63	1.2
852-0547	72U150C1	700	150	B	3.00	2.40	1.8
852-0605	112U150K1	1100	150	F	3.91	3.13	2.4
852-0726	1551U150D1	1550	150	C	5.01	4.01	3.1
852-0660	362U150F1	3600	150	D	8.92	7.08	5.5
852-0687	562U150G1	5600	150	E	12.34	9.87	7.7
852-0626	181T200A1	180	200	A	2.53	2.02	1.5
852-0669	451T200C1	450	200	B	3.23	2.58	2.0
852-0696	751T200K1	750	200	F	4.13	3.30	2.5
852-0508	13T200D1	1000	200	C	5.64	4.51	3.5
852-0741	2451T200F1	2450	200	D	8.54	6.83	5.3
852-0663	382T200G1	3800	200	E	15.48	12.26	9.6
852-0757	3750T250C1	375	250	B	3.74	2.99	2.3
852-0535	62T250K1	600	250	F	4.56	3.65	2.8
852-0551	82T250D1	800	250	C	5.90	4.72	3.7
852-0529	33T250G1	3000	250	E	12.70	10.16	8.0
852-0544	72T300D1	700	300	C	5.93	4.74	3.7
852-0729	1651T300F1	1650	300	D	10.58	8.46	6.6
852-0505	12T350A1	100	350	A	3.04	2.43	1.9
852-0638	251T350C1	250	350	B	3.70	2.96	2.3
852-0684	551T350D1	550	350	C	6.38	5.10	4.0
852-0608	132T350F1	1300	350	D	10.74	8.59	6.7
852-0520	23T350G1	2000	350	E	13.29	10.63	8.3
852-0614	151T400C1	150	400	B	3.70	2.96	2.3
852-0751	3250T400D1	325	400	C	4.75	3.80	2.9
852-0629	181T450K1	180	450	F	3.86	3.09	2.4
852-0635	241T450D1	240	450	C	4.28	3.42	2.6

Be Sure to Specify Stock No., Mfr's Type No. and Capacitance

Selected Capacitors

MALLORY

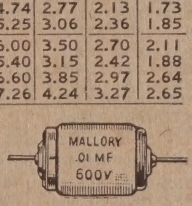
TYPES HC AND NP DRY ELECTROLYTICS

stic-cased electrolytics can operate at wide
iperature range and are moisture-resistant.
ew terminals. Temperature range: —40°C
+85°C. ‡Aluminum case, lug terminals—for
ce control. *NP non-polarized types for
ermittent AC use only. Others are HC polarized types for high-
acity, low voltage uses. †For photoflash. **Dual section. See
e 194 for mounting clamps. Tolerances: NP, ±25%, except
3A, ±15%; HC, 0.50 WVDC, —10% to +150%; 51-350
DC, —10% to +100%; 351 WVDC and up, —10% to +50%.
erage shpg. wt. for size code A through D, ½ lb.; E through H,
g. wt., 1½ lbs.

Size	Clamp	§	Size	Clamp
1 1/16x2 3/4"	852-7532	E	1 1/16x4 3/8"	852-7532
1 1/16x3 3/8"	852-7532	F	1 1/16x2 3/4"	852-7532
2 1/16x4 3/8"	852-7536	G	1 13/16x4 3/8"	852-7535
1 13/16x3 3/8"	852-7535	H	3x4 1/8"	852-7540

Stock No.	Mfr's Type	µF	WV DC	§	EACH 1-9	10-24	25-49	50-99	100-Up
2-2055	10100	10000	10	C	9.78	6.70	3.90	3.02	2.60
2-2015	1540A	4000	15	E	6.71	4.61	2.69	2.07	1.69
2-2017	1560A	6000	15	D	7.03	4.82	2.81	2.17	1.75
2-2021	2050-50	5000	20**	C	10.00	6.86	4.00	3.09	2.18
2-2023	2060A	6000	20	G	7.64	5.24	3.05	2.36	2.29
2-2067	20250‡	25,000	20	H	16.10	11.04	6.44	4.96	4.02
2-2026	2510A	1000	25	F	3.99	2.73	1.59	1.23	1.00
2-2027	2520A	2000	25	B	5.19	3.56	2.07	1.60	1.30
2-2030	2540A	4000	25	D	6.98	4.79	2.79	2.15	1.75
2-2035	4040A	4000	40	G	8.73	6.00	3.49	2.69	2.18
2-2038	5005A	500	50	A	4.16	2.85	1.66	1.28	1.04
2-2040	5010A	1000	50	B	5.31	3.65	2.13	1.64	1.33
2-2043	5020A	2000	50	D	6.33	4.34	2.53	1.95	1.58
2-2046	5040	4000	50	C	9.15	6.27	3.66	2.82	2.29
2-3507	1255A*	500	125	G	7.88	5.40	3.15	2.42	1.90
2-2059	15010A	1000	150	G	8.05	5.52	3.22	2.48	2.01
2-2063	20005	500	200	C	7.46	5.12	2.99	2.30	1.87
2-2064	20005A	500	200	D	6.91	4.74	2.77	2.13	1.73
2-3513	3014A*	100	300	D	7.66	5.25	3.06	2.36	1.85
2-3516	3025*	200	300	C	8.75	6.00	3.50	2.70	2.11
2-3520	4505*	50	450	D	7.88	5.40	3.15	2.42	1.88
2-3521	4510*	100	450	C	9.63	6.60	3.85	2.97	2.64
2-2077	45003†	300	450	C	10.54	7.26	4.24	3.27	2.65

SX POLYSTYRENE CAPACITORS



ess than 1.3% Change: —10°C to +70°C
igh Insulation Resistance • Small Size
ower Factor Less Than .05% • Low Cost

etched polystyrene dielectric fused to high-purity aluminum
, produces excellent humidity barrier. Excellent where utmost
acitance stability versus temperature and time are required, due
high insulation resistance and power factor of less than .05%.
pacitance change from —10°C to +70°C is less than 1.3% total,
d is negative. Temp. coefficient, —150 ppm/°C, ±60 ppm/°C.
) WVDC. ±5% capacitance tolerance. Temp. range —40°C to
5°C. Average shipping weight, 1 oz. Price Locator below. For
ger quantities, contact Allied Electronics.

SIZE CHART

pF	Nominal Lgth.	Diameter
5 to 300	.395"	.165 to .255"
330 to 1000	.590"	.194 to .233"
1100 to 3000	.590"	.238 to .348"
3300 to 5000	.590 to .790"	.366 to .466"
5100 to 10,000	.590 to .790"	.470 to .590"

CAPACITANCE CHART

pF	pF	pF	pF	pF	pF	pF	pF
5	30	75	180	430	1000	2400	5000
10	33	82	200	470	1100	2500	5100
12	36	91	220	510	1200	2700	5600
15	39	100	240	560	1300	3000	6200
18	43	110	270	620	1500	3300	6800
20	47	120	300	680	1600	3600	7500
22	56	130	330	750	1800	3900	8200
24	62	150	360	820	2000	4300	9100
27	68	160	390	910	2200	4700	10,000

PRICE LOCATOR—SPECIFY pF FROM TABLE ABOVE

Stock No.	Capacity pF	EACH 1-24	25-99	100-249	250-499	500-999	1000-Up
852C5000	5 to 300	.15	.112	.093	.07	.054	.051
852C5001	330 to 1000	.15	.112	.093	.07	.054	.051
852C5002	1100 to 3000	.19	.13	.111	.086	.066	.062
852C5003	3300 to 5000	.23	.16	.13	.103	.076	.07
852C5004	5100 to 10,000	.26	.16	.14	.105	.079	.076

MTA ALUMINUM ELECTROLYTICS

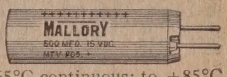
Polypropylene case provides humidity protection by excluding molecules of water vapor while allowing molecular venting. Operating temperature range, —30°C to +85°C. Tolerance, —10%, +100%. DC leakage not over .03 µA per µF volt or 6 µA, whichever is greater. *75 and 100-watt units available on Special Order.* Av. shpg. wt., 2 oz

PRICE AND SIZE LOCATOR†

Size Code	Dia. Length	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
A	.313x .750"	.45	.27	.24	.21	.18	.15	.13
B	.375x1.000"	.50	.30	.26	.22	.20	.17	.15
C	.500x1.375"	.56	.34	.30	.26	.23	.19	.17
D	.500x1.375"	.64	.38	.33	.27	.25	.21	.19
E	.500x1.375"	.68	.40	.35	.30	.27	.23	.20
F	.500x1.375"	.71	.43	.37	.32	.28	.24	.21

Stock No.	Type MTA	µF	Max WV DC	†	Stock No.	Type MTA	µF	Max WV DC	†
852-2501	1D50	1	50	A	852-2540	50D6	50	6	A
852-2503	2D50	2	50	A	852-2541	50E15	50	15	B
852-2505	3D50	3	50	A	852-2542	50E25	50	25	B
852-2507	4D50	4	50	A	852-2543	50F50	50	50	C
852-2509	5D50	5	50	A	852-2547	60D3	60	3	A
852-2511	6D50	6	50	A	852-2548	60E20	60	20	B
852-2513	7D50	7	50	A	852-2549	60F50	60	50	D
852-2515	8D50	8	50	A	852-2550	70E20	70	20	B
852-2516	10D35	10	35	A	852-2551	70F50	70	50	D
852-2517	10E50	10	50	B	852-2553	80E15	80	15	B
852-2519	15D35	15	35	A	852-2554	80F50	80	50	E
852-2520	15E50	15	50	B	852-2557	100E10	100	10	B
852-2522	20D30	20	30	A	852-2558	100E15	100	15	B
852-2523	20E50	20	50	B	852-2559	100F35	100	35	D
852-2525	25D20	25	20	A	852-2560	125E6	125	6	B
852-2526	25E35	25	35	B	852-2561	125F35	125	35	E
852-2527	25F50	25	50	C	852-2564	150E6	150	6	B
852-2529	30D15	30	15	A	852-2565	150F35	150	35	F
852-2530	30E35	30	35	B	852-2568	175E3	175	3	C
852-2531	30F50	30	50	C	852-2569	175F25	175	25	E
852-2532	35D15	35	15	A	852-2571	200F10	200	10	C
852-2533	35E35	35	35	B	852-2575	300F15	300	15	F
852-2534	35F50	35	50	C	852-2578	350F15	350	15	F
852-2536	40D10	40	10	A	852-2581	450F6	450	6	D
852-2537	40E30	40	30	B	852-2584	500F6	500	6	D
852-2538	40F50	40	50	C	852-2587	600F3	600	3	C

TYPE MTV ALUMINUM ELECTROLYTIC CAPACITORS



Molded in plastic case for moisture-tight seal, uniform size. 3 molded stand-off mounts for PC board mounting. Uniform spacing of .200". #20 AWG leads. Temp. range, —30° to +65°C continuous; to ±85°C intermittent. 1000 hrs. life test at 65°C. Capacity tolerance, —10%, +100% at 25°C, 120 Hz. Case size, indicated in Type No. Wt., 1 oz.

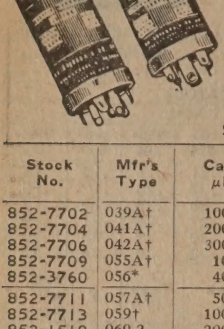
§Size Code	Dia. x L. (Inches)	§Size Code	Dia. x L. (Inches)	§Size Code	Dia. x L. (Inches)	§Size Code	Dia. x L. (Inches)
CB	3/8x1 3/16	CF	3/8x1 11/16	DE	½x1	DN	½x1½
CD	3/8x1 5/16	CK	3/8x1 5/16	DJ	½x1¼	.....	.....

PRICES FOR TYPE MTV CAPACITORS†

Price Code	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-Up
A	.50	.30	.26	.22	.20	.17	.15
B	.53	.32	.27	.23	.21	.18	.15
C	.60	.36	.31	.27	.24	.20	.18
D	.68	.40	.36	.29	.27	.23	.20
E	.70	.42	.37	.32	.28	.24	.21
F	.75	.45	.40	.34	.30	.25	.22

Stock No.	§Type MTV	µF	WV DC	‡	Stock No.	§Type MTV	µF	WV DC	‡
852-3080	1000DN3	1000	3	F	852-3052	200DJ25	200	25	F
852-3040	100CB6	100	6	B	852-3059	250DN25	250	25	F
852-3066	400DE6	400	6	C	852-3021	50CF35	50	35	C
852-3072	500DJ6	500	6	D	852-3044	100DE35	100	35	D
852-3027	70CB10	70	10	B	852-3053	200DN35	200	35	F
852-3041	100CD10	100	10	B	852-3002	1CB50	1	50	A
852-3057	250CK10	250	10	C	852-3003	2CB50	2	50	A
852-3062	300DE10	300	10	D	852-3004	3CB50	3	50	A
852-3068	400DJ10	400	10	E	852-3005	4CB50	4	50	A
852-3018	50CB15	50	15	B	852-3006	5CB50	5	50	A
852-3035	90CD15	90	15	B	852-3007	6CB50	6	50	A
852-3042	100CF15	100	15	B	852-3009	10CB50	10	50	B
852-3058	250DE15	250	15	D	852-3011	15CD50	15	50	B
852-3069	400DJ15	400	15	F	852-3013	20CD50	20	50	B
852-3074	500DN15	500	15	F	852-3015	25CF50	25	50	C
852-3020	50CD25	50	25	B	852-3022	50DE50	50	50	C
852-3043	100CK25	100	25	C	852-3045	100DN50	100	50	F

Twist-Prong Electrolytic Capacitors



TYPES FP, WP, PWP. Designed for filter, audio bypass and TV circuits. Precision engineered to remain stable under high ripple current, surge voltages and temperatures (+85° C). Can is common negative. Both FP and WP types have etched-plate anodes. All have standard twist-prong mounting lugs with solder terminals. Made with exclus vent and seal designs for better operation. Tol ances: 0-50 WVDC, −10 to +150%; 150-3 WVDC, −10 to +100%; over 350 WVDC, −10 +50%. Comes with insulating washer. §In ta refers to size. *Indicates PC terminals. 6 oz.

§	Dia. x L	§	Dia. x L	§	Dia. x L	§	Dia. x L	§	Dia. x L	§	Dia. x L
A	1x1½″	C	1x2″	E	1x3″	G	1⅜x2½″	J	1⅜x3½″	L	1⅜x1¾″
B	1x1¾″	D	1x2½″	F	1⅜x2″	H	1⅜x3″	K	1⅜x4″		

SINGLE SECTION (FP, Except †WP, *PWP)—Specify Stock No. and Type When Ordering

Stock No.	Mfr's Type	Cap. μF	WV DC	§	EACH 1-9	10-24	25-49	50-Up	Stock No.	Mfr's Type	Cap. μF	WV DC	§	EACH 1-9	10-24	25-49	50 U
852-7702	039A†	1000	15	A	2.20	1.76	1.04	.84	852-1526	119A	300	150	F	2.45	1.96	1.32	1.0
852-7704	041A†	2000	15	F	2.96	2.37	1.41	1.12	852-1528	121	120	200	F	1.96	1.57	1.07	.8
852-7706	042A†	3000	15	F	3.66	2.93	1.74	1.39	852-7726	123A†	500	200	H	4.23	3.39	2.01	1.6
852-7709	055A†	100	25	A	1.44	1.15	.68	.55	852-1533	127	200	250	E	3.15	2.52	1.49	1.1
852-3760	056*	400	25	B	1.99	1.59	1.08	.86	852-1534	128A	80	300	D	2.15	1.72	1.02	.8
852-7711	057A†	500	25	A	1.86	1.49	.89	.71	852-1535	129.1A	100	300	D	2.35	1.88	1.12	.8
852-7713	059†	1000	25	F	2.73	2.18	1.30	1.04	852-1537	131.7	160	250	G	2.34	1.87	1.26	1.0
852-1510	060.2	2000	25	L	3.66	2.93	1.74	1.39	852-7731	132†	200	300	G	2.84	3.07	1.67	1.3
852-1513	060.6A	5000	25	J	6.63	5.30	3.14	2.51	852-1540	138A	80	350	F	2.51	2.01	1.19	.9
852-7716	064A†	100	50	A	1.38	1.10	.65	.52	852-1541	140A	125	350	G	3.15	2.52	1.49	1.1
852-7718	065†	500	50	F	2.19	1.75	1.04	.83	852-1543	140.6A	150	350	G	3.40	2.72	1.61	1.2
852-7720	066B†	500	50	C	2.19	1.75	1.04	.83	852-1545	141	320	350	K	4.84	3.87	2.61	2.0
852-1515	066.5	1000	50	F	3.00	2.40	1.62	1.30	852-1548	144A	20	450	C	1.58	1.26	.85	.6
852-3764	067A*	1250	50	G	3.10	2.48	1.68	1.34	852-1552	146	40	450	D	1.90	1.52	1.03	.8
852-7723	068†	1500	50	H	3.71	2.97	2.00	1.60	852-1555	149	80	450	G	2.75	2.20	1.49	1.1
852-1517	070A	2000	50	J	4.23	3.38	2.28	1.83	852-1557	150A	100	450	H	3.03	2.42	1.63	1.3
852-1519	115A	50	150	A	3.15	2.52	1.49	1.19	852-1558	155A	125	450	H	3.44	2.75	1.85	1.4
852-1520	116A	100	150	A	1.59	1.35	.80	.64	852-1561	173A	20	500	C	1.78	1.42	.84	.6
852-1523	117A	150	150	C	1.94	1.55	.92	.74	852-1564	177	40	500	G	2.25	1.80	1.07	.8
852-1525	118A	200	150	F	2.13	1.70	1.15	.92	852-1570	187A	90	500	H	3.35	2.68	1.81	1.4

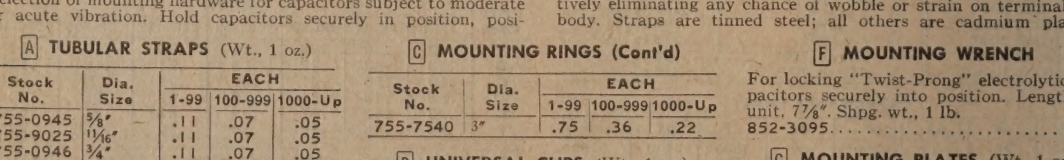
DUAL SECTION (FP, Except †WP, *PFP)—Specify Stock No. and Type When Ordering

852-7735	200†	1000-1000	15	F	3.64	2.91	1.72	1.38	852-1611	227A	20-20	350	C	1.99	1.59	.95	.7
852-7736	200.1B†	1000-1000	15	C	3.64	2.91	1.72	1.38	852-1612	227.3A	30-30	350	D	2.40	1.92	1.14	.9
852-7744	201.5A†	1000-1000	35	G	4.14	3.31	1.96	1.57	852-1614	227.6A	80-80	350	H	4.05	3.24	1.76	1.4
852-7747	202.5A†	100-100	50	A	1.84	1.47	.88	.70	852-1615	227.7A	100-100	350	J	4.60	3.68	2.00	1.6
852-3715	213.1A*	50-30	150	L	1.85	1.48	.88	.70	852-1635	231A	10-10	450	C	1.68	1.34	.91	.7
852-1578	214A	50-50	150	D	1.89	1.51	1.02	.82	852-1637	234A	20-20	450	D	2.21	1.77	1.05	.8
852-3717	214.3*	70-30	150	B	1.93	1.54	.91	.73	852-1640	238A	40-40	450	G	2.96	2.37	1.60	1.2
852-1584	216.4A	200-200	150	G	3.45	2.76	1.64	1.31	852-1661	264.5A	80-40	475	K	4.31	3.45	2.04	1.6
852-1606	221A	40-40	250	B	2.13	1.70	1.01	.81	852-1667	282.5	20-20	500	F	2.44	1.95	1.31	1.0
852-1591	217.7A	150-150	250	G	4.05	3.24	1.92	1.54	852-1669	284A	30-30	500	F	3.25	2.60	1.54	1.2
852-1592	217.74A	200-200	250	H	4.84	3.87	2.29	1.83	852-1671	288A	40-40	500	G	3.73	2.98	1.76	1.4

TRIPLE SECTION—Specify Stock No. and FP Type When Ordering (‡400-400-50 WVDC)

852-1682	311.5A	40-40-40	150	B	2.19	1.75	1.04	.83	852-1825	375.8	10-10-10	450	D	2.25	1.80	1.07	.8
852-1752	330.7A	30-20-10	350	D	2.36	1.89	1.12	.90	852-1828	376.5A	20-20-20	450	G	3.10	2.48	1.47	1.1
852-1756	331.3A	80-60-60	350	J	4.80	3.84	2.09	1.67	852-1833	377.1A	40-40-40	450	J	4.23	3.38	2.01	1.6
852-1770	333.2A	80-40-100	‡	J	4.16	3.33	1.98	1.58	852-1837	378	80-40-20	450	K	4.56	3.65	2.16	1.7

CAPACITOR MOUNTING HARDWARE



Selection of mounting hardware for capacitors subject to moderate or acute vibration. Hold capacitors securely in position, positively eliminating any chance of wobble or strain on terminals body. Straps are tinned steel; all others are cadmium plate

A TUBULAR STRAPS (Wt., 1 oz.)

Stock No.	Dia. Size	EACH 1-99	100-999	1000-Up
755-0945	⅝″	.11	.07	.05
755-9025	11/16″	.11	.07	.05
755-0946	¾″	.11	.07	.05
755-9130	13/16″	.11	.07	.05
755-9110	⅞″	.15	.10	.08
755-9095	15/16″	.15	.10	.08
755-9118	1″	.15	.10	.08
755-9065	1⅛″	.15	.10	.08

B "C" CLAMPS (Wt., 1 oz.)

755-9084	⅝-¾″	.15	.10	.08
755-9085	⅞-1″	.15	.10	.08

C MOUNTING RINGS (Wt., 1 oz.)

852-7530	1-1 1/16″	.32	.15	.11
852-7532	1⅛-1 7/16″	.32	.15	.11
852-7533	1½-1 9/16″	.32	.15	.11
852-7535	1¾-1 13/16″	.38	.18	.13
852-7536	2-2 1/16″	.63	.30	.22
852-7538	2½-2 9/16″	.63	.30	.22

C MOUNTING RINGS (Cont'd)

Stock No.	Dia. Size	EACH 1-99	100-999	1000-Up
755-7540	3″	.75	.36	.22

D UNIVERSAL CLIPS (Wt., 1 oz.)

852-6010	⅜-7/16″	.15	.10	.08
852-6012	½-9/16″	.15	.10	.08
852-6014	⅝-11/16″	.15	.10	.08
852-6016	¾-13/16″	.19	.11	.09
852-6018	⅞-15/16″	.19	.11	.09
852-6020	1-1 1/16″	.19	.12	.10
852-6022	1⅛x1 7/16″	.19	.12	.10

E MOUNTING SOCKETS (Wt., 2 oz.)

For Mallory FP type capacitors. Permit instant replacement. Molded from black bakelite. Recessed center contacts for extended prongs. Also takes short prongs.

750-0816	1″	.65	.42	.....
750-0817	1⅜″	.95	.61	.....

F MOUNTING WRENCH

For locking "Twist-Prong" electrolytic c pacitors securely into position. Length unit, 7⅞″. Shpg. wt., 1 lb.

852-3095 ..... 1.4

G MOUNTING PLATES (Wt., 1 oz.)

Standard mounting plates for mountir "Twist-Prong" capacitors. *Phenolic. †Me al. #Mount 1″ dia. can over a 1⅜″ dia. hol

Stock No.	Size	Stock No.	Size
852-0305	1″*	852-2440	1″†
852-0307	1⅜″*	852-2442	1⅜″†
852-9160	#*	852-9161	#†

1-99 Ea. .11 100-999 Ea. .08 1000-Up Ea. .0

KRAFT INSULATING SLEEVES (Not Illus

852-0485	¾x2″	852-0493	1⅜x2½
852-0487	1x2″	852-0490	1⅜x3″
852-0491	1x2½″	852-0496	1⅜x3½
852-0488	1x3″	852-0494	1⅜x4″
852-0489	1⅜x2″	852-9140	1⅜x4½

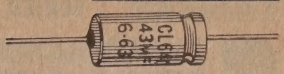
1-99 Ea. .11 100-999 Ea. .08 1000-Up Ea. .0

Uee the Services of the Allied Electronics Facility Nearest Yo

Wet Slug and Foil Tantalum Capacitors

MALLORY

MINIATURE WET SLUG CAPACITORS



- High MFD-Volt/Volume
- Wide Operating Temperature Ranges
- Small Size
- Low DC Leakage Current
- Temperature and Life Stability
- Rugged Construction

ies TLS miniature, polarized, sintered-tantalum-de, liquid-electrolyte capacitors. Three case sizes high μF-Volt rating to volume ratios. Equivalent style CL65 of MIL-C-3965D. Can be selected for oper-on in temperature range of −55°C to +85°C or -5°C to +125°C. Excellent stability versus both temperature and life. Low DC leakage current makes these capacitors especially suited to very low-current timing circuits. Small size and sturdiness make them ideal for high-density electronics packages and severe physical environments. Tolerance: ±10%. Come in plain, uninsulated case. See price tables below.

CASE SIZES

*Size Code	Dia.xLength (Inches)
T1	.219x.485
T2	.313x.672
T3	.406x.797

Stock No.	Mfr's Type	Cap. μF	WVDC @+85°C	WVDC @+125°C	*Case Code
52-1059	CL65BB561KPE	30	6	4	T1
52-1060	CL65BE150KPE	270	15	10	T3
52-1061	CL65BE271KPE	10	25	15	T1
52-1062	CL65BG100KPE	22	25	15	T1
52-1063	CL65BG220KPE	100	25	15	T2
52-1064	CL65BG101KPE	180	25	15	T3
52-1065	CL65BG181KPE	100	30	20	T3
52-1066	CL65BH101KPE	150	30	20	T3
52-1067	CL65BH151KPE	10	50	30	T1
52-1068	CL65BJ100KPE	25	50	30	T2
852-1069	CL65BJ250KPE	25	50	30	T2
852-1070	CL65BJ470KPE	47	50	30	T2
852-1071	CL65BJ820KPE	82	50	30	T3
852-1072	CL65BL6R8KPE	6.8	75	50	T1
852-1073	CL65BL150KPE	15	75	50	T2
852-1074	CL65BN2R5KPE	2.5	100	65	T1
852-1075	CL65BN4R7KPE	4.7	100	65	T1
852-1076	CL65BN220KPE	22	100	65	T2
852-1077	CL65BN430KPE	43	100	65	T3
852-1078	CL65BP090KPE	9	125	85	T2

MIL-C-3965D TANTALUM FOIL ELECTROLYTIC CAPACITORS

- Stable Electrical Characteristics Over a Wide Temperature Range
- Meet or Exceed All Mechanical and Environmental Requirements of MIL-C-3965

ies TFE and TFS capacitors are available in pol-zed and non-polarized types in either etched (TFE) plain (TFS) foil construction. They combine the ellent electrical, physical, and environmental perties of tantalum with the inherent flexibility of l construction. Offer highly stable electrical char-teristics over a wide temperature range. Meet re-irements of MIL-C-3965D. WVDC rating is based on ntinuous duty at +85°C; at +125°C, voltage is derated to two-thirds that at +85°C. Tolerance: U=−15+75%, T=−15+50%, S=−15+30% (TFE); L=15% when WVDC is greater than 150, M=20% when WVDC is 150 or less. Meet or exceed all mechanical and environmental requirements of MIL-C-3965. Surge voltage is 115% of WVDC or derated VDC, representing maximum voltage that may be applied, including transients and peak ripple at the highest applied voltage. See price tables below.

CASE SIZES

†Size Code	Dia.xLength (Inches)
A	.219x.844
B	.312x1.062
C	.406x1.625
D	.406x2.312
E	.406x2.938

STYLE CL21 POLARIZED (TFE)

Stock No.	Mfr's Type	Cap. μF	WVDC @+85°C	WVDC @+125°C	†Case Code
852-1021	CL21BG400UPE	40	25	15	B
852-1022	CL21BG351UPE	350	25	15	E
852-1023	CL21BJ4R5TPE	4.5	50	30	A
852-1024	CL21BJ180TPE	18	50	30	B
852-1025	CL21BJ600TPE	60	50	30	C
852-1026	CL21BJ101TPE	100	50	30	D
852-1027	CL21BL700TPE	70	75	50	D
852-1028	CL21BL101TPE	100	75	50	E
852-1029	CL21BN500SPE	50	100	65	D
852-1030	CL21BN700SPE	70	100	65	E
852-1031	CL21BQ010SPE	1	150	100	A
852-1032	CL21BQ040SPE	4	150	100	B

STYLE CL23 NONPOLARIZED (TFEN)

852-1033	CL23BE100UNE	10	15	10	A
852-1034	CL23BE121UNE	120	15	10	C
852-1035	CL23BG050UNE	5	25	15	A
852-1036	CL23BG200UNE	20	25	15	B
852-1037	CL23BG700UNE	70	25	15	C
852-1038	CL23NJ100TNE	10	50	30	B
852-1039	CL23BL1R5TNE	1.5	75	50	A
852-1040	CL23BN010TNE	1	100	65	A

STYLE CL31 POLARIZED (TFS)

Stock No.	Mfr's Type	Cap μF	WVDC @85C	†Case Code	EACH 1-9	10-24	25-49	50-99	100-Up
852-1041	CL31BJ060MPE	6	50	B	6.60	4.51	3.47	2.47	1.70
852-1042	CL31BL040MPE	4	75	B	6.60	4.51	3.47	2.47	1.70
852-1043	CL31BQ020MPE	2	150	B	6.60	4.51	3.47	2.47	1.70
852-1044	CL31BZR35LPE	0.35	200	A	10.85	8.55	5.89	4.19	3.16
852-1045	CL31BZ050LPE	5	200	C	20.50	16.10	11.12	7.92	5.97
852-1046	CL31BX010LPE	1	300	B	14.25	11.21	7.74	5.49	4.15

STYLE CL33 NONPOLARIZED (TFSN)

852-1047	CL33BA450MNE	45	3	B	6.60	4.51	3.47	2.47	1.70
852-1048	CL33BB250MNE	25	6	B	6.60	4.51	3.47	2.47	1.70
852-1049	CL33BE2R5MNE	2.5	15	A	6.60	4.51	3.47	2.47	1.70
852-1050	CL33BG1R5MNE	1.5	25	A	4.20	3.33	2.42	1.70	1.19
852-1051	CL33BG060MNE	6	25	B	6.60	4.51	3.47	2.47	1.70
852-1052	CL33BG400MNE	40	25	D	14.60	10.03	7.70	5.49	3.78
852-1053	CL33BJ030MNE	3	50	B	6.60	4.51	3.47	2.47	1.70
852-1054	CL33BN0R4MNE	0.4	100	A	4.20	3.33	2.42	1.70	1.19
852-1055	CL33BN100MNE	10	100	D	14.60	10.03	7.70	5.49	3.78
852-1056	CL33BQ010MNE	1	150	B	6.60	4.51	3.47	2.47	1.70
852-1057	CL33BZ050LNE	5	200	D	29.05	22.85	15.49	11.21	8.46
852-1058	CL33B0R15LNE	0.15	250	A	12.45	9.79	6.75	4.82	3.62

***CL65 PRICES**

Price Size Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
T1	2.71	2.47	1.99	1.69	1.45	1.32
T2	4.12	3.75	3.00	2.55	2.18	1.99
T3	6.46	5.88	4.72	3.99	3.41	3.11

†CL21, 23 PRICES

Price Size Code	EACH 1-9	10-24	25-49	50-99	100-Up
A	4.20	3.33	2.42	1.71	1.19
B	7.55	4.94	3.80	2.70	1.87
C	12.60	8.65	6.65	4.73	3.27
D	20.55	14.11	10.83	7.70	5.31
E	27.35	18.76	14.44	10.26	7.10

ATTENTION INDUSTRIAL BUYERS

Allied Electronics maintains complete stocks of Mallory capacitors. For information on any types not listed in this catalog, simply contact the Allied Electronics facility nearest you. You'll get fast service, prompt shipment, and OEM prices.

KEMET Molded Solid-Tantalum Capacitors

SERIES W MINIATURE "BI-PASS" TANTALUM CAPACITORS

Highly reliable, miniature molded solid-tantalum electrolytic capacitors. Rectangular shape for stacking in computers, portable pagers, video recorders, electronic organs, stereo, filtering in color or portable black-and-white TV—anywhere space is at a premium. Provide ultra-low DC leakage, high resistance to heat. Capacitance/voltage range: .082 to 22 μF, 6 to 50 volts DC. Temperature rating: −55° to +85°C. Small size, only .345x.228x.105", ideal for use in high density circuits. All tolerance values are same size. Av. shpg. wt., 1 oz. ±10% tolerance available on special order.

PRICE LOCATOR

Price Code	Tolerance	EACH 1-9	10-24	25-49	50-99	100-499	500-U
A	±20%	1.33	1.06	.85	.50	.41	.35
B	±20%	1.13	.90	.72	.49	.40	.34
C	±20%	1.13	.90	.72	.49	.40	.34
D	±20%	1.13	.90	.72	.49	.40	.34

Stock No.	Mfr's Type T318	Cap., μF	WV DC	Price Code
834-5925	A823M035	.082	35	D
834-5926	A823M050	.082	50	C
834-5805	A104M035	.10	35	D
834-5807	A104M050	.10	50	C
834-5820	A124M035	.12	35	D
834-5821	A124M050	.12	50	C
834-5832	A154M035	.15	35	D
834-5833	A154M050	.15	50	C
834-5845	A184M035	.18	35	D
834-5846	A184M050	.18	50	C
834-5857	A224M035	.22	35	D
834-5858	A224M050	.22	50	B
834-5867	A274M035	.27	35	C
834-5868	A274M050	.27	50	B
834-5875	A334M035	.33	35	C
834-5876	A334M050	.33	50	B
834-5883	A394M035	.39	35	C
834-5884	A394M050	.39	50	B
834-5891	A474M035	.47	35	C
834-5892	A474M050	.47	50	B
834-5905	A564M035	.56	35	B
834-5906	A564M050	.56	50	A
834-5917	A684M035	.68	35	B
834-5918	A684M050	.68	50	A
834-5927	A824M035	.82	35	B
834-5928	A824M050	.82	50	A
834-5809	A105M035	1.0	35	B
834-5811	A105M050	1.0	50	A
834-5824	A125M035	1.2	35	A
834-5825	A125M050	1.2	50	A
834-5836	A155M035	1.5	35	
834-5837	A155M050	1.5	50	
834-5852	A185M035	1.8	35	
834-5862	A225M035	2.2	35	
834-5872	A275M035	2.7	35	
834-5880	A335M025	3.3	25	
834-5897	A475M025	4.7	25	
834-5911	A565M020	5.6	20	
834-5923	A685M020	6.8	20	
834-5933	A825M015	8.2	15	
834-5816	A106M010	10	10	
834-5828	A126M010	12	10	
834-5841	A156M010	15	10	
834-5844	A186M006	18	6	
834-5864	A226M006	22	6	

SERIES E DIPPED SOLID-TANTALUM CAPACITORS

A-B

C-D

Space-saving, solid-tantalum capacitors. Special dip-coated, hard-epoxy encapsulation process provides the ability to withstand high humidity and temperature extremes. These capacitors are ideal for decoupling, bypass, filtering and blocking applications in all types of electronic equipment. They are highly resistant to mechanical shock. Have temperature range from −55°C to +85°C with no voltage derating required. Have low impedance over entire temperature range. Capacitance/voltage range of 1 to 330 μF, 6 to 50 volts DC. Dissi tion factors are less than 10%. Special solder-coated nickel le assure quick and easy soldering. ±20% tolerance. Av. wt. 2 g

SIZE LOCATOR

Case Size	Height	Width	Depth	Diam.	Lead Size (Diameter)
A	0.350"	.....	.....	0.175"	0.020" ± .002"
B	0.500"	.....	.....	0.250"	0.020" ± .002"
C	0.650"	0.450"	0.250"	.....	0.025" ± .002"
D	0.750"	0.600"	0.275"	.....	0.025" ± .002"

50-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-9	10-24	25-49	50-99	100-Up
834-7006	T360A105M050	1.0	A	1.10	.88	.70	.48	.35
834-7039	T360B155M050	1.5	B	1.51	1.21	.97	.67	.48
834-7047	T360B225M050	2.2	B	1.51	1.21	.97	.67	.48
834-7056	T360B335M050	3.3	B	1.51	1.21	.97	.67	.48
834-7064	T360B475M050	4.7	B	1.51	1.21	.97	.67	.48
834-7117	T362C685M050	6.8	C	3.06	2.45	1.96	1.35	.98
834-7081	T362C106M050	10.0	C	3.06	2.45	1.96	1.35	.98
834-7091	T362C156M050	15.0	C	3.06	2.45	1.96	1.35	.98

35-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-9	10-24	25-49	50-99	100-Up
834-7005	T360A105M035	1.0	A	1.00	.80	.64	.44	.32
834-7038	T360B155M035	1.5	B	1.00	.80	.64	.44	.32
834-7046	T360B225M035	2.2	B	1.25	1.00	.80	.55	.40
834-7055	T360B335M035	3.3	B	1.25	1.00	.80	.55	.40
834-7063	T360B475M035	4.7	B	1.38	1.10	.88	.61	.44
834-7072	T360B685M035	6.8	B	1.38	1.10	.88	.61	.44
834-7080	T362C106M035	10.0	C	1.95	1.56	1.25	.86	.63
834-7090	T362C156M035	15.0	C	1.95	1.56	1.25	.86	.63
834-7133	T362D226M035	22.0	D	3.06	2.45	1.96	1.35	.98
834-7140	T362D336M035	33.0	D	4.31	3.45	2.76	1.90	1.38

25-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-9	10-24	25-49	50-99	100-Up
834-7010	T360A155M025	1.5	A	1.00	.80	.64	.44	.32
834-7071	T360B685M025	6.8	B	1.38	1.10	.88	.61	.44
834-7035	T360B106M025	10.0	B	1.38	1.10	.88	.61	.44
834-7366	T362C156M025	15.0	C	1.95	1.56	1.25	.86	.63
834-7105	T362C226M025	22.0	C	1.95	1.56	1.25	.86	.63
834-7420	T362D476M025	47.0	D	4.31	3.45	2.76	1.90	1.38

20-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-9	10-24	25-49	50-99	100-Up
834-7015	T360A225M020	2.2	A	1.00	.80	.64	.44	.32
834-7054	T360B335M020	3.3	B	1.00	.80	.64	.44	.32
834-7062	T360B475M020	4.7	B	1.00	.80	.64	.44	.32
834-7070	T360B685M020	6.8	B	1.00	.80	.64	.44	.32
834-7034	T360B106M020	10.0	B	1.06	.85	.68	.47	.34
834-7042	T360B156M020	15.0	B	1.23	.98	.78	.54	.39

20-VOLT RATING (Cont'd)

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-9	10-24	25-49	50-99	10 U
834-7370	T362C226M020	22.0	C	1.95	1.56	1.25	.86	.
834-7376	T362C336M020	33.0	C	1.95	1.56	1.25	.86	.
834-7383	T362C476M020	47.0	C	1.95	1.56	1.25	.86	.
834-7428	T362D686M020	68.0	D	3.06	2.45	1.96	1.35	.
834-7391	T362D107M020	100.0	D	4.31	3.45	2.76	1.90	1.

15-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-9	10-24	25-49	50-99	10 U
834-7019	T360A335M015	3.3	A	1.00	.80	.64	.44	.
834-7069	T360B685M015	6.8	B	1.00	.80	.64	.44	.
834-7033	T360B106M015	10.0	B	1.00	.80	.64	.44	.
834-7041	T360B156M015	15.0	B	1.06	.85	.68	.47	.
834-7050	T360B226M015	22.0	B	1.06	.85	.68	.47	.
834-7375	T362C336M015	33.0	C	1.95	1.56	1.25	.86	.
834-7382	T362C476M015	47.0	C	1.95	1.56	1.25	.86	.
834-7388	T362C686M015	68.0	C	1.95	1.56	1.25	.86	.
834-7393	T362D157M015	150.0	D	4.31	3.45	2.76	1.90	1.

10-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-9	10-24	25-49	50-99	10 U
834-7023	T360A475M010	4.7	A	1.00	.80	.64	.44	.
834-7040	T360B156M010	15.0	B	1.00	.80	.64	.44	.
834-7049	T360B226M010	22.0	B	1.06	.85	.68	.47	.
834-7067	T360B336M010	33.0	B	1.06	.85	.68	.47	.
834-7360	T362C686M010	68.0	C	1.95	1.56	1.25	.86	.
834-7361	T362C107M010	100.0	C	1.95	1.56	1.25	.86	.
834-7396	T362D227M010	220.0	D	4.31	3.45	2.76	1.90	1.

6-VOLT RATING

Stock No.	Mfr's Type	Cap., μF	Case Size	EACH 1-9	10-24	25-49	50-99	10 U
834-7028	T360A685M006	6.8	A	1.00	.80	.64	.44	.
834-7048	T360B226M006	22.0	B	1.00	.80	.64	.44	.
834-7058	T360B336M006	33.0	B	1.06	.85	.68	.47	.
834-7067	T360B476M006	47.0	B	1.06	.85	.68	.47	.
834-7360	T362C107M006	100.0	C	1.95	1.56	1.25	.86	.
834-7368	T362C157M006	150.0	C	1.95	1.56	1.25	.86	.
834-7398	T362D337M006	330.0	D	4.31	3.45	2.76	1.90	1.

For Large Quantity Pricing . . Contact the Nearest Allied Electronics Facili

Polarized Solid-Tantalum Capacitors

KEMET

C SERIES—POLAR TYPE

…xy-molded, self-insulating solid tan-…m capacitors designed for lead wire …forming and use in automatic insertion …ipment. Ideally suited for use in ship-to-…re and two-way radio communications, industrial electronic …ipment, computers and better grade entertainment devices. …let-shaped for positive polarity identification. Exhibit low-leak-… current, narrow range of capacitance tolerance, good ca-…itance stability and low dissipation factor characteristics. De-…ed to operate continuously at full-rated voltage at temperatures …n −55° to +85°C. High purity solder-coated nickel lead wires …r be soldered or welded. Av. shpg. wt., 2 oz. **Price depends …n case size and capacitance; see price and size locator below.** *…0% tolerance available on special order. Contact the Allied facility …est you for complete price and ordering information.*

PRICE AND SIZE LOCATOR ±10% Tolerance

Price Code*	Case Size (Diam. x Lgth.)	EACH 1-9	10-24	25-99	100-499	500-Up
A	.138x.390″	.79	.63	.53	.43	35
B	.190x.562″	.81	.65	.55	.45	.37
C	.300x.710″	.81	.65	.55	.45	.37
D	.300x.710″	2.49	1.99	1.59	1.27	1.06
E	.365x.875″	2.49	1.99	1.59	1.27	1.06
F	.365x.875″	4.14	3.31	2.65	2.12	1.77

tock No.	Type T310-	µF	WV DC	*	Stock No.	Type T310-	µF	WV DC	*
-5005	A104K035	.10	35	A	834-5344	B565K035	5.6	35	B
-5017	A124K035	.12	35	A	834-5127	A685K006	6.8	6	A
-5028	A154K035	.15	35	A	834-5349	B685K020	6.8	20	B
-5052	A224K035	.22	35	A	834-5350	B685K035	6.8	35	B
-5064	A274K035	.27	35	A	834-5355	B825K020	8.2	20	B
-5076	A334K035	.33	35	A	834-5151	B106K020	10.0	20	B
-5088	A394K035	.39	35	A	834-5365	C106K035	10.0	35	D
-5100	A474K035	.47	35	A	834-5159	B126K020	12	20	B
-5112	A564K035	.56	35	A	834-5369	C126K035	12	35	D
-5124	A684K035	.68	35	A	834-5171	B156K020	15	20	B
-5137	A824K035	.82	35	A	834-5372	C156K035	15	35	D
-5011	A105K035	1.0	35	A	834-5182	B186K015	18	15	B
-5022	A125K020	1.2	20	A	834-5375	C186K020	18	20	D
-5154	B125K035	1.2	35	B	834-5194	B226K015	22	15	B
-5033	A155K020	1.5	20	A	834-5377	C226K020	22	20	D
-5166	B155K035	1.5	35	B	834-5428	D226K035	22	35	E
-5045	A185K020	1.8	20	A	834-5305	B276K010	27	10	B
-5178	B185K035	1.8	35	B	834-5379	C276K020	27	20	D
-5057	A225K020	2.2	20	A	834-5317	B336K010	33	10	B
-5190	B225K035	2.2	35	B	834-5382	C336K020	33	20	D
-5068	A275K015	2.7	15	A	834-5433	D336K035	33	35	F
-5302	B275K035	2.7	35	B	834-5329	B396K010	39	10	C
-5080	A335K015	3.3	15	A	834-5384	C396K015	39	15	D
-5314	B335K035	3.3	35	B	834-5340	B476K006	47	6	B
-5091	A395K010	3.9	10	A	834-5388	C476K010	47	10	D
-5326	B395K035	3.9	35	B	834-5390	C476K015	47	15	D
-5103	A475K010	4.7	10	A	834-5346	B566K006	56	6	C
-5338	B475K035	4.7	35	B	834-5396	C566K010	56	10	D
-5114	A565K006	5.6	6	A					

50-VOLT RATING

PRICE AND SIZE LOCATOR ±10% Tolerance

Price Code*	Case Size (Diam. x Lgth.)	EACH 1-9	10-24	25-99	100-499	500-Up
A	.138x.390″	.85	.68	.55	.45	.37
B	.190x.562″	.89	.71	.57	.47	.39
C	.300x.710″	2.74	2.19	1.75	1.40	1.17
D	.365x.875″	4.55	3.64	2.92	2.33	1.95

tock No.	Type T310-	µF	*	Stock No.	Type T310-	µF	*
-5006	A104K050	.10	A	834-5179	B185K050	1.8	B
-5029	A154K050	.15	A	834-5191	B225K050	2.2	B
-5041	A184K050	.18	A	834-5303	B275K050	2.7	B
-5053	A224K050	.22	A	834-5315	B335K050	3.3	B
-5077	A334K050	.33	A	834-5383	C395K050	3.9	C
-5089	A394K050	.39	A	834-5386	C475K050	4.7	C
-5101	A474K050	.47	A	834-5397	C685K050	6.8	C
-5125	A684K050	.68	A	834-5366	C106K050	10.0	C
-5138	A824K050	.82	A	834-5370	C126K050	12	C
-5012	A105K050	1.0	A	834-5420	D156K050	15	D
-5155	B125K050	1.2	B	834-5424	D186K050	18	D
-5167	B155K050	1.5	B				

P SERIES—POLAR TYPE

Dry, sintered slab-shaped tantalum anode capacitor encapsulated in molded epoxy case. Excellent moisture resistance and dielectric properties. Withstands severe shock and vibration. Extremely compact and highly reliable—provides maximum capacitance per unit of chassis area. Ideal for printed circuits and other limited space applications. Parallel wire leads spaced .200″ apart, can be soldered or welded. One face of epoxy case has slight radius on two vertical corners to permit use with automatic insertion equipment. Polarity symbol molded into top face of case. Operates continuously at full-rated voltage at temperatures from −55° to +85°C. Av. shpg. wt., 2 oz. **Price based on case size; see price and size locator below.**

PRICE AND SIZE LOCATOR ±10% Tolerance

Price Code*	Case Size (DxWxH)	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.225x.285x.170″	2.38	1.90	1.52	1.28	.95	.90
B	.225x.285x.170″	3.25	2.60	2.08	1.75	1.50	1.37
C	.225x.285x.170″	3.08	2.46	1.97	1.66	1.43	1.29
D	.225x.285x.170″	2.48	1.98	1.58	1.34	.98	.93
E	.325x.360x.170″	3.25	2.60	2.08	1.75	1.50	1.37
F	.325x.360x.170″	2.48	1.98	1.58	1.34	.98	.93
G	.325x.360x.170″	5.33	4.26	3.41	2.88	2.45	2.24
H	.325x.360x.170″	4.10	3.28	2.62	2.21	1.63	1.55
J	.375x.600x.195″	5.33	4.26	3.41	2.88	2.45	2.24
K	.375x.600x.195″	4.10	3.28	2.62	2.21	1.63	1.55
L	.375x.600x.195″	7.64	6.11	4.89	3.59	2.91	2.42
M	.375x.600x.195″	9.95	7.96	6.37	5.37	4.58	4.18

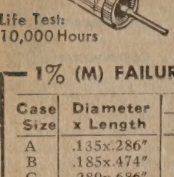
Stock No.	Mfr's Type	µF	WV DC	*	Stock No.	Mfr's Type	µF	WV DC	*
834-1155	KR1P35K	.1	35	A	834-1063	K6R8P15K	6.8	15	D
834-1156	KR1P50K	.1	50	C	834-1065	K6R8P35K	6.8	35	F
834-1158	KR12P35K	.12	35	A	834-1069	K8R2P15K	8.2	15	D
834-1159	KR12P50K	.12	50	C	834-1070	K8R2P25K	8.2	25	F
834-1161	KR15P35K	.15	35	A	834-1071	K8R2P35K	8.2	35	H
834-1162	KR15P50K	.15	50	C	834-1072	K8R2P50K	8.2	50	J
834-1164	KR18P35K	.18	35	A	834-1074	K10P10K	10	10	D
834-1165	KR18P50K	.18	50	C	834-1076	K10P25K	10	25	H
834-1167	KR22P35K	.22	35	A	834-1077	K10P35K	10	35	H
834-1168	KR22P50K	.22	50	C	834-1078	K10P50K	10	50	J
834-1170	KR27P35K	.27	35	A	834-1080	K12P10K	12	10	D
834-1171	KR27P50K	.27	50	C	834-1082	K12P25K	12	25	H
834-1173	KR33P35K	.33	35	A	834-1083	K12P35K	12	35	K
834-1176	KR39P35K	.39	35	A	834-1086	K15P10K	15	10	D
834-1177	KR39P50K	.39	50	C	834-1088	K15P25K	15	25	H
834-1179	KR47P35K	.47	35	A	834-1089	K15P35K	15	35	K
834-1180	KR47P50K	.47	50	C	834-1090	K15P50K	15	50	M
834-1182	KR56P35K	.56	35	A	834-1091	K18P6K	18	6	D
834-1185	KR68P35K	.68	35	A	834-1093	K18P15K	18	15	F
834-1188	KR82P35K	.82	35	A	834-1095	K18P35K	18	35	K
834-1005	K1P35K	1.0	35	A	834-1096	K18P50K	18	50	M
834-1006	K1P50K	1.0	50	C	834-1097	K22P6K	22	6	D
834-1010	K1R2P25K	1.2	25	A	834-1099	K22P15K	22	15	H
834-1011	K1R2P35K	1.2	35	D	834-1101	K22P35K	22	35	L
834-1016	K1R5P25K	1.5	25	A	834-1105	K27P15K	27	15	H
834-1017	K1R5P35K	1.5	35	D	834-1106	K27P25K	27	25	L
834-1022	K1R8P25K	1.8	25	A	834-1107	K27P35K	27	35	L
834-1023	K1R8P35K	1.8	35	D	834-1110	K33P10K	33	10	H
834-1024	K1R8P50K	1.8	50	B	834-1111	K33P15K	33	15	K
834-1027	K2R2P15K	2.2	15	A	834-1113	K33P35K	33	35	L
834-1029	K2R2P35K	2.2	35	D	834-1116	K39P10K	39	10	H
834-1030	K2R2P50K	2.2	50	B	834-1117	K39P15K	39	15	K
834-1033	K2R7P15K	2.7	15	A	834-1118	K39P25K	39	25	L
834-1035	K2R7P35K	2.7	35	D	834-1121	K47P6K	47	6	H
834-1036	K2R7P50K	2.7	50	E	834-1123	K47P15K	47	15	L
834-1039	K3R3P15K	3.3	15	A	834-1124	K47P25K	47	25	L
834-1041	K3R3P35K	3.3	35	D	834-1127	K56P6K	56	6	H
834-1042	K3R3P50K	3.3	50	E	834-1129	K56P15K	56	15	L
834-1046	K3R9P25K	3.9	25	D	834-1133	K68P6K	68	6	H
834-1047	K3R9P35K	3.9	35	F	834-1135	K68P15K	68	15	L
834-1051	K4R7P25K	4.7	25	D	834-1142	K82P15K	82	15	L
834-1052	K4R7P15K	4.7	15	D	834-1143	K100P10K	100	10	L
834-1053	K4R7P35K	4.7	35	F	834-1145	K120P10K	120	10	L
834-1054	K4R7P50K	4.7	50	G	834-1147	K150P6K	150	6	L
834-1057	K5R6P15K	5.6	15	D	834-1148	K150P10K	150	10	L
834-1059	K5R6P35K	5.6	35	F	834-1150	K180P6K	180	6	L
834-1060	K5R6P50K	5.6	50	G	834-1152	K220P6K	220	6	L

ATTENTION PURCHASING AGENTS

Allied can furnish the complete line of Kemet capacitors. Contact the Allied facility nearest you for information on larger quantities than shown here or on types not listed. Allied can make immediate shipments in industrial quantities and at OEM prices.

Mallory, Sprague Solid-Tantalum Capacitors

TYPE CSR13—±10% TOLERANCE-PLASTIC INSULATING SLEEVE



Life Test: 10,000 Hours

Subminiature hermetically sealed units meet new MIL-C-39003/1A specifications. Life test 10,000 hours. Tighter leakage current and dissipation factor over MIL-C-26655B. Low impedance above 1 MHz. 2000-cycle vibration test. 50g shock test. Temp., —55°C to +125°C. Leads: Type N1 of MIL-STD-1276, tin coated 0.5 1.50 mil. Temperature cycling and voltage ag Method 102, Condition C, of MIL-STD-202, followed exposure at +85°C for 40 hrs. minimum, with ra voltage applied. Plastic insulating sleeve. Wt., 2

1% (M) FAILURE RATE PRICE AND SIZE LOCATOR

Case Size	Diameter x Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.135x.286"	1.14	.91	.71	.61	.51	.46
B	.185x.474"	1.24	.99	.77	.66	.55	.50
C	.289x.686"	2.38	1.91	1.46	1.24	1.01	.89
D	.351x.786"	4.58	3.67	2.78	2.34	1.89	1.67
E†	.135x.286"	1.43	1.15	.89	.76	.63	.57
E	.135x.286"	1.33	1.07	.83	.71	.59	.53
F	.185x.474"	1.43	1.15	.89	.76	.63	.57
G†	.289x.686"	3.33	2.67	2.03	1.71	1.39	1.23
G	.289x.686"	3.53	2.83	2.15	1.81	1.47	1.30
H	.351x.786"	6.78	5.43	4.10	3.44	2.77	2.44
J	.135x.286"	6.96	5.57	4.44	3.75	3.20	2.92
K	.185x.474"	7.32	5.86	4.67	3.96	3.37	3.11
L	.289x.686"	11.98	9.59	7.66	6.54	5.53	5.09
M	.351x.786"	22.40	17.92	14.31	12.14	10.29	9.45

2% (L) FAILURE RATE PRICE AND SIZE LOCATOR

Case Size	Diameter x Length	EACH 1-9	10-24	25-49	50-99	100-499	500-U
A	.135x.286"	1.07	.86	.66	.56	.46	.41
B	.185x.474"	1.17	.94	.72	.61	.50	.45
C	.289x.686"	2.32	1.86	1.41	1.19	.96	.84
D	.351x.786"	4.52	3.62	2.73	2.29	1.84	1.62
E†	.135x.286"	1.37	1.10	.84	.71	.58	.52
E	.135x.286"	1.27	1.02	.78	.66	.54	.48
F	.185x.474"	1.37	1.10	.84	.71	.58	.52
G†	.289x.686"	3.27	2.62	1.98	1.66	1.34	1.18
G	.289x.686"	3.47	2.78	2.10	1.76	1.42	1.25
H	.351x.786"	6.72	5.38	4.05	3.39	2.72	2.39
J	.135x.286"	5.10	4.08	3.26	2.75	2.34	2.14
K	.185x.474"	5.37	4.30	3.42	2.90	2.48	2.27
L	.289x.686"	8.80	7.04	5.61	4.79	4.05	3.73
M	.351x.786"	16.43	13.15	10.49	8.91	7.55	6.93

Stock No.	Type CSR13-	Cap., µF	WV DC	Case Size
926-0421	B685KM	6.8	6	A
926-0416	B476KM	47	6	B
926-0407	B157KM	150	6	C
926-0411	B337KM	330	6	D
926-0441	C475KM	4.7	10	A
926-0436	C336KM	33	10	B
926-0426	C107KM	100	10	C
926-0431	C227KM	220	10	D
926-0458	D335KM	3.3	15	A
926-0453	D226KM	22	15	B
926-0463	D686KM	68	15	C
926-0447	D157KM	150	15	D
926-0479	E155KM	1.5	20	A
926-0485	E225KM	2.2	20	A
926-0469	E106KM	10	20	B
926-0481	E156KM	15	20	B
926-0489	E336KM	33	20	C
926-0491	E476KM	47	20	C
926-0493	E686KM	68	20	D
926-0474	E107KM	100	20	D
926-0509	F685KM	6.8	35	B
926-0497	F226KM	22	35	C
926-0501	F336KM	33	35	D
926-0505	F476KM	47	35	D
926-0557	G472KM	.0047	50	E†
926-0559	G682KM	.0068	50	E†
926-0513	G103KM	.01	50	E†
926-0521	G153KM	.015	50	E†
926-0529	G223KM	.022	50	E†
926-0537	G333KM	.033	50	E
926-0543	G473KM	.047	50	E
926-0549	G683KM	.068	50	E
926-0515	G104KM	.1	50	E
926-0523	G154KM	.15	50	E
926-0531	G224KM	.22	50	E
926-0539	G334KM	.33	50	E
926-0545	G474KM	.47	50	E
926-0551	G684KM	.68	50	E
926-0517	G105KM	1	50	E
926-0525	G155KM	1.5	50	F
926-0533	G225KM	2.2	50	F
926-0541	G335KM	3.3	50	F
926-0547	G475KM	4.7	50	F
926-0553	G685KM	6.8	50	G†
926-0519	G106KM	10	50	G†
926-0527	G156KM	15	50	G
926-0535	G226KM	22	50	H
926-0561	H104KM	.1	75	J
926-0569	H154KM	.15	75	J
926-0575	H224KM	.22	75	J
926-0582	H334KM	.33	75	J
926-0588	H474KM	.47	75	J
926-0594	H684KM	.68	75	J
926-0563	H105KM	1	75	K
926-0571	H155KM	1.5	75	K
926-0578	H225KM	2.2	75	K
926-0584	H335KM	3.3	75	K
926-0590	H475KM	4.7	75	L
926-0596	H685KM	6.8	75	L
926-0565	H106KM	10	75	L
926-0573	H156KM	15	75	M

Stock No.	Type CSR13-	Cap., µF	WV DC	Cas Siz
926-0420	B685KL	6.8	6	A
926-0415	B476KL	47	6	B
926-0405	B157KL	150	6	C
926-0410	B337KL	330	6	D
926-0440	C475KL	4.7	10	A
926-0435	C336KL	33	10	B
926-0425	C107KL	100	10	C
926-0430	C227KL	220	10	D
926-0457	D335KL	3.3	15	A
926-0452	D226KL	22	15	B
926-0462	D686KL	68	15	C
926-0446	D157KL	150	15	D
926-0478	E155KL	1.5	20	A
926-0484	E225KL	2.2	20	A
926-0468	E106KL	10	20	B
926-0480	E156KL	15	20	B
926-0488	E336KL	33	20	C
926-0490	E476KL	47	20	C
926-0492	E686KL	68	20	D
926-0473	E107KL	100	20	D
926-0508	F685KL	6.8	35	B
926-0496	F226KL	22	35	C
926-0500	F336KL	33	35	D
926-0504	F476KL	47	35	D
926-0556	G472KL	.0047	50	E†
926-0558	G682KL	.0068	50	E
926-0512	G103KL	.01	50	E
926-0520	G153KL	.015	50	E
926-0528	G223KL	.022	50	E
926-0536	G333KL	.033	50	E
926-0542	G473KL	.047	50	E
926-0548	G683KL	.068	50	E
926-0514	G104KL	.1	50	E
926-0522	G154KL	.15	50	E
926-0530	G224KL	.22	50	E
926-0538	G334KL	.33	50	E
926-0544	G474KL	.47	50	E
926-0550	G684KL	.68	50	E
926-0516	G105KL	1	50	E
926-0524	G155KL	1.5	50	F
926-0532	G225KL	2.2	50	F
926-0540	G335KL	3.3	50	F
926-0546	G475KL	4.7	50	F
926-0552	G685KL	6.8	50	G
926-0518	G106KL	10	50	G
926-0526	G156KL	15	50	G
926-0534	G226KL	22	50	H
926-0560	H104KL	.1	75	J
926-0568	H154KL	.15	75	J
926-0574	H224KL	.22	75	J
926-0581	H334KL	.33	75	J
926-0587	H474KL	.47	75	J
926-0593	H684KL	.68	75	J
926-0562	H105KL	1	75	K
926-0570	H155KL	1.5	75	K
926-0578	H225KL	2.2	75	K
926-0583	H335KL	3.3	75	K
926-0589	H475KL	4.7	75	L
926-0595	H685KL	6.8	75	L
926-0564	H106KL	10	75	L
926-0572	H156KL	15	75	M

All capacitance values, failure rate .1% (P), and tolerance per MIL 39003/1A not listed above are available from Allied. Contact your nearest Allied facility for complete information and for prices in production quantities.

Be Sure to Specify Stock No., Mfr's Type and Capacitance When Order

Solid Tantalum Capacitors

TYPE 145D MINIATURE TANTALEX CAPACITORS

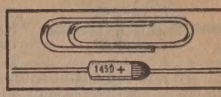
SPRAGUE

THE MARK OF RELIABILITY

pact sintered-anode capacitors. Ideal for in-rial printed wiring boards, many tight-space ications. Priced comparably to older style rolytics. Tol., ±20%; ±10% available on ial order. Oper. temp. range: −55°C to °C. Voltage ratings, 6 to 75 WVDC. Mois--protected case, plastic insulation sleeve. ½ oz.

145D PRICE AND SIZE LOCATOR

Price Code*	Diameter & Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.115 x .312"	2.41	1.55	1.36	1.18	.95	.88
B	.145 x .600"	3.62	1.95	1.71	1.48	1.19	1.10
C	.225 x .700"	4.75	2.55	2.24	1.93	1.55	1.43



tock No.	Type 145D-	µF	WV DC	*
-6233	276X0006E2	27	6	A
-6271	187X0006H2	180	6	B
-6285	567X0006J2	560	6	C
-6229	226X0008E2	22	8	A
-6267	157X0008H2	150	8	B
-6283	477X0008J2	470	8	C
-6225	186X0010E2	18	10	A
-6263	127X0010H2	120	10	B
-6281	397X0010J2	390	10	C
-6221	156X0012E2	15	12	A
-6259	107X0012H2	100	12	B
-6279	337X0012J2	330	12	C
-6219	126X0015E2	12	15	A
-6255	826X0015H2	82	15	B

Stock No.	Type 145D-	µF	WV DC	*
926-6277	277X0015J2	270	15	C
926-6217	106X0020E2	10	20	A
926-6251	686X0020H2	68	20	B
926-6275	227X0020J2	220	20	C
926-6215	825X0025E2	8.2	25	A
926-6245	566X0025H2	56	25	B
926-6273	187X0025J2	180	25	C
926-6213	685X0030E2	6.8	30	A
926-6241	476X0030H2	47	30	B
926-6269	157X0030J2	150	30	C
926-6211	565X0035E2	5.6	35	A
926-6239	396X0035H2	39	35	B
926-6265	127X0035J2	120	35	C
926-6209	475X0040E2	4.7	40	A

Stock No.	Type 145D-	µF	WV DC	*
926-6237	336X0040H2	33	40	B
926-6261	107X0040J2	100	40	C
926-6207	395X0050E2	3.9	50	A
926-6235	276X0050H2	27	50	B
926-6257	826X0050J2	82	50	C
926-6205	335X0060E2	3.3	60	A
926-6231	226X0060H2	22	60	B
926-6253	686X0060J2	68	60	C
926-6201	225X0075E2	2.2	75	A
926-6203	275X0075E2	2.7	75	A
926-6223	156X0075H2	15	75	B
926-6227	186X0075H2	18	75	B
926-6243	476X0075J2	47	75	C
926-6247	566X0075J2	56	75	C

TYPE 196D SOLID TANTALUM EPOXY-DIPPED CAPACITORS

ts are low on cost, high on space-saving. gged epoxy-resin coating effectively resists and vents moisture and mechanical damage. Tinned el leads for long life, dependability. Operating perature range, −55°C to +85°C. Tolerance, 0%. Voltage ratings range from 4 WVDC to 50 VDC. Av. shpg. wt. ½ oz.

SIZE TABLE

Case Code	Height	Width	Thickness	Lead Length	Case Code	Height	Width	Thickness	Lead Length
A	.375	.175	.175	.750	D	.500	.450	.250	1.500
B	.425	.225	.225	.750	E	.800	.600	.257	1.500
C	.450	.225	.225	.750					

4 WVDC

Stock No.	Type 196D-	Cap. µF	Case Size Code	EACH 1-24	25-49	50-99	100-499	500-Up
6-6746	106X0004HA1	10	A	.60	.36	.30	.24	.21
6-6835	476X0004JA1	47	B	.70	.42	.35	.28	.25
6-6753	107X0004KA1	100	C	.80	.48	.40	.32	.28
6-6797	227X0004LA3	220	D	1.60	.96	.80	.64	.56

6 WVDC

6-6845	685X0006HA1	6.8	A	.60	.36	.30	.24	.21
6-6815	336X0006JA1	33	B	.70	.42	.35	.28	.25
6-6836	476X0006KA1	47	C	.80	.48	.40	.32	.28
6-6850	686X0006KA1	68	C	.80	.48	.40	.32	.28
6-6772	157X0006LA3	150	D	1.60	.96	.80	.64	.56
6-6823	337X0006MA3	330	E	2.80	1.68	1.40	1.12	.98

10 WVDC

6-6830	475X0010HA1	4.7	A	.60	.36	.30	.24	.21
6-6791	226X0010JA1	22	B	.70	.42	.35	.28	.25
6-6816	336X0010KA1	33	C	.80	.48	.40	.32	.28
6-6755	107X0010LA3	100	D	1.60	.96	.80	.64	.56
6-6799	227X0010MA3	220	E	2.80	1.68	1.40	1.12	.98

15 WVDC

6-6808	335X0015HA1	3.3	A	.60	.36	.30	.24	.21
6-6766	156X0015JA1	15	B	.70	.42	.35	.28	.25
6-6792	226X0015KA1	22	C	.80	.48	.40	.32	.28
6-6852	686X0015LA3	68	D	1.60	.96	.80	.64	.56
6-6774	157X0015MA3	150	E	2.80	1.68	1.40	1.12	.98

20 WVDC

6-6749	106X0020JA1	10	B	.60	.42	.35	.28	.25
6-6767	156X0020KA1	15	C	.70	.48	.40	.32	.28
6-6838	476X0020LA3	47	D	.80	.96	.80	.64	.56
6-6757	107X0020MA3	100	E	1.60	1.68	1.40	1.12	.98

25 WVDC

6-6761	155X0025HA1	1.5	A	.60	.36	.30	.24	.21
6-6784	225X0025HA1	2.2	A	.60	.36	.30	.24	.21
6-6847	685X0025JA1	6.8	B	.70	.42	.35	.28	.25
6-6751	106X0025KA1	10	C	.80	.48	.40	.32	.28
6-6794	226X0025LA3	22	D	1.60	.96	.80	.64	.56

25 WVDC (CONT'D)

Stock No.	Type 196D-	Cap. µF	Case Size Code	EACH 1-24	25-49	50-99	100-499	500-Up
926-6818	336X0025LA3	33	D	1.60	.96	.80	.64	.56
926-6839	476X0025MA3	47	E	2.80	1.68	1.40	1.12	.98
926-6853	686X0025MA3	68	E	2.80	1.68	1.40	1.12	.98

35 WVDC

926-6740	104X0035HA1	0.1	A	.60	.36	.30	.24	.21
926-6759	154X0035HA1	0.15	A	.60	.36	.30	.24	.21
926-6778	224X0035HA1	0.22	A	.60	.36	.30	.24	.21
926-6805	334X0035HA1	0.33	A	.60	.36	.30	.24	.21
926-6827	474X0035HA1	0.47	A	.60	.36	.30	.24	.21
926-6842	684X0035HA1	0.68	A	.60	.36	.30	.24	.21
926-6744	105X0035HA1	1.0	A	.60	.36	.30	.24	.21
926-6763	155X0035HA1	1.5	B	.70	.42	.35	.28	.25
926-6787	225X0035JA1	2.2	B	.70	.42	.35	.28	.25
926-6810	335X0035JA1	3.3	B	.70	.42	.35	.28	.25
926-6833	475X0035JA1	4.7	B	.70	.42	.35	.28	.25
926-6848	685X0035KA1	6.8	C	.80	.48	.40	.32	.28
926-6752	106X0035LA3	10	D	1.60	.96	.80	.64	.56
926-6768	156X0035LA3	15	D	1.60	.96	.80	.64	.56
926-6795	226X0035MA3	22	E	1.75	1.05	.88	.70	.61
926-6819	336X0035MA3	33	E	2.80	1.68	1.40	1.12	.98

50 WVDC

926-6741	104X0050HA1	0.1	A	.85	.51	.43	.34	.30
926-6760	154X0050HA1	0.15	A	.85	.51	.43	.34	.30
926-6779	224X0050HA1	0.22	A	.85	.51	.43	.34	.30
926-6806	334X0050HA1	0.33	A	.85	.51	.43	.34	.30
926-6828	474X0050HA1	0.47	A	.85	.51	.43	.34	.30
926-6843	684X0050HA1	0.68	A	.85	.51	.43	.34	.30
926-6745	105X0050HA1	1.0	A	.85	.51	.43	.34	.30
926-6746	155X0050JA1	1.5	B	.95	.57	.48	.38	.33
926-6788	225X0050JA1	2.2	B	.95	.57	.48	.38	.33
926-6811	335X0050JA1	3.3	B	.95	.57	.48	.38	.33
926-6834	475X0050KA1	4.7	C	1.05	.63	.53	.42	.37

TYPE 162D MINIATURE POLARIZED TANTALUMS

xtremely small and compact tantalum capacitors designed for use n printed circuit wiring boards, in packaged circuit modules, and applications where space is a critical factor. Excellent for use in earing aids and ultra-miniature radios. Have solid, non-corrosive electrolyte. Exceptionally long shelf and service life. All have plastic resin end-seal; plastic insulating sleeve. Tolerance, ±10%. Operating temperature range, −55° to +85°C, derating. Axial leads. Av. shpg. wt., 2 oz. *Price Code.

Stock No.	Type 162D-	µF	WV DC	*
26-6591	683X9100AA2	.068	100	F
26-6580	104X9050AA2	.1	50	E
26-6584	154X9035AA2	.15	35	A
26-6589	474X9020AA2	.47	20	A
26-6592	684X9015AA2	.68	15	A
26-6581	105X9010AA2	1.0	10	A
26-6582	105X9020AB2	1.0	20	B

Stock No.	Type 162D-	µF	WV DC	*
926-6586	225X9015AB2	2.2	15	B
926-6589	475X9020BA2	4.7	20	C
926-6593	685X9015BA2	6.8	15	C
926-6583	106X9010BA2	10	10	C
926-6585	156X9015CA2	15	15	D
926-6587	226X9010CA2	22	10	D
926-6590	476X 9004CA2	47	4	D

162D AXIAL-LEAD PRICE AND SIZE LOCATOR

*	Diameter x Length	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	.080x.135"	1.52	1.22	.72	.54	.50	.46
B	.080x.185"	1.52	1.22	.72	.54	.50	.46
C	.105x.265"	1.60	1.28	.76	.57	.53	.49
D	.145x.265"	1.75	1.40	.83	.62	.58	.53
E	.080x.135"	2.31	1.85	1.09	.82	.76	.70
F	.080x.135"	4.52	3.62	2.12	1.58	1.46	1.34

Specify Stock No., Mfr's Type and Capacitance on All Capacitor Orders

Tantalum and Aluminum Electrolytics

CL25 (TYPE 112D) TANTALEX® FOIL CAPACITORS

Polarized, etched-foil tantalum capacitors with virtually leakproof fluorocarbon end-seals. Specially designed for applications up to 150 volts in both military and industrial equipment. Excellent low temperature performance. Feature exceptionally high degree of stability at all operating temperatures. Operating temperature range is —50° to +85°C. Engineered to meet MIL-C-3965B specifications. Have float-design for higher insulation resistance, ultra-low leakage current, and longer service life. With tubular aluminum cases and outer plastic insulating sleeve. Av. shpg. wt., 2 oz.

CL25 (112D) PRICE AND SIZE LOCATOR

Price Code*	Diameter & Length	EACH 1-9	10-24	25-49	50-99	100-499	500-L
A	13/64x3/4"	5.30	3.37	2.46	1.74	1.23	.88
B	19/64x15/16"	9.48	4.98	3.84	2.74	1.91	1.50
C	25/64x1 1/2"	15.80	8.69	6.69	4.77	3.31	2.64
D	25/64x2 3/16"	25.73	14.15	10.87	7.74	5.35	4.69
E	25/64x2 13/16"	34.23	18.80	14.48	10.30	7.14	5.94

Stock No.	MIL CL25- / Type 112D-	μF	WVDC	Case Size*
926-5788	BQ010SP3 / 105C3150D1	1	150	A
926-5805	BN020SP3 / 205C3100D1	2	100	A
926-5831	BQ040SP3 / 405C3150G1	4	150	B
926-5840	BJ4R5TP3 / 455C5050D1	4.5	50	A
926-5879	BG100UP3/ 106C7025D1	10	25	A
926-5796	BL120TP3 / 126C5075G1	12	75	B
926-5801	BJ180TP3 / 186C5050G1	18	50	B
926-5810	BN250SP3 / 256C3100J1	25	100	C
926-5819	BL300TP3 / 306C5075J1	30	75	C
926-5832	BG400UP3/ 406C7025G1	40	25	B
926-5846	BE600UP3 / 606C7015G1	60	15	B

Stock No.	MIL CL25- / Type 112D-	μF	WVDC	Ca Siz
926-5845	BJ600TP3 / 606C5050J1	60	50	C
926-5791	BJ101TP3 / 107C5050M1	100	50	D
926-5793	BL101TP3 / 107C5075P1	100	75	E
926-5795	BH111UP3/ 117C7030J1	110	30	C
926-5798	BJ151TP3 / 157C5050P1	150	50	E
926-5808	BH221UP3/ 227C7030M1	220	30	D
926-5812	BG251UP3/ 257C7025M1	250	25	D
926-5822	BH301UP3/ 307C7030P1	300	30	E
926-5826	BG351UP3/ 357C7025P1	350	25	E
926-5833	BE401UP3 / 407C7015M1	400	15	D

IMPROVED TYPE 36D "POWERLYTIC" INSULATED COMPUTER-GRADE ALUMINUM ELECTROLYTICS

Provides maximum capacitance in a given size. Low ESR and leakage currents. Long life. Plastic insulating tube withstands military environment conditions including —55° storage tests. Pressure safety ven Terminal tapped 10-32. —20° +65°C. Tol.: 3-50 W —10%, +75%; 75-450 WV, —10%, +50%. Av., 1½ lb

*Code	Dia. x L.	*Code	Dia. x L.	*Code	Dia. x L.	*Code	Dia. x L.	*Code	Dia. x L.	*code	Dia. x
A	1 7/16x2 1/2"	C	1 7/16x4 1/2"	E	2 1/16x4 1/2"	G	2 9/16x4 1/2"	I	3 1/16x4 1/2"	K	3 1/16x6
B	1 7/16x3 1/2"	D	2 1/16x3 1/2"	F	2 9/16x3 1/2"	H	2 9/16x5"	J	3 1/16x5"		

Stock No.	Type 36D. .2A	uF	WV DC	*	EACH 1-9	10-24	25-49	50-99	100-Up
926-5220	274G003DF	270000	3	K	17.25	13.80	11.04	9.66	7.45
926-5123	124G006DC	120000	6	I	12.81	10.25	8.20	7.17	5.54
926-5176	194G006DF	190000	6	K	17.25	13.80	11.04	9.66	7.46
926-5354	602G010AA	6000	10	A	2.89	2.31	1.85	1.62	1.25
926-5119	123G010AB	12000	10	B	3.49	2.79	2.23	1.95	1.51
926-5164	183G010AC	18000	10	C	4.01	3.21	2.57	2.25	1.74
926-5224	283G010BB	28000	10	D	5.36	4.29	3.43	3.00	2.32
926-5276	423G010BC	42000	10	E	6.49	5.19	4.15	3.64	2.81
926-5307	483G010CB	48000	10	F	7.28	5.82	4.66	4.08	3.15
926-5105	104G010DC	100000	10	I	12.93	10.34	8.27	7.24	5.58
926-5159	164G010DF	160000	10	K	17.34	13.87	11.10	9.71	7.49
926-5296	462G015AA	4600	15	A	2.89	2.31	1.85	1.62	1.25
926-5619	922G015AB	9200	15	B	3.49	2.79	2.24	1.96	1.51
926-5131	133G015AC	13000	15	C	4.03	3.22	2.58	2.25	1.74
926-5189	213G015BB	21000	15	D	5.39	4.31	3.45	3.02	2.33
926-5240	313G015BC	31000	15	E	6.50	5.20	4.16	3.64	2.81
926-5254	363G015CB	36000	15	F	7.31	5.85	4.68	4.10	3.16
926-5331	543G015CC	54000	15	G	9.59	7.67	6.14	5.37	4.14
926-5363	633G015CD	63000	15	H	10.74	8.59	6.87	6.01	4.64
926-5390	803G015DC	80000	15	I	12.46	9.97	7.97	6.98	5.38
926-5218	272G025AA	2700	25	A	2.89	2.31	1.85	1.62	1.25
926-5334	552G025AB	5500	25	B	3.50	2.80	2.24	1.96	1.51
926-5397	822G025AC	8200	25	C	4.04	3.23	2.59	2.26	1.75
926-5166	183G025BC	18000	25	E	6.53	5.22	4.18	3.66	2.82
926-5242	323G025CC	32000	25	G	9.65	7.72	6.18	5.41	4.17
926-5304	473G025DC	47000	25	I	12.49	9.99	7.99	7.00	5.40
926-5340	553G025DD	55000	25	J	14.86	11.89	9.51	8.33	6.42
926-5379	713G025DF	71000	25	K	17.18	13.74	10.99	9.62	7.42
926-5256	363G030DC	36000	30	I	12.59	10.07	8.05	7.05	5.44
926-5278	423G030DD	42000	30	J	14.93	11.94	9.56	8.36	6.45
926-5336	552G040AC	5500	40	C	4.06	3.25	2.60	2.28	1.76
926-5402	842G040BB	8400	40	D	5.46	4.37	3.50	3.06	2.36
926-5320	123G040BC	12000	40	E	6.65	5.32	4.26	3.73	2.88
926-5321	213G040CC	21000	40	G	9.73	7.78	6.22	5.45	4.20
926-5209	253G040CD	25000	40	H	10.96	8.77	7.02	6.14	4.74
926-5129	132G050AA	1300	50	A	2.90	2.32	1.86	1.63	1.26
926-5214	262G050AB	2600	50	B	3.53	2.82	2.26	1.98	1.53
926-5267	392G050AC	3900	50	C	4.08	3.26	2.61	2.29	1.76
926-5356	602G050BB	6000	50	D	5.49	4.39	3.52	3.08	2.38
926-5417	902G050BC	9000	50	E	6.68	5.34	4.27	3.74	2.88
926-5145	153G050CC	15000	50	G	9.75	7.80	6.24	5.46	4.22
926-5199	223G050DC	22000	50	E	12.65	10.12	8.09	7.08	5.47
926-5205	252F075AC	2500	75	C	4.09	3.27	2.62	2.29	1.77
926-5265	392F075BB	3900	75	D	5.51	4.41	3.53	3.09	2.38

Stock No.	Type 36D. .2A	uF	WV DC	*	EACH 1-9	10-24	25-49	50-99	10 U
926-5347	592F075BC	5900	75	E	6.68	5.34	4.28	3.74	2.
926-5111	113F075CD	11000	75	H	11.06	8.85	7.08	6.20	4.
926-5141	143F075DC	14000	75	I	12.71	10.17	8.14	7.12	5.
926-5197	223F075DF	22000	75	K	18.00	14.40	11.52	10.08	7.
926-5289	451F100AA	450	100	A	2.90	2.32	1.86	1.63	1.
926-5126	132F100AC	1300	100	C	4.06	3.25	2.60	2.28	1.
926-5234	302F100BC	3000	100	E	6.63	5.30	4.24	3.71	2.
926-5323	532F100CC	5300	100	G	9.73	7.78	6.22	5.45	4.
926-5383	782F100DC	7800	100	I	13.28	10.62	8.50	7.44	5.
926-5232	301F150AA	300	150	A	2.90	2.32	1.86	1.63	1.
926-5415	901F150AC	900	150	C	4.03	3.22	2.58	2.26	1.
926-5135	142F150BB	1400	150	D	5.39	4.31	3.45	3.02	2.
926-5184	212F150BC	2100	150	E	6.53	5.22	4.18	3.66	2.
926-5252	362F150CC	3600	150	G	9.75	7.80	6.24	5.46	4.
926-5235	532F150DC	5300	150	I	13.15	10.52	8.42	7.37	5.
926-5385	782F150DF	7800	150	K	17.80	14.24	11.39	9.97	7.
926-5202	251F200AA	250	200	A	2.89	2.31	1.85	1.62	1.
926-5283	431F200AB	430	200	B	3.46	2.77	2.22	1.94	1.
926-5369	641F200AC	640	200	C	4.00	3.20	2.56	2.24	1.
926-5137	142F200BC	1400	200	E	6.43	5.14	4.11	3.60	2.
926-5154	162F200CB	1600	200	F	7.34	5.87	4.70	4.11	3.
926-5260	372F200DC	3700	200	I	12.83	10.26	8.21	7.18	5.
926-5533	552F200DF	5500	200	K	17.74	14.19	11.35	9.93	7.
926-5320	531F250AC	530	250	C	3.99	3.19	2.55	2.23	1.
926-5116	122F250BC	1200	250	E	6.39	5.11	4.09	3.58	2.
926-5236	302F250DC	3000	250	I	12.79	10.23	8.19	7.16	5.
926-5291	452F250DF	4500	250	K	17.64	14.11	11.29	9.88	7.
926-5200	241F300AB	240	300	B	3.44	2.75	2.20	1.92	1.
926-5395	821F300BC	820	300	E	6.36	5.09	4.07	3.56	2.
926-5186	212F300DC	2100	300	I	12.75	10.20	8.16	7.14	5.
926-5624	950F350AA	95	350	A	2.88	2.30	1.84	1.61	1.
926-5172	191F350AB	190	350	B	3.40	2.72	2.17	1.90	1.
926-5272	421F350BB	420	350	D	4.96	3.97	3.17	2.78	2.
926-5374	651F350BC	650	350	E	6.31	5.05	4.04	3.53	2.
926-5109	112F350CC	1100	350	G	9.23	7.38	5.90	5.16	3.
926-5156	162F350DC	1600	350	I	12.59	10.07	8.05	7.05	5.
926-5207	252F350DF	2500	350	K	17.31	13.85	11.08	9.69	7.
926-5274	421F400BC	420	400	E	6.28	5.02	4.02	3.52	2.
926-5310	500F450AA	50	450	A	2.81	2.25	1.80	1.58	1.
926-5133	141F450AC	140	450	C	3.91	3.13	2.50	2.19	1.
926-5195	221F450BB	220	450	D	5.04	4.03	3.23	2.82	2.
926-5246	331F450BC	330	450	E	6.24	4.99	3.99	3.49	2.
926-5409	861F450DC	860	450	I	13.09	10.47	8.37	7.33	5.

ATTENTION INDUSTRIAL BUYERS

Allied maintains complete stocks of Sprague capacitors. For information on any types not listed in this catalog, simply contact the Allied Electronics facility nearest you. Depend on us for fast service and prompt shipment. Contact our nearest branch office for prices in larger quantities.

Specify Stock No., Mfr's Type No. and Capacitance When Orderi

Sprague Aluminum Electrolytics

TYPE 39D MINIATURE ELECTROLYTICS

a-dependable computer-grade electrolytics. Provide high reliability for transistorized and printed circuit applications. Greatest possible capacitance in small case. Welded terminals; welded construction. 2½" axial leads. Low ESR and leakage current. With plastic sleeve. −20°C to +85°C. Tolerance: 3-50 WV. −10 +50%. Average shpg. wt. 4 oz.

PRICE AND SIZE LOCATOR

*Price, Size Code	Dia. x L., Inches	EACH 1-9	10-24	25-49	50-99	100-Up
EE	9/16x1¼	1.99	1.59	.93	.72	.64
EJ	9/16x1¾	2.03	1.62	.95	.73	.65
EL	9/16x2¼	2.09	1.67	.98	.75	.67
FJ	11/16x1¾	2.14	1.71	1.00	.77	.69
FL	11/16x2¼	2.29	1.83	1.07	.83	.74
FP	11/16x2¾	2.44	1.95	1.14	.88	.79
GE	13/16x1¼	2.18	1.74	1.02	.79	.70
GJ	13/16x1¾	2.36	1.89	1.11	.85	.76
GL	13/16x2¼	2.44	1.95	1.14	.88	.79
GP	13/16x2¾	2.51	2.01	1.18	.91	.81
HE	15/16x1¼	2.29	1.83	1.07	.83	.74
HL	15/16x2¼	2.96	2.37	1.39	1.07	.95
HP	15/16x2¾	3.00	2.40	1.41	1.08	.97
HS	15/16x3¼	3.15	2.52	1.48	1.14	1.01
JE	1 1/16x1¼	2.36	1.89	1.11	.85	.76
JL	1 1/16x2¼	3.19	2.55	1.49	1.15	1.03
JP	1 1/16x2¾	3.23	2.58	1.51	1.16	1.04
JS	1 1/16x3¼	3.64	2.91	1.70	1.31	1.17
JT	1 1/16x3¾	3.94	3.15	1.84	1.42	1.26

tock No.	Mfr's Type 39D-	µF	WV DC	*
6-5489	138G003EL4	1300	3	EL
6-5540	218G003HE4	2100	3	HE
6-5593	308G003JE4	3000	3	JE
6-5515	189G003JT4	18000	3	JT
6-5641	607G006EJ4	600	6	EJ
6-5450	108G006GE4	1000	6	GE
6-5536	208G006GJ4	2000	6	GJ
6-5604	408G006GP4	4000	6	GP
6-5644	608G006HP4	6000	6	HP
6-5465	109G006JS4	10000	6	JS
6-5619	507G010EJ4	500	10	EJ
6-5461	108G010FJ4	1000	10	FJ
6-5506	168G010FL4	1600	10	FL
6-5569	258G010GL4	2500	10	GL
6-5625	508G010HP4	5000	10	GP
6-5466	109G010JT4	10000	10	JT
6-5642	607G015EL4	600	15	EL
6-5480	128G015FL4	1200	15	FL
6-5579	258G015GP4	2500	15	GP
6-5605	408G015JL4	4000	15	JL
6-5651	808G015JT4	8000	15	JT
926-5533	207G025EJ4	200	25	EJ
926-5620	507G025HE4	500	25	HE
926-5462	108G025GL4	1000	25	GL
926-5547	228G025HP4	2200	25	HP
926-5606	408G025JT4	4000	25	JT
926-5652	756G030EE4	75	30	EE
926-5497	157G030EJ4	150	30	EJ
926-5565	257G030EL4	250	30	EL
926-5621	507G030FL4	500	30	FL
926-5474	118G030GP4	1100	30	GP
926-5541	218G030HS4	2100	30	HS
926-5594	308G030JS4	3000	30	JS
926-5617	506G050EE4	50	50	EE
926-5654	107G050EJ4	100	50	EJ
926-5498	157G050EL4	150	50	EL
926-5566	257G050HE4	250	50	HE
926-5622	507G050GL4	500	50	GL
926-5475	118G050HP4	1100	50	HP
926-5554	238G050JT4	2300	50	JT
926-5563	256F150EJ4	25	150	EJ
926-5613	506F150FJ4	50	150	FJ
926-5453	107F150FP4	100	150	FP
926-5564	257F150HP4	250	150	HP
926-5633	537F150JT4	530	150	JT
926-5528	206F250EL4	20	250	EL
926-5614	506F250JE4	50	250	JE
926-5454	107F250HL4	100	250	HL
926-5532	207F250JP4	200	250	JP
926-5591	307F250JT4	300	250	JT
926-5529	206F350FL4	20	350	FL
926-5589	306F350FP4	30	350	FP
926-5602	406F350GL4	40	350	GL
926-5615	506F350GP4	50	350	GP
926-5455	107F350HS4	100	350	HS
926-5504	167F350JT4	160	350	JT
926-5611	505F450EL4	5	450	EL
926-5451	106F450FL4	10	450	FL
926-5530	206F450GL4	20	450	GL
926-5616	506F450JP4	50	450	JP
926-5651	756F450JT4	75	450	JT

TYPE 600D 125°C HIGH-GRADE ALUMINUM ELECTROLYTICS

gh-grade aluminum electrolytics. Temp. range from −55°C to 25°C, voltage ratings up to 150 VDC. Dual-rated for either C or 125°C operation. 200-hr. life test at either temp. and responding working voltage. Withstand vibration from 10-2000 cycles at 15g. Tolerance, −10% and +75% up to 75 WVDC; −10% and +50% for 100 VDC up. All types with insulating sleeve. Chart sizes for bare can only; add 1/64" to dia. and 1/16" to length for insulating sleeve. Average shpg. wt. 3 oz.

PRICE AND SIZE LOCATOR

*Price, Size Code	Dia. x L., Inches	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
A	3/32x15/16	3.83	2.29	1.54	1.34	.97	.89
B	3/8x15/16	3.83	2.29	1.54	1.34	.97	.89
C	3/8x1 1/8	4.98	2.98	2.00	1.75	1.26	1.16
D	3/8x1 3/8	7.48	4.48	3.00	2.62	1.88	1.73
E	3/8x1 5/8	7.68	4.60	3.08	2.69	1.93	1.78
F	3/8x2 3/16	8.23	4.93	3.30	2.88	2.07	1.90
G	3/8x2 11/16	9.68	5.80	3.88	3.39	2.43	2.24

tock No.	Mfr's Type 600 D-	µF	WVDC@ 85° C	WVDC@ 125° C	*
6-8635	127G007KD4	120	7	5	A
6-8735	227G007DD4	220	7	5	B
6-8765	277G007DE4	270	7	5	C
6-8841	397G007DG4	390	7	5	D
6-8902	567G007DJ4	560	7	5	E
6-8965	827G007DL4	820	7	5	F
6-8615	108G007DX4	1000	7	5	G
6-8607	107G010KD4	100	10	7	A
6-8709	187G010DE4	180	10	7	C
6-8737	227G010DE4	220	10	7	C
6-8830	337G010DG4	330	10	7	D
6-8874	477G010DJ4	470	10	7	E
6-8924	687G010DL4	680	10	7	F
6-8968	827G010DX4	820	10	7	G
6-8915	686G015KD4	68	15	10	A
6-8960	826G015KD4	82	15	10	A
6-8675	157G015DD4	150	15	10	B
6-8712	187G015DE4	180	15	10	C
6-8767	277G015DG4	270	15	10	D
6-8843	397G015DJ4	390	15	10	E
6-8904	567G015DL4	560	15	10	F
6-8927	687G015DX4	680	15	10	G
6-8918	686G020KD4	68	20	15	A
6-8608	107G020DD4	100	20	15	B
6-8664	147G020DE4	140	20	15	C
6-8734	227G020DG4	220	20	15	D
6-8776	297G020DJ4	290	20	15	E
6-8876	447G020DL4	440	20	15	F
6-8909	607G020DX4	600	20	15	G
6-8828	336G030DK4	33	30	20	A
6-8870	476G030KD4	47	30	20	A
926-8963	826G030DD4	82	30	20	B
926-8609	107G030DE4	100	30	20	C
926-8637	127G030DG4	120	30	20	D
926-8678	157G030DG4	150	30	20	D
926-8741	227G030DJ4	220	30	20	E
926-8831	337G030DL4	330	30	20	F
926-8845	397G030DX4	390	30	20	G
926-8801	306G040KD4	30	40	30	A
926-8881	506G040DD4	50	40	30	B
926-8936	706G040DE4	70	40	30	C
926-8610	107G040DG4	100	40	30	D
926-8666	147G040DJ4	140	40	30	E
926-8720	217G040DL4	210	40	30	F
926-8775	287G040DX4	280	40	30	G
926-8733	226G050KD4	22	50	40	A
926-8829	336G050DD4	33	50	40	B
926-8872	476G050DE4	47	50	40	C
926-8897	566G050DG4	56	50	40	D
926-8920	686G050DG4	68	50	40	D
926-8612	107G050DJ4	100	50	40	E
926-8681	157G050DL4	150	50	40	F
926-8714	187G050DX4	180	50	40	G
926-8794	176G060KD4	17	60	50	A
926-8745	256G060DD4	25	60	50	B
926-8854	406G060DE4	40	60	50	C
926-8906	606G060DG4	60	60	50	D
926-8952	806G060DJ4	80	60	50	E
926-8639	127G060DL4	120	60	50	F
926-8685	167G060DX4	160	60	50	G
926-8625	126F075KD4	12	75	60	A
926-8725	226F075DD4	22	75	60	B
926-8823	336F075DE4	33	75	60	C
926-8867	476F075DG4	47	75	60	D
926-8911	686F075DJ4	68	75	60	E
926-8606	107F075DL4	100	75	60	F
926-8633	127F075DX4	120	75	60	G
926-8955	825F100KD4	8.2	100	75	A
926-8627	126F100DD4	12	100	75	B
926-8670	156F100DE4	15	100	75	C
926-8727	226F100DG4	22	100	75	D
926-8825	336F100DJ4	33	100	75	E
926-8869	476F100DL4	47	100	75	F
926-8913	686F100DX4	68	100	75	G
926-8861	475F150KD4	4.7	150	100	A
926-8890	565F150KD4	5.6	150	100	A
926-8957	825F150DD4	8.2	150	100	B
926-8629	126F150DE4	12	150	100	C
926-8704	186F150DG4	18	150	100	D
926-8729	226F150DJ4	22	150	100	E
926-8827	336F150DL4	33	150	100	F
926-8894	566F150DX4	56	150	100	G
926-8851	405F200KD4	4	200	150	A
926-8905	605F200DD4	6	200	150	B
926-8943	805F200DE4	8	200	150	C
926-8654	136F200DG4	13	200	150	D
926-8692	176F200DJ4	17	200	150	E
926-8754	266F200DL4	26	200	150	F
926-8838	396F200DX4	39	200	150	G
926-8816	335F250KD4	3.3	250	200	A
926-8891	565F250DD4	5.6	250	200	B
926-8910	685F250DX4	6.8	250	200	C
926-8605	106F250DG4	10	250	200	D

SPRAGUE
THE MARK OF RELIABILITY

Miniature and Storage Capacitors

TE "LITTL-LYTIC" (30D) MINIATURE ELECTROLYTICS

- For All Types of Transistorized Equipment
- Dependable All-Welded Construction
- Plastic Sleeve for Corrosion Resistance
- Hermetically Sealed and Metal-Enclosed

*Code	Size	*Code	Size
BA	17/64 x 35/64"	DC	25/64 x 55/64"
BB	17/64 x 47/64"	DD	25/64 x 63/64"
CB	21/64 x 47/64"	DF	25/64 x 119/64"
CC	21/64 x 55/64"	DH	25/64 x 135/64"

Ultra-small and dependable 30D Series miniature electrolytic capacitors provide high reliability for transistorized and printed circuit applications. Ideal for radios, hearing aids, wireless microphones and a variety of other electronic equipment. Hermetically-sealed and metal enclosed, with clear plastic outer insulating sleeves for corrosion resistance in hot, humid conditions. All-welded construction no pressure joints to cause open or intermi circuits. Will withstand temperatures of 85° C (185° F) without derating. Leakage cu is extremely low, with long shelf life. All di sions are given in sequence of diameter by le Av. shpg. wt., 2 oz.

IMPORTANT ORDERING INFORMATION

If a capacitance you require is not listed in the voltage desired, go to the higher voltage where the capacitance is listed. For example: 1, 2, 3 and 4 μF capacitors are not stocked at less than 25 WVDC, because all voltages below this are the same size and approximately the same price as the 25 WVDC.

Stock No.	Mfr's Type	μF	WV DC	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
926-1205	TE1200	1	25	BA	.71	.39	.31	.23	.19	.17
926-1252	TE1300	1	50	BA	.71	.39	.31	.23	.19	.17
926-1302	TE1400	1	100	BA	.78	.43	.34	.26	.21	.19
926-1352	TE1500	1	150	BA	.78	.43	.34	.26	.21	.19
926-1207	TE1201	2	25	BA	.71	.39	.31	.23	.19	.17
926-1254	TE1301	2	50	BA	.71	.39	.31	.23	.19	.17
926-1304	TE1401	2	100	BA	.78	.44	.35	.26	.22	.19
926-1306	TE1402	3	100	CB	.90	.49	.39	.29	.24	.22
926-1354	TE1501	2	150	BA	.78	.44	.35	.26	.22	.19
926-1208	TE1201.1	3	25	BA	.71	.39	.31	.23	.19	.17
926-1256	TE1302	3	50	BA	.71	.39	.31	.23	.19	.17
926-1356	TE1502	3	150	CB	.90	.49	.39	.29	.24	.22
926-1209	TE1201.2	4	25	BA	.71	.39	.31	.23	.19	.17
926-1257	TE1302.1	4	50	BA	.71	.39	.31	.23	.19	.17
926-1309	TE1403	4	100	CB	.90	.49	.39	.29	.24	.22
926-1360	TE1503	4	150	CC	1.01	.55	.44	.33	.28	.24
926-1005	TE1052.2	5	3	BA	.71	.39	.31	.23	.19	.17
926-1058	TE1084	5	6	BA	.71	.39	.31	.23	.19	.17
926-1120	TE1127	5	12	BA	.71	.39	.31	.33	.19	.17
926-1159	TE1152	5	16	BA	.71	.39	.31	.23	.19	.17
926-1210	TE1202	5	25	BA	.71	.39	.31	.23	.19	.17
926-1259	TE1303	5	50	BB	.71	.39	.31	.23	.19	.17
926-1312	TE1404	5	100	CC	1.01	.55	.44	.33	.28	.24
926-1363	TE1504	5	150	CC	1.01	.55	.44	.33	.28	.24
926-1060	TE1085	6	6	BA	.71	.39	.31	.23	.19	.17
926-1161	TE1153	6	16	BA	.71	.39	.31	.23	.19	.17
926-1212	TE1203	6	25	BA	.71	.39	.31	.23	.19	.17
926-1263	TE1303.1	6	50	BB	.71	.39	.31	.23	.19	.17
926-1315	TE1405	6	100	CC	1.01	.55	.44	.33	.28	.24
926-1366	TE1505	6	150	DC	1.05	.58	.46	.35	.29	.25
926-1368	TE1505.5	7	150	DC	1.05	.58	.46	.35	.29	.25
926-1062	TE1086	8	6	BA	.71	.39	.31	.23	.19	.17
926-1163	TE1154	8	16	BA	.71	.39	.31	.23	.19	.17
926-1213	TE1203.5	8	25	BA	.71	.39	.31	.23	.19	.17
926-1262	TE1303.3	8	50	BB	.71	.39	.31	.23	.19	.17
926-1318	TE1406	8	100	DC	1.05	.58	.46	.35	.29	.25
926-1371	TE1506	8	150	DC	1.05	.58	.46	.35	.29	.25
926-1007	TE1053	10	3	BA	.71	.39	.31	.23	.19	.17
926-1064	TE1087	10	6	BA	.71	.39	.31	.23	.19	.17
926-1122	TE1128	10	12	BA	.71	.39	.31	.23	.19	.17
926-1165	TE1155	10	16	BA	.71	.39	.31	.23	.19	.17
926-1215	TE1204	10	25	BB	.71	.39	.31	.23	.19	.17
926-1263	TE1304	10	50	CB	.78	.44	.35	.26	.22	.19
926-1321	TE1407	10	100	DC	1.05	.58	.46	.35	.29	.25
926-1374	TE1507	10	150	DD	1.08	.60	.48	.36	.30	.26
926-1066	TE1089	16	6	BA	.71	.39	.31	.23	.19	.17
926-1124	TE1129	16	12	BA	.71	.39	.31	.23	.19	.17
926-1167	TE1156	16	16	BB	.71	.39	.31	.23	.19	.17
926-1217	TE1205	16	25	BB	.71	.39	.31	.23	.19	.17
926-1265	TE1304.2	16	50	CB	.78	.44	.35	.26	.22	.19
926-1325	TE1408	16	100	DD	1.08	.60	.48	.36	.30	.26
926-1377	TE1508.1	16	150	DF	1.12	.63	.50	.38	.31	.28
926-1069	TE1090	20	6	BA	.71	.39	.31	.23	.19	.17
926-1130	TE1130	20	12	BB	.71	.39	.31	.23	.19	.17
926-1169	TE1157	20	16	BB	.71	.39	.31	.23	.19	.17
926-1267	TE1305	20	50	CC	1.01	.55	.44	.33	.28	.24
926-1381	TE1509	20	150	DH	1.20	.65	.52	.39	.33	.29

Stock No.	Mfr's Type	μF	WV DC	*	EACH 1-24	25-49	50-99	100-249	250-499
926-1328	TE1409	20	100	DF	1.12	.63	.50	.38	.31
926-1011	TE1055	25	3	BA	.71	.39	.31	.23	.19
926-1071	TE1091	25	6	BB	.71	.39	.31	.23	.19
926-1128	TE1131	25	12	BB	.71	.39	.31	.23	.19
926-1170	TE1157.1	25	16	BB	.71	.39	.31	.23	.19
926-1220	TE1207	25	25	CB	.78	.44	.35	.26	.22
926-1269	TE1305.5	25	50	CC	1.01	.55	.44	.33	.28
926-1332	TE1410	25	100	DH	1.20	.65	.52	.39	.33
926-1171	TE1158	30	16	CB	.78	.44	.35	.26	.22
926-1222	TE1207.5	30	25	CB	.78	.44	.35	.26	.22
926-1336	TE1411	30	100	DH	1.20	.65	.52	.39	.33
926-1074	TE1093	35	6	BB	.71	.39	.31	.23	.19
926-1173	TE1159	35	16	CB	.78	.44	.35	.26	.22
926-1224	TE1208	35	25	CB	.78	.44	.35	.26	.22
926-1271	TE1306	35	50	DC	1.05	.58	.46	.35	.29
926-1014	TE1058	50	3	BB	.71	.39	.31	.23	.19
926-1130	TE1133	50	12	BB	.78	.44	.35	.26	.22
926-1175	TE1160	50	16	CB	.78	.44	.35	.26	.22
926-1226	TE1209	50	25	CC	1.01	.55	.44	.33	.28
926-1273	TE1307	50	50	DD	1.08	.60	.48	.36	.30
926-1080	TE1101.5	75	6	CB	.78	.44	.35	.26	.22
926-1132	TE1134	75	12	CC	1.01	.55	.44	.33	.28
926-1177	TE1161	75	16	CC	1.01	.55	.44	.33	.28
926-1228	TE1210	75	25	DC	1.05	.58	.46	.35	.29
926-1275	TE1308	75	50	DF	1.12	.63	.50	.38	.31
926-1016	TE1059.5	100	3	CB	.78	.44	.35	.26	.22
926-1085	TE1102	100	6	CC	1.01	.55	.44	.33	.28
926-1134	TE1135	100	12	CC	1.05	.58	.46	.35	.29
926-1179	TE1162	100	16	DC	1.05	.58	.46	.35	.29
926-1230	TE1211	100	25	DD	1.08	.60	.48	.36	.30
926-1277	TE1309	100	50	DH	1.20	.65	.52	.39	.33
926-1019	TE1061	150	3	CC	1.01	.55	.44	.33	.28
926-1087	TE1103	150	6	DC	1.05	.58	.46	.35	.29
926-1136	TE1136	150	12	DD	1.08	.60	.48	.36	.30
926-1181	TE1163	150	16	DD	1.08	.60	.48	.36	.30
926-1232	TE1212	150	25	DF	1.12	.63	.50	.38	.31
926-1023	TE1064	200	3	CC	1.01	.55	.44	.33	.28
926-1089	TE1104	200	6	DC	1.05	.58	.46	.35	.29
926-1138	TE1137	200	12	DF	1.12	.63	.50	.38	.31
926-1183	TE1164	200	16	DF	1.12	.63	.50	.38	.31
926-1234	TE1213	200	25	DH	1.20	.65	.52	.39	.33
926-1025	TE1065	250	3	DC	1.05	.58	.46	.35	.29
926-1091	TE1105	250	6	DD	1.08	.60	.48	.36	.30
926-1140	TE1138	250	12	DF	1.12	.63	.50	.38	.31
926-1185	TE1165	260	16	DF	1.12	.63	.50	.38	.31
926-1142	TE1139	290	12	DF	1.12	.63	.50	.38	.31
926-1093	TE1106	300	6	DF	1.08	.60	.48	.36	.30
926-1187	TE1166	350	16	DH	1.20	.65	.52	.39	.33
926-1031	TE1067.1	390	3	DD	1.08	.60	.48	.36	.30
926-1144	TE1140	390	12	DH	1.20	.65	.52	.39	.33
926-1095	TE1107	400	6	DF	1.12	.63	.50	.38	.31
926-1033	TE1068	500	3	DF	1.12	.63	.50	.38	.31
926-1097	TE1108	560	6	DH	1.20	.65	.52	.39	.33
926-1035	TE1069	590	3	DF	1.12	.63	.50	.38	.31
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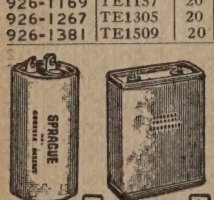
ENERGY-STORAGE CAPACITORS FOR PHOTOFLASH AND LASER APPLICATIONS



Designed expressly for photoflash and laser applications. Provide very low leakage for dry-battery or AC-operated power supplies. Miniature size capacitors are extremely lightweight and dependable in performance.

A Type FF-1 525-μF Capacitor. Highly stable film formation ensures long life. Weighs only 11 oz. Working voltage, 450 VDC. Nominal rating, 53 watt-seconds. Shpg. wt., ¾ lb.

926-0701 ..... 13.50

B Type PQ Capacitors. Hermetically sealed, oil-impregnated, oil-filled. Have high insulation resistance. Combine small possible construction with maximum operational dependabil

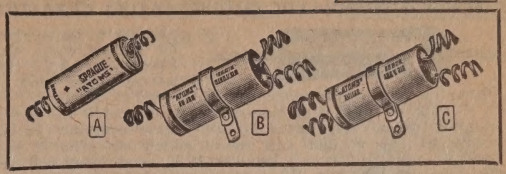
Stock No.	Type PQ-	μF	DC Peak Volts	Watt/ Sec.	Size TxWxH"	Wt., Lbs.	EA
926-0880	2510	10	2500	31	2 1/4 x 3 3/4 x 4 1/2"	1¾	20
926-0885	2515	15	2500	47	3 3/16 x 3 3/4 x 4 1/4"	2½	28
926-0889	2525	25	2500	78	4 3/16 x 3 3/4 x 5 1/16"	4¼	37
926-0899	2535	35	2500	109	4 3/16 x 3 3/4 x 7"	6	44
926-0855	315	15	3000	67	3 3/16 x 3 3/4 x 4 1/4"	3	30
926-0865	425	25	4000	200	4 3/16 x 3 3/4 x 9 5/16"	7¼	55

Specify Stock No., Mfr's Type and Capacitance When Orderi

TVA Atom Midget Electrolytics

SPRAGUE
THE MARK OF RELIABILITY

rague Atom electrolytics offer dependable performance, compact size d the ability to operate at high temperatures. Ultra-compact size akes these dry electrolytics excellent for use in circuits for television, C-DC home radios, auto radios, and radio-phonograph combinations. sy to install—even in crowded chassis. Capacitors will perform effi- ently at temperatures up to 85°C (185°F) and withstand high surge ltages and ripple currents as found in television circuits. All have ex- emely low leakage and long shelf life. All have metal cases with outer rdboard insulating case except †, cardboard.



A SINGLE SECTION TYPE TVA Av. shpg. wt., 3 oz.

Stock No.	Type TVA	μF	WV DC	Size (Inches)	EACH 1-9	10-24	25-49	50-99	100-Up
26-1620	1102	250	6	9/16x1 5/16	1.01	.81	.64	.56	.42
26-1621	1103	500	6	5/8x1 9/16	1.16	.93	.74	.64	.48
26-1622	1104	1000	6	3/4x1 13/16	1.43	1.14	.90	.79	.59
26-1623	1105	1500	6	13/16x2 1/16	1.57	1.26	.99	.87	.65
26-1624	1106	2000	6	13/16x2 1/16	1.73	1.38	1.09	.96	.72
26-1635	1130	100	12	9/16x1 5/16	.90	.72	.57	.45	.34
26-1636	1131	250	12	5/8x1 5/16	1.09	.87	.69	.60	.45
26-1637	1132	500	12	11/16x1 9/16	1.28	1.02	.80	.70	.53
26-1638	1133	1000	12	13/16x2 1/16	1.69	1.35	1.07	.93	.70
26-1655	1160	100	15	9/16x1 5/16	.94	.75	.58	.46	.35
26-1656	1161	250	15	5/8x1 9/16	1.16	.93	.74	.65	.49
26-1657	1162	500	15	11/16x1 13/16	1.31	1.05	.83	.73	.55
26-1658	1163	1000	15	13/16x1 13/16	1.73	1.38	1.09	.95	.71
26-1660	1170	2000	15	15/16x2 13/16	2.40	1.92	1.43	1.14	.86
26-1684	1201	2	25	5/16x5/8	.68	.54	.43	.35	.26
26-1686	1203	5	25	5/16x5/8	.75	.60	.46	.37	.28
26-1687	1204	10	25	5/16x1 3/16	.75	.60	.47	.37	.28
26-1688	1204.5	20	25	3/8x1 3/16	.75	.60	.48	.38	.29
26-1689	1205	25	25	3/8x1 3/16	.75	.60	.46	.39	.29
26-1690	1206	50	25	9/16x1 5/16	.83	.66	.52	.42	.31
26-1691	1207	100	25	9/16x1 11/16	1.01	.81	.64	.51	.38
26-1692	1207.5	150	25	13/16x1 9/16	1.09	.87	.69	.55	.42
26-1693	1208	250	25	11/16x1 9/16	1.28	1.02	.80	.70	.52
26-1695	1209	500	25	3/4x1 13/16	1.73	1.38	1.09	.95	.71
26-1697	1211	1000	25	13/16x2 5/16	2.48	1.98	.60	.48	.36
26-1701	1214	3000	25	1 1/4x3 5/8	2.70	2.16	1.72	1.52	1.43
26-1720	1300	1	50	5/16x5/8	.68	.54	.43	.35	.26
26-1721	1301	2	50	5/16x5/8	.68	.54	.43	.35	.26
26-1723	1303	5	50	5/16x1 3/16	.75	.60	.46	.37	.28
26-1724	1304	10	50	3/8x1 3/16	.75	.60	.47	.37	.28
26-1725	1305	15	50	3/8x1 3/16	.75	.60	.48	.38	.29
26-1726	1305.5	20	50	3/8x1 5/16	.75	.60	.48	.38	.29
26-1727	1306	25	50	3/8x1 5/16	.79	.63	.49	.39	.29
26-1729	1308	50	50	5/8x1 5/16	.90	.72	.57	.46	.34
26-1731	1310	100	50	5/8x1 9/16	1.05	.84	.66	.53	.40
26-1732	1311	150	50	3/4x1 9/16	1.16	.93	.73	.58	.44
26-1733	1312	250	50	1 3/16x1 9/16	1.31	1.05	.83	.73	.55
26-1736	1315	500	150	1x1 15/16	1.80	1.44	1.13	.98	.74
26-1737	1316	1000	50	1 1/16x2 13/16	2.93	2.34	1.82	1.56	1.17
26-1739	1318	1500	50	1 1/16x3 13/16	2.85	2.28	1.02	.82	.61
26-1765	1400	1	50	5/16x5/8	.71	.57	.45	.36	.27
26-1767	1402	4	150	3/4x1 5/16	.75	.60	.47	.38	.28
26-1768	1403	5	150	3/8x1 5/16	.75	.60	.48	.38	.29
26-1770	1405	8	150	7/16x1 7/8	.79	.63	.49	.39	.30
26-1771	1406	10	150	9/16x1 5/16	.79	.63	.48	.41	.31
26-1772	1407	12	150	9/16x5/16	.83	.66	.52	.41	.31
26-1774	1409	16	150	9/16x1 9/16	.86	.69	.54	.43	.33
26-1775	1410	20	150	5/8x1 9/16	.90	.72	.56	.44	.33
26-1776	1411	25	150	3/4x1 9/16	.94	.75	.59	.47	.35
26-1777	1412	30	150	13/16x1 5/16	.98	.78	.61	.49	.37
26-1718	1413	40	150	13/16x1 9/16	1.01	.81	.64	.51	.39
26-1779	1414	50	150	13/16x1 13/16	1.05	.84	.66	.53	.40
26-1780	1415	60	150	15/16x1 9/16	1.13	.90	.70	.56	.42
26-1783	1418	80	150	15/16x1 9/16	1.20	.96	.76	.61	.46
926-1784	1420	100	150	15/16x2 1/16	1.31	1.05	.83	.66	.50
926-1786	1422	150	150	1 1/16x2 1/16	1.43	1.14	.90	.72	.54
926-1787	1423	200	150	1 1/16x2 9/16	1.65	1.32	1.03	.82	.62
926-1788	1424	250	150	1 1/4x4 3/8	2.70	2.16	1.67	1.42	1.07
926-1689	1425†	300	150	1 1/16x3 5/16	2.10	1.68	1.30	1.11	.83
926-1794	1430	80	175	1 1/16x2 1/16	1.24	.99	.76	.61	.46
926-1810	1445	100	200	1 1/16x2 5/16	1.43	1.14	.91	.79	.60
926-1812	1447	150	200	1 3/8x3 3/8	2.10	1.68	1.30	1.12	.84
926-1835	1480†	200	200	1 3/8x3 3/8	2.36	1.89	1.47	1.26	.95
926-1850	1501	4	250	9/16x1 5/16	.83	.66	.52	.42	.32
926-1852	1503	8	250	9/16x1 9/16	.86	.69	.54	.47	.36
926-1853	1504	10	250	5/8x1 9/16	.90	.72	.57	.49	.37
926-1854	1505	12	250	5/8x1 9/16	.94	.75	.59	.51	.38
926-1856	1507	16	250	13/16x1 5/16	.98	.78	.61	.53	.40
926-1857	1508	20	250	13/16x1 5/16	1.01	.81	.64	.57	.43
926-1859	1510	30	250	13/16x1 13/16	1.09	.87	.69	.60	.45
926-1860	1511	40	250	13/16x2 1/16	1.16	.93	.74	.65	.49
926-1861	1512	50	250	15/16x1 1/16	1.28	1.02	.81	.71	.53
926-1862	1513	60	250	1x1 13/16	1.35	1.08	.85	.75	.56
926-1870	1522	100	250	1 1/16x2 5/16	1.84	1.47	1.06	.85	.64
926-1874	1528	200	250	1 3/8x3 1/8	2.63	2.10	1.49	1.19	.90
926-1895	1573	100	300	1 1/16x3 1/16	1.99	1.59	.98	.77	.61
926-1897	1575†	140	300	1 3/8x3 3/8	2.24	2.19	1.82	1.45	1.09
926-1902	1578	200	300	1 3/8x4 5/8	3.38	2.70	1.67	1.33	1.00
926-1910	1601	4	350	1 1/16x1 5/16	.79	.63	.50	.43	.32
926-1912	1603	8	350	1 1/16x1 9/16	.90	.72	.56	.49	.37
926-1916	1607	16	350	13/16x1 9/16	1.05	.84	.67	.58	.44
926-1917	1608	20	350	13/16x1 13/16	1.09	.87	.69	.60	.45
926-1919	1610	30	350	13/16x2 1/16	1.24	.99	.78	.68	.51
926-1920	1611	40	350	15/16x2 1/16	1.31	1.05	.82	.71	.53
926-1922	1613	60	350	1 1/16x2 1/16	1.46	1.17	.93	.81	.61
926-1929	1620	100	350	1 1/16x2 13/16	2.33	1.86	1.11	.86	.69
926-1931	1622	150	350	1 3/8x3 3/8	2.78	2.22	1.62	1.29	.97
926-1933	1624	200	350	1 3/8x4 1/8	3.90	3.12	1.85	1.48	1.11
926-1985	1700	1	450	9/16x1 5/16	.83	.66	.52	.45	.34
926-1986	1701	2	450	9/16x1 5/16	.83	.69	.53	.46	.34
926-1987	1702	4	450	11/16x1 5/16	.86	.66	.54	.47	.36
926-1989	1704	8	450	3/4x1 9/16	.94	.75	.60	.53	.40
926-1990	1705	10	450	13/16x1 9/16	.98	.78	.61	.53	.40
926-1993	1708	16	450	13/16x1 13/16	1.05	.84	.66	.58	.45
926-1994	1709	20	450	15/16x1 13/16	1.16	.93	.74	.64	.49
926-1996	1711	30	450	15/16x2 1/16	1.28	1.02	.81	.71	.53
926-1997	1712	40	450	1 1/16x2 1/16	1.35	1.08	.85	.74	.55
926-1999	1714	60	450	1 1/16x2 13/16	1.76	1.41	1.12	.99	.77
926-2001	1716	80	450	1 1/16x3 13/16	2.44	1.95	1.51	1.30	.97
926-2003	1718†	100	450	1 1/16x4 1/16	2.40	1.92	1.53	1.49	1.12
926-2005	1719	150	450	1 3/8x4 3/4	3.56	2.85	2.24	1.80	1.35
926-2006	1720	200	450	1 1/2x4 5/8	3.75	3.00	2.33	2.00	1.50
926-2070	1902	8	500	15/16x1 13/16	.98	.78	.62	.54	.41
926-2075	1906	20	500	1 1/16x2 5/16	1.20	.96	.83	.66	.50
926-2100	1962	8	600	1 1/16x3 3/16	2.29	1.83	1.42	1.21	.91
926-2101	1963	10	600	1 1/16x3 3/16	2.74	2.19	1.70	1.45	1.09
926-2103	1965	16	600	1 1/16x4 3/16	3.11	2.49	1.93	1.66	1.25
926-2104	1966	20	600	1 1/16x4 3/16	3.23	2.58	2.00	1.71	1.28

B DUAL SECTION TYPE TVA Av. shpg. wt., 5 oz.

26-2251	2428	20-20	150	13/16x1 9/16	1.31	1.05	.81	.70	.52
26-2260	2438	40-20	150	15/16x1 9/16	1.43	1.14	.88	.74	.56
26-2256	2434	30-30	150	15/16x1 9/16	1.35	1.08	.86	.75	.56
26-2266	2445	40-40	150	15/16x2 1/16	1.39	1.11	.88	.78	.59
26-2270	2450	50-30	150	15/16x2 1/16	1.46	1.17	.91	.78	.59
26-2273	2453	50-50	150	15/16x2 1/16	1.58	1.26	.96	.81	.61
26-2280	2460	80-30	150	15/16x2 9/16	1.65	1.32	1.05	.84	.63
26-2282	2462	80-50	150	15/16x2 9/16	1.76	1.41	1.09	.87	.65
926-2283	2463	100-50	150	1 1/16x2 13/16	1.99	1.59	1.17	.94	.70
926-2284	2464†	100-100	150	1 3/8x3 3/8	2.40	1.92	1.47	1.17	.88
926-2302	2515	20-20	250	15/16x1 13/16	1.39	1.11	.88	.78	.59
926-2352	2720	8-8	450	15/16x1 13/16	1.45	1.17	.91	.78	.59
926-2354	2722	10-10	450	15/16x2 1/16	1.54	1.23	.98	.81	.61
926-2360	2730	20-20	450	15/16x2 13/16	1.88	1.50	1.18	1.03	.77
926-2365	2735	30-30	450	1 1/16x3 5/16	2.44	1.95	1.51	1.29	.97
926-2370	2740	40-40	450	1 1/16x4 1/16	2.81	2.25	1.75	1.50	1.12

C TRIPLE SECTION TYPE TVA Av. shpg. wt., 6 oz.

26-2452	3442	30-25-20	150	15/16x2 5/16	2.25	1.80	1.40	1.20	.90
26-2454	3444	30-30-30	150	15/16x2 5/16	2.33	1.86	1.44	1.23	.92
26-2456	3446	40-20-20	150	15/16x2 1/16	2.25	1.80	1.40	1.20	.90
26-2458	3448	40-30-20	150	15/16x2 5/16	2.33	1.86	1.44	1.23	.92
26-2460	3450	40-40-20	150	15/16x2 9/16	2.33	1.86	1.45	1.25	.94
26-2461	3451	40-40-40	150	1 1/16x2 9/16	2.40	1.92	1.60	1.28	.96
926-2463	3453	50-30-20	150	1 1/16x2 9/16	2.36	1.89	1.50	1.25	.94
926-2465	3455	80-40-20	150	1 1/16x3 1/16	2.48	1.98	1.54	1.32	.99
926-2466	3456	80-40-40	150	1 1/16x3 1/16	2.55	2.04	1.58	1.35	1.02
926-2559	3712	5-80-4	400-400	1 1/16x4 1/8	3.45	2.76	2.14	1.84	1.38
926-2585	3740	40-20-20	450	1 1/16x4 1/16	3.23	2.58	2.00	1.71	1.29

EK9 Capacitor Assortment. Total of 18 electrolytic capacitors in metal ase. Described in μF values. At 25 WVDC: 25, 100. At 50 WVDC: , 10, 25, 50, 100. At 150 WVDC: 20, 40, 150. At 450 WVDC: 8, 10, 20, 30, 40, 80. At 150-150 WVDC: 50-30, 50-50. Neatly packaged in a convenient and durable 9-drawer cabinet.
926-0625. Shpg. wt. 4 lbs. 18.69

Sizes Given in the Tables Above are Maximum

Motor-Starting, Min., Submin., Capacitors

SERIES TL TRANSI-LYTIC (31D) MINIATURE CAPACITORS

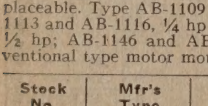
Miniature units designed for transistorized circuits. Plastic cases with thermo-setting resin end seals. Operating temperature range −20°C to +65°C. Tolerance, −10% to +100% of rated capacitance, measured at 120 Hz and 25°C. **Important Note:** Values listed in table below combine the highest voltage with the smallest case size for added protection at no extra cost. Example: 1μF is only listed at 25 V, as all lower voltages are the same size and price. Wt. 2 oz.

SIZE CHART

Code	Size	Code	Size	Code	Size	Code	Size
A	.180x.57	D	.250x .82	G	.625x1.70	K	1.00x2.32
B	.218x.57	E	.375x1.07	H	.750x2.10	.....	.....
C	.210x.70	F	.312x .82	J	.875x2.32	.....	.....

Stock No.	Mfr's Type	μF	WV DC	Size Code	EACH 1-24	25-49	50-99	100-249	250-Up
926-1560	TL1200	1	25	A	.64	.39	.30	.24	.20
926-1561	TL1201	2	25	A	.67	.41	.32	.26	.21
926-1534	TL1127	5	12	A	.67	.41	.32	.26	.21
926-1545	TL1152	5	16	B	.71	.43	.34	.27	.22
926-1562	TL1202	5	25	D	.78	.48	.37	.30	.25
926-1584	TL1303	5	50	D	.82	.50	.39	.31	.26
926-1554	TL1176	8	20	C	.82	.50	.39	.31	.26
926-1564	TL1203.5	8	25	D	.86	.52	.41	.33	.27
926-1585	TL1303.3	8	50	D	.90	.54	.42	.34	.28
926-1535	TL1128	10	12	C	.78	.48	.37	.30	.25
926-1565	TL1204	10	25	D	.90	.54	.42	.34	.28
926-1547	TL1157.1	25	16	D	.93	.57	.44	.36	.29
926-1587	TL1304	10	50	D	.93	.57	.44	.36	.29
926-1567	TL1207	25	25	E	1.11	.61	.48	.38	.32
926-1591	TL1305.1	25	50	E	1.05	.63	.49	.40	.33
926-1510	TL1058	50	3	D	.90	.54	.42	.34	.28
926-1539	TL1133	50	12	F	.97	.59	.46	.37	.30
926-1569	TL1209	50	25	E	1.12	.68	.53	.42	.35
926-1512	TL1059.5	100	3	D	.97	.59	.46	.36	.30
926-1550	TL1162	100	16	E	1.12	.68	.53	.42	.35
926-1524	TL1103.5	175	6	E	1.12	.68	.53	.42	.35
926-1572	TL1214	250	25	G	1.65	.99	.77	.62	.51
926-1575	TL1217	500	25	G	2.10	1.26	.98	.78	.64
926-1576	TL1218	1000	25	H	2.25	1.35	1.05	.84	.69
926-1578	TL1219	1500	25	J	2.40	1.44	1.12	.90	.74
926-1580	TL1220	2000	25	K	2.55	1.53	1.19	.95	.78
926-1557	TL1194	2500	20	K	2.55	1.53	1.19	.95	.78

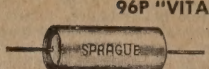
AB PLASTIC-ENCASED MOTOR-STARTING CAPACITORS



Electrolytic capacitors for intermittent duty with 110/125 V capacitor-start AC motors. Dual blade universal terminals take quick-connect connectors, notches and eyes for soldered leads. Includes two clip-on adapters with screws. In questions of proper size, use next larger capacitance. *Minimum-maximum capacitance values replaceable. Type AB-1109 for 1/8 hp motors; AB-1110, 1/6 hp; AB-1113 and AB-1116, 1/4 hp; AB-1125, 1/3 hp; AB-1130 and AB-1131, 1/2 hp; AB-1146 and AB-1149, 1 hp. Standard sizes to fit conventional type motor mounts. Av. shpg. wt., 10 oz.

Stock No.	Mfr's Type	* μF	Size (Dia. x L)	EACH 1-9	10-24	25-Up
926-0015	AB-1104	38-46	1 7/16x2 3/4"	1.26	1.01	.91
926-0016	AB-1105	43-53	1 7/16x2 3/4"	1.31	1.05	.95
926-0018	AB-1107	53-64	1 7/16x2 3/4"	1.33	1.06	.96
926-0019	AB-1108	64-77	1 7/16x2 3/4"	1.35	1.08	.98
926-0020	AB-1109	72-88	1 7/16x2 3/4"	1.38	1.10	.99
926-0021	AB-1110	88-108	1 7/16x2 3/4"	1.41	1.13	1.02
926-0024	AB-1113	108-130	1 7/16x2 3/4"	1.43	1.14	1.03
926-0027	AB-1116	124-149	1 7/16x2 3/4"	1.46	1.17	1.06
926-0030	AB-1119	130-156	1 7/16x2 3/4"	1.55	1.24	1.13
926-0033	AB-1122	145-175	1 7/16x2 3/4"	1.59	1.27	1.16
926-0036	AB-1125	161-193	1 7/16x3 3/8"	1.63	1.30	1.18
926-0039	AB-1128	189-227	1 7/16x3 3/8"	1.86	1.49	1.36
926-0041	AB-1130	200-240	1 7/16x3 3/8"	1.93	1.55	1.40
926-0042	AB-1131	216-259	1 13/16x3 3/8"	2.03	1.62	1.46
926-0045	AB-1134	233-280	1 13/16x3 3/8"	2.34	1.87	1.68
926-0048	AB-1137	243-292	1 13/16x3 3/8"	2.34	1.87	1.68
926-0057	AB-1140	270-324	1 13/16x3 3/8"	2.36	1.89	1.70
926-0053	AB-1142	324-388	1 13/16x3 3/8"	2.69	2.15	1.93
926-0054	AB-1143	340-408	1 13/16x3 3/8"	2.76	2.21	2.00
926-0057	AB-1146	378-440	1 13/16x3 3/8"	2.96	2.37	2.10
926-0060	AB-1149	400-480	1 13/16x3 3/8"	3.01	2.41	2.20
926-0063	AB-1152	430-516	2 1/16x4 3/8"	3.45	2.76	2.49
926-0069	AB-1158	540-648	2 1/16x4 3/8"	4.83	3.87	3.49
926-0072	AB-1161	590-708	2 1/16x4 3/8"	5.18	4.14	3.73

96P "VITAMIN Q" SUBMINIATURES



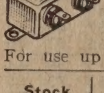
Hermetically-sealed glass-to-metal t minals. Style S-2—insulated secti plain metal case. Inserted tabs. "Vi min Q" impregnated for high insulat resistance. Tolerance, ±10%. Exceed MIL-C-25. For ambient te peratures —55° to +125° C. Av. shpg. wt., 3 oz.

SIZE LOCATOR

*	Size	*	Size	*	Size	*	Size
A	3/16x3/4"	D	1 3/32x7/8"	G	1 3/32x1 3/8"	K	2 1/32x1 7/8"
B	7/32x3/4"	E	1 3/32x1 1/8"	H	9/16x1 3/8"	L	1x1 7/8"
C	5/16x7/8"	F	9/16x1 1/8"	J	9/16x1 7/8"	M	3/4x2 1/8"

Stock No.	Type 96P-S2	μF	WV DC	*	EACH 1-9	10-24	25-49	50-99	100-499	50 U
926-5910	10391	.01	100	A	2.65	1.59	1.19	.80	.64	.5
926-5939	22391	.022	100	A	2.86	1.72	1.29	.86	.69	.6
926-5965	47391	.047	100	C	2.70	1.62	1.22	.81	.65	.6
926-5919	10491	.1	100	C	2.80	1.68	1.26	.84	.67	.6
926-5951	22491	.22	100	E	2.92	1.75	1.32	.88	.71	.6
926-5973	47491	.47	100	F	3.65	2.19	1.65	1.10	.88	.8
926-5927	10591	1.0	100	J	4.23	2.55	1.91	1.27	1.02	.9
926-5907	10292	.001	200	B	2.62	1.58	1.18	.79	.63	.5
926-5960	47292	.0047	200	B	2.62	1.58	1.19	.79	.63	.5
926-5911	10392	.01	200	B	2.63	1.58	1.19	.79	.64	.5
926-5940	22392	.022	200	B	2.63	1.58	1.19	.79	.64	.5
926-5920	10492	.1	200	D	2.77	1.66	1.25	.83	.67	.6
926-5952	22492	.22	200	G	2.92	1.76	1.32	.88	.71	.6
926-5974	47492	.47	200	H	3.52	2.12	1.59	1.06	.85	.7
926-5928	10592	1.0	200	K	4.18	2.51	1.89	1.26	1.01	.9
926-5913	10394	.01	400	B	2.63	1.58	1.19	.79	.64	.5
926-5942	22394	.022	400	C	2.68	1.62	1.21	.81	.65	.6
926-5968	47394	.047	400	D	2.75	1.65	1.24	.83	.66	.6
926-5922	10494	.1	400	G	2.86	1.72	1.29	.86	.69	.6
926-5954	22494	.22	400	H	3.56	2.14	1.61	1.07	.86	.7
926-5930	10594	1.0	400	L	5.40	3.24	2.43	1.62	1.30	1.1
926-5915	10396	.01	600	G	2.70	1.62	1.22	.81	.65	.6
926-5970	47396	.047	600	E	2.81	1.69	1.27	.85	.68	.6
926-5924	10496	.1	600	F	3.30	1.98	1.49	.99	.80	.7
926-5977	47496	.47	600	M	4.51	2.71	2.03	1.36	1.09	1.0

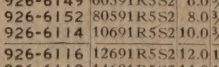
MIL TYPE CP 53 CAPACITORS



Non-inductive oil-filled bathtub capacitors; he metically sealed, silicone rubber compression te minals. Have mtg. flanges. Exceed MIL-C-25 Suffix K has tolerance of ±10%; V, +20%, −10 For use up to 85°C. 600 WVDC, except *1000. Shpg. wt., 4 o

Stock No.	MIL No. CP53	μF	Size	EACH 1-9	10-24	25-49	50-99	10 Up
926-0171	B1EF254K	.25	1 13/16x1x3/4"	3.83	2.87	2.16	1.44	1.1
926-0174	B1EF504K	.5	1 13/16x1x1"	4.12	3.09	2.32	1.55	1.2
926-0165	B1EF105K	1.0	2x1 3/4x1"	4.80	3.60	2.70	2.80	1.4
926-0168	B1EF205K	2.0	2x2x1 1/8"	6.44	4.83	3.63	2.42	1.9
926-0193	B4EF104V	.1-.1	1 13/16x1x3/4"	5.00	3.75	2.82	1.88	1.5
926-0196	B4EF254V	.25-.25	1 13/16x1x1"	5.16	3.87	2.91	1.94	1.5
926-0198	B4EF504V	.5-.5	2x1 3/4x1"	5.88	4.41	3.31	2.21	1.7
926-0185	B1EG254K*	.25	1 13/16x1x7/8"	4.04	3.03	2.28	1.52	1.2
926-0179	B1EG104K*	.1	1 13/16x1x3/4"	3.92	2.94	2.20	1.47	1.1
926-0199	B4EG254V*	.25-.25	2x1 3/4x7/8"	5.68	4.26	3.20	2.13	1.7
926-0188	B1EG504K*	.5	2x1 3/4x7/8"	4.32	3.24	2.43	1.62	1.3
926-0182	B1EG105K*	1.0	2x2x1 1/8"	5.80	4.35	3.27	2.18	1.7

TYPE 121P METALLIZED PAPER CAPACITORS



Operate at 125°C without deratin Have ungrounded cases. Hermetical sealed, glass-to-metal solder-seal term nals. Tol., ±10%. 150 WVDC. 3 oz.

Stock No.	Type 121P	μF	Size, Inches	EACH 1-9	10-24	25-49	50-99	100-499	500- Up
926-6122	15591R5S2	1.5	3/16x1 1/8	4.56	3.11	2.34	1.56	1.25	1.1
926-6135	20591R5S2	2.0	3/16x1 3/8	4.86	3.26	2.44	1.63	1.31	1.2
926-6138	25591R5S2	2.5	3/16x1 5/8	5.32	3.33	2.50	1.67	1.34	1.2
926-6141	30591R5S2	3.0	3/4 3/64x1 3/8	5.94	3.75	2.82	1.88	1.50	1.3
926-6144	40591R5S2	4.0	3/4 3/64x1 5/8	6.60	4.05	3.04	2.03	1.62	1.4
926-6146	50591R5S2	5.0	3/4 3/64x1 7/8	7.83	12.54	9.41	6.27	5.02	4.6
926-6149	60591R5S2	6.0	3/4x1 7/8	8.40	4.83	3.63	2.42	1.94	1.7
926-6152	80591R5S2	8.0	3/4x2 5/8	9.94	5.64	4.23	2.82	2.26	2.0
926-6114	10691R5S2	10.0	3/4x2 5/8	11.74	6.51	4.89	3.26	2.61	2.3
926-6116	12691R5S2	12.0	1x1 7/8	13.46	7.38	5.54	3.69	2.96	2.7
926-6119	14691R5S2	14.0	1x2 1/8	15.18	8.25	6.19	4.13	3.30	3.0
926-6126	16691R5S2	16.0	1x2 5/8	16.80	8.76	6.57	4.38	3.51	3.2
926-6130	18691R5S2	18.0	1x2 5/8	18.61	9.99	7.50	5.00	4.00	3.6

Specify Stock No., Mfr's Type No. and Capacitance on Capacitor Order

"Metfilm" and Miniature Capacitors

SPRAGUE
THE MARK OF RELIABILITY

192P "PACER" MINIATURE CAPACITORS

Type 192P "Pacer" miniature capacitors are nearly three times smaller than conventional paper-film tubular capacitors. They fit tight spots in small electronic assemblies that require high temperature operation and good humidity performance. Miniature capacitor sizes are approximately the same as composition resistors and may be used together with resistors and diodes in modular circuits. Non-inductor capacitors are manufactured with metal end caps over foil sections for better shielding. All have durable epoxy coating for high insulation resistance. Ambient temperature range, −55° to +85°C. Derate 50% at 105° centigrade temperature. Overall tolerance, ±10%. "R" in Mfr's Type indicates 80 WVDC, others are 200 WVDC. Av. shpg. wt. 2 oz.

SIZE CHART

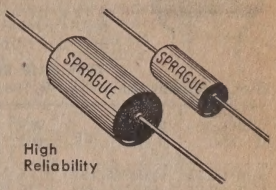
Code	Size	Code	Size	Code	Size	Code	Size
A	9/64"x5/16"	D	11/64"x1/2"	G	15/64"x9/16"	K	21/64"x5/8"
B	11/64"x5/16"	E	7/32"x9/16"	H	19/64"x1/2"	L	21/64"x7/8"
C	11/64"x7/16"	F	7/32"x9/16"	J	19/64"x5/8"	M	21/64"x1 3/16"

Stock No.	Type 192P-	µF	Size Code	EACH 1-24	25-49	50-99	100-249	250-Up
926-6678	2229R8	.0022	A	.48	.28	.22	.18	.16
926-6681	2729R8	.0027	A	.48	.28	.22	.18	.16
926-6684	3329R8	.0033	A	.48	.28	.22	.18	.16
926-6687	3929R8	.0039	A	.48	.28	.22	.18	.16
926-6690	4729R8	.0047	A	.48	.28	.22	.18	.16
926-6693	5629R8	.0056	B	.48	.28	.22	.18	.16
926-6695	6829R8	.0068	B	.48	.28	.22	.18	.16
926-6697	8229R8	.0082	B	.48	.28	.22	.18	.16
926-6670	1039R8	.01	B	.45	.27	.21	.17	.15
926-6672	1239R8	.012	C	.48	.29	.22	.18	.16
926-6674	1539R8	.015	C	.52	.31	.24	.19	.18
926-6676	1839R8	.018	D	.52	.31	.24	.19	.18
926-6679	2239R8	.022	D	.52	.31	.24	.20	.18
926-6682	2739R8	.027	E	.56	.32	.25	.20	.18
926-6685	3339R8	.033	E	.56	.32	.25	.20	.19
926-6688	3939R8	.039	F	.56	.33	.26	.21	.19
926-6691	4739R8	.047	F	.56	.34	.26	.21	.20
926-6694	5639R8	.056	G	.60	.35	.27	.22	.20
926-6696	6839R8	.068	G	.63	.37	.28	.23	.21
926-6698	8239R8	.082	H	.63	.38	.30	.24	.22
926-6671	1049R8	.1	H	.67	.39	.30	.24	.23
926-6673	1249R8	.12	J	.78	.46	.36	.29	.27
926-6675	1549R8	.15	J	.82	.49	.39	.31	.29
926-6677	1849R8	.18	K	.93	.55	.42	.34	.32
926-6680	2249R8	.22	K	1.01	.60	.47	.37	.35
926-6683	2749R8	.27	L	1.08	.64	.50	.40	.37
926-6686	3349R8	.33	L	1.12	.68	.53	.42	.39
926-6689	3949R8	.39	M	1.20	.72	.56	.45	.41
926-6692	4749R8	.47	M	1.50	.75	.59	.47	.44
926-6720	47192	.00047	A	.38	.24	.19	.15	.14
926-6723	56192	.00056	A	.38	.22	.17	.14	.13
926-6726	68192	.00068	A	.38	.22	.17	.14	.13
926-6729	82192	.00082	A	.38	.22	.17	.14	.13
926-6702	10292	.001	A	.34	.19	.15	.12	.11
926-5705	12292	.0012	A	.34	.19	.15	.12	.11
926-6708	15292	.0015	A	.34	.19	.15	.12	.11
926-6711	18292	.0018	B	.34	.19	.15	.12	.11
926-6713	22292	.0022	B	.34	.20	.15	.12	.11
926-6716	33292	.0033	B	.34	.20	.15	.12	.11
926-6718	39292	.0039	C	.34	.20	.15	.13	.12
926-6721	47292	.0047	C	.34	.20	.16	.13	.12
926-6724	56292	.0056	C	.34	.20	.16	.13	.12
926-6727	68292	.0068	C	.38	.21	.16	.13	.12
926-6730	82292	.0082	D	.38	.21	.17	.14	.13
926-6703	10392	.01	D	.38	.22	.17	.14	.13
926-6706	12392	.012	E	.38	.22	.17	.14	.13
926-6709	15392	.015	E	.38	.23	.18	.14	.13
926-6712	18392	.018	F	.41	.23	.18	.14	.13
926-6714	22392	.022	F	.41	.23	.18	.15	.14
926-6717	33392	.033	G	.45	.26	.20	.16	.15
926-6719	39392	.039	H	.49	.27	.21	.17	.16
926-6722	47392	.047	H	.49	.29	.22	.18	.17
926-6725	56392	.056	J	.52	.30	.24	.19	.18
926-6728	68392	.068	J	.56	.32	.25	.20	.18
926-6731	82392	.082	K	.56	.33	.26	.21	.19
926-6704	10492	.1	K	.60	.35	.27	.22	.20
926-6707	12492	.12	L	.63	.37	.28	.23	.21
926-6710	15492	.15	L	.71	.42	.32	.26	.24
926-6715	22492	.22	M	.78	.47	.36	.29	.27

TK36 Assortment. Total of 73. Same construction as TK35. In 80 WVDC. Two each, µF: .0022, .0033, .0047, 0068,. 01,. 015, .022, .047, .068, .22, .47. Three each: .1. At 200 WVDC. Two each: .0015, .0068, .068. Three each: .0022, .0033, .0047, .015, .022, .033, .047,, .15, .22. Five each: .01, .1. 9-drawer cabinet.
926-1268. Shpg. wt. 4 lbs. 27.99

SPRAGUE CAPACITORS

TYPE 431P METFILM "E"



High Reliability

A small sized, lightweight capacitor protected against moisture and well-suited for potting or encapsulating. Provides space advantage over metal-cased, molded, or wax-coated cardboard-case tubular capacitors of comparable rating. Controlled metalizing process for greater dependability and performance. Axial leads, 1¾" long. Tolerance: ±10%. Temperature Range: −55°C to +85°C. Minimum Insulation Resistance; 1000 megohm-microfarads. Power Factor: 1% at 25°C. Able to meet 2000 Hz vibration Test Method 204, MIL-STD-202, Condition B. Av. shpg. wt. 1 oz.

Stock No.	Type 431P	µF	WV DC	Size TxWxL	EACH 1-9	10-24	25-49	50-Up
926-8002	1049R5	.1	50	9/64x7/32x5/8"	2.54	2.31	1.64	.96
926-8011	1549R5	.15	50	11/64x1/4x5/8"	2.67	2.43	1.72	1.00
926-8017	2249R5	.22	50	7/32x9/32x3/4"	2.83	2.58	1.84	1.07
926-8004	1059R5	1.0	50	15/16x13/32x1"	3.79	3.45	2.45	1.43
926-8013	1559R5	1.5	50	9/32x31/64x1"	4.35	3.96	2.81	1.64
926-8015	2059R5	2.0	50	23/64x9/32x1"	4.71	4.29	3.06	1.79
926-8019	2559R5	2.5	50	21/64x17/32x1 1/4"	5.04	4.59	3.28	1.91
926-8006	1069R5	10.0	50	9/16x49/64x1 3/4"	13.76	12.51	8.93	5.21
926-8009	1269R5	12.0	50	1/2x51/64x2 1/4"	15.87	14.43	10.30	6.01
926-8045	15392	.015	200	3/32x11/64x5/8"	1.51	1.38	.98	.57
926-8062	22392	.022	200	7/64x3/32x5/8"	1.51	1.38	.98	.57
926-8074	33392	.033	200	1/8x13/64x5/8"	1.22	1.11	.78	.46
926-8085	47392	.047	200	5/32x15/64x5/8"	1.21	1.56	.78	.46
926-8104	68392	.068	200	9/64x17/64x3/4"	1.22	1.11	.78	.46
926-8026	10492	.1	200	11/64x19/64x3/4"	1.22	1.11	.78	.46
926-8050	15492	.15	200	13/64x21/64x3/4"	1.28	1.17	.82	.48
926-8062	22492	.22	200	15/64x13/32x3/4"	1.38	1.26	.90	.53
926-8078	33492	.33	200	7/32x25/64x1"	1.58	1.44	1.02	.60
926-8088	47492	.47	200	7/32x25/64x1 1/4"	1.74	1.59	1.14	.66
926-8108	68492	.68	200	21/64x33/64x1"	2.04	1.86	1.33	.78
926-8031	10592	1.0	200	5/16x33/64x1 1/4"	2.17	1.98	1.41	.82
926-8052	15592	1.5	200	11/32x35/64x1 1/2"	2.73	2.49	1.77	1.03
926-8055	20592	2.0	200	23/64x9/16x1 3/4"	3.13	2.85	2.02	1.18
926-8068	25592	2.5	200	29/64x21/32x1 1/2"	3.39	3.09	2.20	1.29
926-8071	30592	3.0	200	29/64x21/32x1 3/4"	3.66	3.33	2.38	1.39
926-8082	40592	4.0	200	17/32x47/64x1 3/4"	4.15	3.78	2.70	1.58
926-8092	50592	5.0	200	29/64x3/4x2 1/4"	4.71	4.29	3.06	1.79
926-8095	60592	6.0	200	15/32x49/64x2 1/2"	5.77	5.25	3.75	2.19
926-8112	70592	7.0	200	47/64x15/16x1 3/4"	6.99	6.36	4.54	2.65
926-8036	10692	10.0	200	45/64x1 1/2x2 1/4"	8.44	7.68	5.48	3.20
926-8038	12692	12.0	200	23/32x11/64x2 1/2"	9.37	8.52	6.09	3.55
926-8042	15296	.0015	600	3/32x1 1/64x5/8"	2.01	1.83	1.31	.77
926-8058	22296	.0022	600	7/64x3/16x5/8"	2.01	1.83	1.31	.77
926-8073	33296	.0033	600	9/64x7/32x5/8"	2.01	1.83	1.31	.77
926-8084	47296	.0047	600	1/8x1/4x1/8"	2.01	1.83	1.31	.77
926-8102	68296	.0068	600	9/64x17/64x3/4"	2.07	1.89	1.35	.79
926-8024	10396	.01	600	11/64x19/64x3/4"	1.81	1.65	1.17	.69
926-8047	15396	.015	600	3/16x23/64x3/4"	2.01	1.83	1.29	.76
926-8063	22396	.022	600	15/64x13/32x3/4"	1.98	1.80	1.29	.76
926-8076	33396	.033	600	13/64x3/8x1"	2.01	1.83	1.29	.76
926-8086	47396	.047	600	13/64x3/8x1 1/4"	2.04	1.86	1.33	.78
926-8106	68396	.068	600	19/64x1/2x1"	2.04	1.86	1.33	.78
926-8028	10496	.1	600	3/8x37/64x1"	2.11	1.92	1.37	.80
926-8051	15496	.15	600	3/8x37/64x1 1/4"	2.31	2.10	1.49	.87
926-8065	22496	.22	600	11/32x35/64x1 3/4"	2.60	2.37	1.68	.98
926-8079	33496	.33	600	7/16x41/64x1 3/4"	2.77	2.52	1.80	1.05
926-8090	47496	.47	600	35/64x3/4x1 3/4"	3.73	2.85	2.03	1.19
926-8109	68496	.68	600	15/32x49/64x2 1/2"	4.22	3.84	2.73	1.60
926-8033	10596	1.0	600	3/4x1 1/64x2"	4.85	4.41	3.14	1.83
926-8053	15596	1.5	600	3/4x1 3/64x2 1/2"	6.43	5.85	4.18	2.44

J-135 "CERAMICENTER" CERAMIC ASSORTMENT KIT

Saves Time and Effort—Eliminates Searching Through Scattered Boxes

Contains 710 capacitors of 57 different values, packaged in handy reusable "Kleer-Pak" plastic boxes and conveniently arranged in a two-drawer, metal sliding-tray cabinet. Kit includes: 290 Type 5GA, 1000 WVDC ceramic disc capacitors in 31 different capacitance values from 5 pF to 20,000 pF; 145 Type 5HK "High K" bypass and coupling capacitors in 7 different values from .001 µF to .01 µF @ 1000 WVDC, and .02 µF to .1 µF @ 500 WVDC; 100 Type 10TS, 1000 WVDC temperature stable capacitors in 12 different values from 100 pF to 20,000 pF; and 175 Type TG, 50 WVDC miniaturized disc capacitors in 7 different values from .005 to .1 µF. Cabinet, 30¾x5½x11¾". Shpg. wt., 29 lbs.
926-0828 ..... 172.50

SPRAGUE — Paper Capacitors, Assortments and Indicato

THE MARK OF RELIABILITY

ORANGE DROP PRINTED CIRCUIT CAPACITORS

Type 225P. Filmite 'E' orange drop capacitors. Designed with the minimum thickness for limited space on printed wiring boards. Contains polyester film and thin gauge foil. Covered in epoxy to prevent melting. Tolerance, ±10%. Temperature range, −40°C to +85°C. Wt. 2 oz.

Type 220P. Orange drop dual dielectric capacitors wit polyester film and special capacitor tissue. Double dippe in epoxy resin for a rock-hard case. Radial leads ar crimped for printed circuit board spacing. Toleranc ±10%. Temperature range, −40°C to +85°C. Wt. 2 oz

TYPE 225P RECTANGULAR

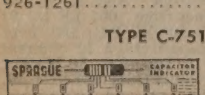
Size, height by thickness. 45/64" long, except *3/4", †1 3/16", 13/16".

Stock No.	Mfr's Type	µF	WV DC	Size	EACH 1-24	25-49	50-99	100-249	250-Up
926-6913	1549R75	.15*	75	5/8x25/64"	.30	.16	.13	.10	.09
926-6914	2249R75	.22*	75	43/64x27/64"	.37	.22	.17	.14	.12
926-6915	3349R75	.33*	75	27/32x31/64"	.67	.40	.31	.25	.20
926-6916	4749R75	.47*	75	27/32x1 9/32"	.78	.47	.37	.29	.24
926-6917	6849R75	.68†	75	29/32x1 9/32"	.86	.51	.40	.32	.26
926-6912	1059R75	1.0†	75	63/64x47/64"	.86	.51	.40	.32	.26
926-6918	10291	.001	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6928	15291	.0015	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6938	22291	.0022	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6954	33291	.0033	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6963	47291	.0047	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6974	68291	.0068	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6921	10391	.01	100	5/16x13/64"	.18	.11	.08	.07	.06
926-6931	15391	.015	100	5/16x13/64"	.18	.11	.09	.07	.06
926-6936	18391	.018	100	5/16x13/64"	.18	.11	.09	.07	.06
926-6942	22391	.022	100	5/16x13/64"	.18	.11	.09	.07	.06
926-6951	27391	.027	100	21/64x15/64"	.18	.11	.09	.07	.06
926-6957	33391	.033	100	21/64x15/64"	.18	.11	.09	.07	.06
926-6962	39391	.039	100	1 1/32x1/4"	.22	.12	.09	.07	.06
926-6966	47391	.047	100	1 1/32x1/4"	.22	.12	.10	.08	.06
926-6972	56391	.056	100	3/8x9/32"	.22	.13	.10	.08	.07
926-6978	68391	.068	100	3/8x9/32"	.22	.13	.10	.08	.07
926-6987	82391	.082	100	1 7/32x21/64"	.22	.13	.11	.09	.07
926-6924	10491	.1	100	1 7/32x21/64"	.22	.14	.11	.09	.07
926-6973	56491	.56†	100	57/64x9/16"	.67	.40	.31	.25	.21
926-6983	68491	.68†	100	29/32x1 9/32"	.67	.40	.31	.25	.21
926-6927	10591	1.0†	100	63/64x47/64"	.86	.51	.40	.32	.26
926-6919	10292	.001‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6929	15292	.0015‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6939	22292	.0022‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6955	33292	.0033‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6964	47292	.0047‡	200	9/16x15/64"	.18	.10	.08	.06	.05
926-6975	68292	.0068‡	200	1 9/32x1/4"	.18	.10	.08	.06	.05
926-6922	10392	.01‡	200	1 9/32x1/4"	.18	.10	.08	.06	.05
926-6932	15392	.015‡	200	1 9/32x1/4"	.18	.11	.08	.07	.06
926-6943	22392	.0022‡	200	1 9/32x1/4"	.18	.11	.09	.07	.06
926-6958	33392	.033‡	200	5/8x9/32"	.18	.11	.09	.07	.06
926-6967	47392	.047‡	200	5/8x9/32"	.22	.12	.09	.07	.06
926-6979	68392	.068‡	200	41/64x5/16"	.22	.13	.10	.08	.06
926-6925	10492	.1‡	200	2 3/32x3/8"	.26	.14	.11	.09	.07
926-6934	15492	.15‡	200	3/4x27/64"	.30	.18	.14	.11	.09
926-6946	22492	.22‡	200	25/32x1 5/32"	.37	.21	.16	.13	.11
926-6960	33492	.33†	200	2 3/32x27/64"	.41	.24	.19	.15	.12
926-6970	47492	.47†	200	2 7/32x1/2"	.48	.28	.22	.17	.14
926-6984	68492	.68†	200	1 9/64x27/32"	.75	.45	.35	.28	.23
926-6920	10294	.001‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6930	15294	.0015‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6940	22294	.0022‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6956	33294	.0033‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6965	47294	.0047‡	400	9/16x15/64"	.18	.10	.08	.06	.05
926-6976	68294	.0068‡	400	1 9/32x1/4"	.18	.10	.08	.06	.05
926-6923	10394	.01‡	400	1 9/32x1/4"	.18	.10	.08	.07	.05
926-6933	15394	.015‡	400	1 9/32x9/32"	.18	.11	.09	.07	.06
926-6944	22394	.022‡	400	1 9/32x5/16"	.18	.11	.09	.07	.06
926-6959	33394	.033‡	400	21/32x1 1/32"	.22	.12	.09	.07	.06
926-6968	47394	.047‡	400	21/32x27/64"	.22	.13	.10	.08	.07
926-6980	68394	.068‡	400	1 13/16x31/64"	.26	.14	.11	.09	.07
926-6926	10494	.1‡	400	27/32x1 7/32"	.30	.17	.13	.11	.09
926-6935	15494	.15†	400	1 13/16x31/64"	.41	.23	.18	.14	.12
926-6947	22494	.22†	400	57/64x9/16"	.52	.30	.23	.18	.15
926-6961	33494	.33†	400	1x47/64"	.86	.50	.39	.31	.25
926-6971	47494	.47†	400	1 9/64x27/32"	1.08	.63	.49	.40	.32

TK28 Assortment. Total of 80. Dipped tubular polyester capacitors. Leakproof, and heat humidity resistant. All 600 WVDC. At following µF values. Five each: .001, .002, .0022, .0033, .0047, .005, .015, .02, .022, .033, .047, .05, .1. Ten each: .01. 6-drawer cabinet.
926-1260. Shpg. wt. 2½ lbs.....13.65

TK29 Assortment. Total of 105. Same as TK28 but has these µF values. Two: .0015; three each: .003, .068, .22, .25; five each: .001, .002, .0022, .0033, .0047, .005, .0068, .015, .02, .022, .03, .003, .1; eight: .047, .05; ten: .01. 9-drawer cabinet. 3 lbs.
926-1261.....19.89

TYPE C-751 CAPACITOR INDICATOR



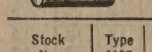
Handy thumbwheel indicator reads color codes directly in capacitance, tolerance and volts. Shpg. wt. 2 oz.
926-0140.....25

TYPE 220P TUBULAR

Size, height by thickness. 45/64" long.

Stock No.	Mfr's Type	µF	WV DC	Size	EACH 1-24	25-49	50-99	100-249	250 U
926-6865	2PS-S20	.02	200	3/8x7/8"	.22	.12	.09	.08	.0
926-6866	2PS-S47	.047	200	29/64x7/8"	.22	.13	.10	.08	.0
926-6867	2PS-S50	.05	200	15/32x7/8"	.22	.14	.11	.09	.0
926-6859	2PS-P10	.1	200	31/64x1 3/16"	.26	.15	.12	.10	.0
926-6860	2PS-P20	.2	200	1 9/32x1 5/16"	.37	.21	.16	.13	.1
926-6861	2PS-P25	.25	200	5/8x1 5/16"	.37	.22	.17	.14	.1
926-6862	2PS-P33	.33	200	5/8x1 5/8"	.48	.29	.22	.18	.1
926-6863	2PS-P47	.47	200	45/64x1 5/8"	.56	.34	.26	.21	.1
926-6864	2PS-P50	.5	200	23/32x1 5/8"	.60	.34	.27	.22	.1
926-6873	4PS-S10	.01	400	13/32x1 1/16"	.18	.11	.08	.07	.0
926-6874	4PS-S20	.02	400	13/32x7/8"	.22	.12	.10	.08	.0
926-6875	4PS-S47	.047	400	29/64x1 3/16"	.26	.15	.12	.10	.0
926-6876	4PS-S50	.05	400	29/64x1 3/16"	.26	.15	.12	.10	.0
926-6877	4PS-S68	.068	400	33/64x1 3/16"	.26	.16	.12	.10	.0
926-6869	4PS-P10	.1	400	37/64x1 3/16"	.30	.18	.14	.11	.0
926-6870	4PS-P20	.2	400	1 9/32x1 5/8"	.45	.26	.21	.17	.1
926-6871	4PS-P22	.22	400	39/64x1 5/8"	.45	.26	.21	.17	.1
926-6872	4PS-P25	.25	400	41/64x1 5/8"	.45	.27	.21	.17	.1
926-6879	6PS-D10	.001	600	21/64x1 1/16"	.18	.11	.08	.07	.0
926-6880	6PS-D15	.0015	600	21/64x1 1/16"	.18	.11	.08	.07	.0
926-6881	6PS-D20	.002	600	21/64x1 1/16"	.18	.11	.09	.07	.0
926-6882	6PS-D25	.0025	600	21/64x1 1/16"	.18	.11	.09	.07	.0
926-6883	6PS-D33	.0033	600	23/64x1 1/16"	.18	.11	.09	.07	.0
926-6884	6PS-D39	.0039	600	3/8x1 1/16"	.18	.11	.09	.07	.0
926-6885	6PS-D47	.0047	600	25/64x1 1/16"	.18	.11	.09	.07	.0
926-6886	6PS-D50	.005	600	25/64x1 1/16"	.18	.11	.09	.07	.0
926-6887	6PS-D56	.0056	600	25/64x1 1/16"	.18	.11	.09	.07	.0
926-6888	6PS-D68	.0068	600	13/32x1 1/16"	.18	.11	.09	.07	.0
926-6889	6PS-D82	.0082	600	3/8x7/8"	.18	.11	.09	.07	.0
926-6895	6PS-S10	.01	600	25/64x7/8"	.18	.12	.09	.07	.0
926-6896	6PS-S15	.015	600	27/64x7/8"	.22	.12	.09	.07	.0
926-6897	6PS-S20	.02	600	31/64x7/8"	.22	.13	.10	.08	.0
926-6898	6PS-S22	.022	600	31/64x7/8"	.22	.13	.10	.08	.0
926-6899	6PS-S25	.025	600	17/32x7/8"	.22	.14	.11	.09	.0
926-6900	6PS-S33	.033	600	15/32x1 3/16"	.22	.14	.11	.09	.0
926-6901	6PS-S39	.039	600	31/64x1 3/16"	.26	.15	.11	.09	.0
926-6902	6PS-S47	.047	600	17/32x1 3/16"	.26	.15	.12	.10	.0
926-6903	6PS-S50	.05	600	17/32x1 3/16"	.26	.16	.12	.10	.0
926-6904	6PS-S56	.056	600	35/64x1 3/16"	.26	.16	.13	.10	.0
926-6905	6PS-S68	.068	600	37/64x1 3/16"	.33	.19	.15	.12	.1
926-6906	6PS-S82	.082	600	37/64x1 5/16"	.33	.19	.15	.12	.1
926-6990	6PS-P10	.1	600	5/8x1 5/16"	.33	.20	.16	.13	.1
926-6991	6PS-P15	.15	600	43/64x1 5/8"	.45	.27	.21	.17	.1
926-6992	6PS-P20	.2	600	3/4x1 5/8"	.56	.34	.26	.21	.1
926-6993	6PS-P22	.22	600	25/32x1 5/8"	.56	.34	.26	.21	.1
926-6994	6PS-P25	.25	600	13/16x1 5/8"	.60	.34	.27	.22	.1
926-6907	10PS-D10	.001	1000	21/64x1 1/16"	.18	.11	.08	.07	.0
926-6908	10PS-D50	.005	1000	1 13/32x7/8"	.22	.12	.10	.08	.0

118P HERMETICALLY SEALED "DIFILM" CAPACITORS



Metallized paper and polyester film dielectri
Meet MIL-C-25 specs. Ambient temperature
125°C without derating. Tolerance ±10%. 3 o

Stock No.	Type 118P	µF	WV DC	Size	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
926-5860	10392S2	.01	200	15/64x3/4"	3.16	2.37	1.78	1.19	.95	.87
926-5865	10492S2	.1	200	5/16x3/4"	2.87	2.16	1.62	1.08	.86	.79
926-5880	22492S2	.22	200	13/32x3/4"	2.92	2.19	1.65	1.10	.88	.81
926-5890	47492S2	.47	200	1/2x1 1/2"	3.36	2.52	1.89	1.26	1.01	.93
926-5896	56492S2	.56	200	1/2x1 1/2"	3.40	2.55	1.92	1.28	1.02	.94
926-5869	10592S2	1.0	200	9/16x1 1/2"	3.64	2.73	2.05	1.37	1.10	1.01
926-5877	20592S2	2.0	200	43/64x1 1/2"	6.04	4.53	3.40	2.27	1.81	1.67
926-5885	30592S2	3.0	200	43/64x1 1/2"	6.32	4.74	3.56	2.37	1.90	1.74
926-5889	40592S2	4.0	200	3/4x1 1/2"	6.76	5.07	3.81	2.54	2.03	1.86
926-5894	50592S2	5.0	200	1x1 1/2"	7.36	5.52	4.14	2.76	2.21	2.03
926-5902	60592S2	6.0	200	1x1 1/2"	8.44	6.33	4.75	3.17	2.54	2.33
926-5905	80592S2	8.0	200	1x1 1/2"	8.64	6.48	4.86	3.24	2.60	2.38
926-6072	10692S2	10.0	200	1x2 3/4"	9.20	6.90	5.18	3.45	2.76	2.53
926-5870	10594S2	1.0	400	3/4x1 1/2"	5.04	3.78	2.84	1.89	1.52	1.39
926-5878	20594S2	2.0	400	1x1 1/2"	6.96	5.22	3.20	2.61	2.09	1.92
926-5886	30594S2	3.0	400	1x2 3/4"	8.20	6.15	4.62	3.08	2.46	2.26
926-5861	10396S2	.01	600	5/16x1 1/2"	2.80	2.10	1.58	1.05	.84	.77
926-5866	10496S2	.1	600	1/2x1 1/2"	3.30	2.48	1.86	1.24	.99	.91
926-5881	22496S2	.22	600	5/16x1 1/2"	3.62	2.71	2.04	1.36	1.09	1.00
926-5891	47496S2	.47	600	43/64x1 1/2"	4.33	3.25	2.44	1.63	1.30	1.19
926-5871	10596S2	1.0	600	1x1 1/2"	6.12	4.59	3.45	2.30	1.84	1.69
926-5879	20596S2	2.0	600	1x2 1/2"	7.80	5.85	4.39	2.93	2.34	2.15

Be Sure to Specify Stock No., Mfr's Type No. and Capacitance When Ordering

Polyester-Paper and Ceramic Capacitors

SPRAGUE
THE MARK OF RELIABILITY

160P "BLACK BEAUTY" POLYESTER FILM AND PAPER TUBULAR CAPACITORS

High-quality molded tubular capacitors built for long life under high heat and humidity operating conditions. Dual polyester-paper dielectric combines the best qualities of both polyester film and paper capacitors. Solid impregnated construction, will not leak or drip. 200 to 1600-volt types operate to 105° C without derating; 6000-volt up to 85° C. 6000-volt types oil impregnated. Capacitance tolerance ±10% from .001 μF. See assortment on lower right hand of page. Av. shpg. wt. 2 oz.

TYPE 160P TUBULAR

Stock No.	Mfr's Type	μF	WV DC	Size Dia. x L.	EACH 1-24	25-49	50-99	100-Up
926-6527	2TM-S10	.01	200	5/16x1"	.26	.14	.11	.09
926-6528	2TM-S20	.02	200	3/8x1 1/4"	.30	.17	.13	.10
926-6529	2TM-S47	.047	200	3/8x1 1/4"	.30	.17	.13	.10
926-6530	2TM-S50	.05	200	3/8x1 1/4"	.30	.17	.13	.10
926-6521	2TM-P10	.1	200	7/16x1 1/4"	.30	.18	.14	.12
926-6522	2TM-P15	.15	200	1/2x1 1/2"	.37	.22	.18	.14
926-6523	2TM-P22	.22	200	5/8x1 7/8"	.60	.36	.28	.23
926-6524	2TM-P25	.25	200	5/8x1 7/8"	.60	.36	.28	.23
926-6525	2TM-P47	.47	200	5/8x1 7/8"	.60	.36	.28	.23
926-6526	2TM-P50	.5	200	5/8x1 7/8"	.60	.36	.28	.23
926-6520	2TM-M1	1.0	200	3/4x2 1/4"	1.05	.62	.48	.39
926-6531	4TM-D10	.001	400	5/16x1"	.26	.15	.12	.09
926-6532	4TM-D50	.005	400	5/16x1"	.26	.14	.11	.09
926-6541	4TM-S10	.01	400	5/16x1"	.26	.14	.11	.09
926-6542	4TM-S15	.015	400	3/8x1 1/4"	.30	.17	.13	.10
926-6543	4TM-S20	.02	400	3/8x1 1/4"	.30	.17	.13	.10
926-6544	4TM-S25	.025	400	3/8x1 1/4"	.30	.17	.13	.10
926-6545	4TM-S47	.047	400	7/16x1 1/4"	.30	.18	.14	.12
926-6546	4TM-S50	.05	400	7/16x1 1/4"	.37	.22	.18	.14
926-6534	4TM-P10	.1	400	1/2x1 1/2"	.37	.22	.18	.14
926-6535	4TM-P15	.15	400	5/8x1 7/8"	.60	.36	.28	.23
926-6536	4TM-P20	.2	400	5/8x1 7/8"	.60	.36	.28	.23
926-6537	4TM-P22	.22	400	5/8x1 7/8"	.60	.36	.28	.23
926-6538	4TM-P25	.25	400	3/4x2 1/4"	1.05	.62	.48	.39
926-6539	4TM-P47	.47	400	3/4x2 1/4"	1.05	.62	.48	.39
926-6540	4TM-P50	.5	400	3/4x2 1/4"	1.05	.62	.48	.39
926-6533	4TM-M1	1.0	400	1x2 1/2"	1.35	.81	.63	.50
926-6568	6TM-T10	.0001	600	5/16x1"	.56	.34	.27	.21
926-6569	6TM-T25	.00025	600	5/16x1"	.56	.34	.27	.21
926-6570	6TM-T50	.0005	600	5/16x1"	.56	.34	.27	.21
926-6547	6TM-D10	.001	600	5/16x1"	.26	.15	.12	.09
926-6548	6TM-D15	.0015	600	5/16x1"	.26	.15	.12	.09
926-6549	6TM-D20	.002	600	5/16x1"	.26	.15	.12	.09
926-6550	6TM-D25	.0025	600	5/16x1"	.26	.15	.12	.09
926-6551	6TM-D30	.003	600	5/16x1"	.26	.15	.12	.09
926-6552	6TM-D40	.004	600	3/8x1 1/4"	.30	.17	.13	.10
926-6553	6TM-D47	.0047	600	3/8x1 1/4"	.30	.17	.13	.10
926-6554	6TM-D50	.005	600	3/8x1 1/4"	.30	.17	.13	.10
926-6555	6TM-D68	.0068	600	3/8x1 1/4"	.30	.17	.13	.10
926-6557	6TM-S10	.01	600	3/8x1 1/4"	.30	.17	.13	.10
926-6558	6TM-S15	.015	600	3/8x1 1/4"	.30	.17	.13	.10
926-6559	6TM-S20	.02	600	7/16x1 1/4"	.30	.18	.14	.12
926-6560	6TM-S22	.022	600	7/16x1 1/4"	.30	.18	.14	.12
926-6561	6TM-S25	.025	600	7/16x1 1/4"	.30	.18	.14	.12
926-6562	6TM-S30	.03	600	7/16x1 1/4"	.30	.18	.14	.12
926-6563	6TM-S40	.04	600	1/2x1 1/2"	.37	.22	.18	.14
926-6564	6TM-S47	.047	600	1/2x1 1/2"	.37	.22	.18	.14
926-6565	6TM-S50	.05	600	1/2x1 1/2"	.37	.22	.18	.14
926-6566	6TM-S60	.06	600	1/2x1 1/2"	.37	.22	.18	.14
926-6567	6TM-S68	.068	600	1/2x1 1/2"	.37	.22	.18	.14
926-6503	6TM-P10	.1	600	5/8x1 7/8"	.60	.36	.28	.23
926-6504	6TM-P15	.15	600	5/8x1 7/8"	.60	.36	.28	.23
926-6505	6TM-P20	.2	600	3/4x2 1/4"	.105	.62	.48	.39
926-6506	6TM-P22	.22	600	3/4x2 1/4"	1.05	.62	.48	.39
926-6507	6TM-P25	.25	600	3/4x2 1/4"	1.05	.62	.48	.39
926-6508	6TM-P50	.5	600	1x2 1/2"	1.35	.81	.63	.50
926-6556	6TM-M1	1.0	600	1x2 1/2"	1.95	1.17	.91	.73
926-6576	10TM-T50	.0005	1000	5/16x1"	.56	.34	.27	.21
926-6571	10TM-D10	.001	1000	5/16x1"	.26	.15	.12	.09
926-6572	10TM-D50	.005	1000	3/8x1 1/4"	.30	.17	.13	.10
926-6574	10TM-S10	.01	1000	7/16x1 1/4"	.30	.18	.14	.12
926-6575	10TM-S50	.05	1000	5/8x1 7/8"	.60	.36	.28	.23
926-6573	10TM-P10	.1	1000	3/4x2 1/4"	1.05	.62	.48	.39
926-6510	MB-D1	.001	1600	3/8x1 1/4"	.33	.18	.14	.12
926-6512	MB-D5	.005	1600	1/2x1 1/2"	.41	.25	.19	.15
926-6514	MB-S1	.01	1600	5/8x1 7/8"	.67	.39	.30	.24
926-6515	MB-S2	.02	1600	5/8x1 7/8"	.67	.39	.30	.24
926-6516	MB-S3	.03	1600	3/4x2 1/4"	1.12	.66	.51	.41
926-6517	MB-S4	.04	1600	3/4x2 1/4"	1.12	.66	.51	.41
926-6518	MB-S5	.05	1600	3/4x2 1/8"	1.42	.86	.67	.54

Contact the Allied facility nearest you for information on any Sprague capacitor types not listed in this catalog.

7C RADIAL-LEAD CERAMIC CAPACITORS

Resin-coated monolythic ceramic capacitors made of technically upgraded material for the most reliable in dielectrics. Radial-lead style with stand off "feet" designed for printed wiring board mounting. Vacuum wax inpregnation and an outer epoxy varnish finish for moisture protection. 50 VDC rating. Layer-built construction offers highest capacitance values per unit size. Tolerance: ±20%. Operating temperature: −55°C. to +85°C. Size (Lx WxT): .39x.275x.16" except *.535x.55x.16"; †.535x.55x.26". Wt. 1 oz.

Stock No.	Type 7C	μF	EACH 1-24	25-49	50-99	100-499	500-Up
926-4890	075102X0500D	.0010	1.45	1.16	.87	.58	.44
926-4860	067152X0500D	.0015	1.45	1.16	.87	.58	.44
926-4863	067222X0500D	.0022	1.45	1.16	.87	.58	.44
926-4866	067332X0500D	.0033	1.45	1.16	.87	.58	.44
926-4869	067472X0500D	.0047	1.45	1.16	.87	.58	.44
926-4873	067682X0500D	.0068	1.50	1.20	.90	.60	.45
926-4877	067822X0500D	.0082	1.50	1.20	.90	.60	.45
926-4810	023103X0500D	.010	1.32	1.06	.80	.53	.40
926-4820	023153X0500D	.015	1.32	1.06	.80	.53	.40
926-4827	023223X0500D	.022	1.32	1.06	.80	.53	.40
926-4835	023333X0500D	.033	1.32	1.06	.80	.53	.40
926-4840	023473X0500D	.047	1.32	1.06	.80	.53	.40
926-4846	023683X0500D	.068	1.32	1.06	.80	.53	.40
926-4812	023104X0500D	.10	1.32	1.06	.80	.53	.40
926-4822	023154X0500D	.15	1.47	1.18	.88	.59	.44
926-4828	023224X0500D	.22	1.56	1.25	.94	.63	.47
926-4837	023334X0500E*	.33	1.96	1.57	1.18	.79	.59
926-4841	023474X0500E*	.47	2.18	1.75	1.32	.88	.66
926-4847	023684X0500E*	.68	2.30	1.84	1.38	.92	.69
926-4814	023105X0500E*	1.0	2.60	2.08	1.56	1.04	.78
926-4824	023155X0500E*	1.5	3.91	3.13	2.35	1.57	1.18
926-4831	023225X0500F†	2.2	5.17	4.14	3.11	2.07	1.56

CERAMIC DISC CAPACITORS

SERIES 30GA—3000 WVDC

Tolerance: 1.5 pF, ±.25 pF; 4.7 pF, ±.5 pF; 10 through 50 pF, ±10%; 100 through 500 pF, ±20%. †in table indicates μF. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	pF	EACH 1-49	50-99	EA., Multiples of 100 Only 100-400	500-Up
926-5283	30GA-V15	1.5	.18	.15	.10	.09
926-5296	30GA-V47	4.7	.18	.15	.10	.09
926-5215	30GA-Q10	10	.18	.15	.10	.09
926-5224	30GA-Q25	25	.18	.15	.10	.09
926-5229	30GA-Q30	30	.18	.15	.10	.09
926-5237	30GA-Q50	50	.18	.15	.10	.09
926-5251	30GA-T10	100	.18	.15	.10	.09
926-5255	30GA-T15	150	.18	.15	.11	.10
926-5258	30GA-T18	180	.18	.15	.11	.10
926-5262	30GA-T22	220	.18	.15	.11	.10
926-5265	30GA-T25	250	.18	.15	.11	.10
926-5269	30GA-T30	300	.22	.18	.13	.11
926-5277	30GA-T50	500	.26	.21	.15	.13
926-5180	30GA-D10	†.001	.26	.21	.15	.13
926-5185	30GA-D20	†.002	.26	.21	.15	.13
926-5195	30GA-D50	†.005	.30	.24	.17	.15
926-5243	30GA-S10	†.01	.48	.39	.29	.25

SERIES TG—100 WVDC ±20%.

Stock No.	Mfr's Type	μF	EACH 1-49	50-99	EA., Multiples of 100 Only 100-400	500-900	1000-Up
926-1420	TG-D50	.005	.18	.15	.06	.04	.03
926-1434	TG-S10	.01	.18	.15	.08	.05	.04
926-1437	TG-S20	.02	.18	.15	.09	.06	.04
926-1440	TG-S25	.025	.18	.15	.10	.07	.05
926-1444	TG-S30	.03	.18	.15	.10	.07	.05
926-1447	TG-S50	.05	.37	.30	.22	.15	.10
926-1425	TG-P10	.1	.48	.39	.29	.19	.13

CAPACITOR ASSORTMENTS

TK33 Assortment. Total of 61. Case is humidity-resistant, mica-filled, non-flammable phenolic. Dual dielectric of polyester film and capacitor tissue. Solid impregnant. All units are rated at 600 WVDC. Operate at up to 105° C without voltage derating. Contains the following μF values. Five each: .001, .002, .003, .005, .02, .03, .25; eight each: .05, .1; ten each: .01. 6-drawer capacitor cabinet.
926-1465. Shpg. wt. 3 lbs. 19.59

TK34 Assortment. Total of 90. Same construction as TK33. All 600 WVDC. In μF values. Two each: .5; three each: .15, .22, .25; five each: .001, .0015, .003, .004, .005, .0068, .015, .020, .03; eight each: .002, .05, .1; ten each: .01. 9 drawer cabinet.
926-1466. Shpg. wt. 4 lbs. 29.31

Ceramic Capacitors

SPRAGUE — THE MARK OF RELIABILITY

NPO AND N750 CERAMICS

SERIES 10TCC NPO CERAMICS. Rugged, ultra-reliable capacitors for wide industrial applications. Zero-temperature-coefficient. 1000 WVDC. Tolerance: ±5%. 6.8 pF and above; ±25 pF, 4.7 pF and below. Av. sh. wt. 1 oz.

Stock No.	Mfr's Type	pF	EACH 1-49	EACH 50-99	EA., Mult. of 100 Only 100-400	500-900	1000-Up
926-5004	10TCC-V10	1.0	.18	.15	.06	.04	.03
926-5009	10TCC-V15	1.5	.18	.15	.06	.04	.03
926-5015	10TCC-V22	2.2	.18	.15	.06	.04	.03
926-5024	10TCC-V33	3.3	.18	.15	.06	.04	.03
926-5034	10TCC-V47	4.7	.18	.15	.06	.04	.03
926-5044	10TCC-V68	6.8	.18	.15	.06	.04	.03
926-4920	10TCC-Q10	10.0	.18	.15	.06	.04	.03
926-4924	10TCC-Q15	15.0	.18	.15	.06	.04	.03
926-4928	10TCC-Q20	20.0	.18	.15	.06	.04	.03
926-4930	10TCC-Q22	22.0	.18	.15	.06	.04	.03
926-4933	10TCC-Q25	25.0	.18	.15	.06	.04	.03
926-4939	10TCC-Q33	33.0	.18	.15	.06	.04	.03
926-4945	10TCC-Q39	39.0	.18	.15	.06	.04	.03
926-4950	10TCC-Q47	47.0	.18	.15	.07	.05	.04
936-4953	10TCC-Q50	50.0	.18	.15	.07	.05	.04
926-4962	10TCC-Q68	68.0	.18	.15	.07	.05	.04
926-4969	10TCC-Q75	75.0	.18	.15	.07	.05	.04
926-4974	10TCC-T10	100.0	.18	.15	.09	.06	.04
926-4976	10TCC-T12	120.0	.18	.15	.09	.06	.04
926-4979	10TCC-T15	150.0	.18	.15	.11	.08	.05
926-4985	10TCC-T22	220.0	.37	.30	.21	.14	.10
926-4990	10TCC-T27	270.0	.47	.33	.24	.16	.11

SERIES 10TCU N750 CERAMICS. Negative temperature coefficient capacitors with a negative change of 750 parts per million per degree Centigrade. All are rated 1000 WVDC Tolerance, ±5%. Av. shpg. wt., 3 oz.

926-5153	10TCU-V50	5	.18	.15	.06	.04	.03
926-5055	10TCU-Q10	10	.18	.15	.06	.04	.03
926-5060	10TCU-Q15	15	.18	.15	.06	.04	.03
926-5065	10TCU-Q20	20	.18	.15	.06	.04	.03
926-5067	10TCU-Q22	22	.18	.15	.06	.04	.03
926-5070	10TCU-Q25	25	.18	.15	.06	.04	.03
926-5075	10TCU-Q33	33	.18	.15	.06	.04	.03
926-5084	10TCU-Q47	47	.18	.15	.06	.04	.03
926-5095	10TCU-Q68	68	.18	.15	.06	.04	.03
926-5105	10TCU-Q75	75	.18	.15	.06	.04	.03
926-5110	10TCU-T10	100	.18	.15	.07	.05	.04
926-5115	10TCU-T15	150	.18	.15	.07	.05	.04
926-5120	10TCU-T20	200	.18	.15	.09	.06	.04
926-5122	10TCU-T22	220	.18	.15	.09	.06	.04
926-5130	10TCU-T33	330	.18	.15	.11	.08	.05
926-5139	10TCU-T47	470	.26	.21	.15	.10	.07
926-5149	10TCU-T68	680	.41	.33	.24	.16	.11

HYPERCON CERAMIC DISCS

These ultraminiature ceramic discs are especially designed for use in solid-state circuits. Engineered for by-pass and coupling applications, but particularly well-suited for any low-voltage use where high capacitance and low power factor are important circuit considerations. Hypercons are superior to similar-capacitance electrolytics because of the Hypercon's low power factor. Capacity tolerance, +80% to −20%. Av shpg. wt. 1 oz.

Stock No.	Mfr's Type	μF	WVDC	EACH 1-49	EACH 50-Up	EA., Mult. of 100 Only 100-400	500-900	1000-Up
926-0715	HY-350	.1	10	.18	.15	.102	.068	.045
926-0719	HY-355	.00	10	.18	.15	.106	.071	.047
926-0723	HY-360	.00	10	.23	.18	.12	.08	.053
926-0727	HY-365	.00	10	.30	.24	.169	.113	.075
926-0731	HY-370	.2	10	.34	.27	.189	.126	.084
926-0735	HY-375	.00	10	.41	.33	.248	.165	.11
926-0739	HY-380	.00	10	.45	.36	.318	.212	.141
926-0745	HY-420	.01	16	.18	.15	.086	.057	.038
926-0749	HY-425	.022	16	.18	.15	.086	.057	.038
926-0754	HY-430	.033	16	.18	.15	.086	.057	.038
926-0758	HY-435	.047	16	.18	.15	.102	.068	.045
926-0762	HY-440	.068	16	.19	.15	.113	.075	.05
926-0766	HY-450	.1	16	.19	.15	.113	.075	.05
926-0775	HY-470	.2	16	.34	.27	.192	.128	.085
926-0790	HY-510	.0047	25	.18	.15	.09	.06	.04
926-0796	HY-520	.01	25	.18	.15	.09	.06	.04
926-0801	HY-525	.022	25	.18	.15	.102	.068	.045
926-0803	HY-530	.033	25	.18	.15	.102	.068	.045
926-0805	HY-535	.047	25	.23	.18	.124	.083	.055
926-0807	HY-540	.068	25	.23	.18	.135	.09	.06
926-0812	HY-550	.1	25	.26	.21	.147	.098	.065

CERAMIC DISC CAPACITORS

Moistureproof-coating, ultra-compact ceramic disc capacitors in standard EIA and other popular values. Low self-inductance of silvered flat-plate design ensures high by-pass efficiency in critical circuits. Av., 1 oz.

SERIES 5GA—1000 WVDC ±20%. †μF.

Stock No.	Mfr's Type	Cap. in pF	EACH 1-49	EACH 50-99	EACH Multiples of 100 Only 100-400	500-900	1000-Up
926-4587	5GA-V50	5	.18	.15	.06	.04	.03
926-4594	5GA-V75	7.5	.18	.15	.06	.04	.03
926-4455	5GA-Q10	10	.18	.15	.06	.04	.03
926-4457	5GA-Q12	12	.18	.15	.06	.04	.03
926-4460	5GA-Q15	15	.18	.15	.06	.04	.03
926-4465	5GA-Q20	20	.18	.15	.06	.04	.03
926-4467	5GA-Q22	22	.18	.15	.06	.04	.03
926-4470	5GA-Q25	25	.18	.15	.06	.04	.03
926-4472	5GA-Q27	27	.18	.15	.06	.04	.03
926-4475	5GA-Q30	30	.18	.15	.06	.04	.03
926-4478	5GA-Q33	33	.18	.15	.06	.04	.03
926-4481	5GA-Q39	39	.18	.15	.06	.04	.03
926-4490	5GA-Q50	50	.18	.15	.06	.04	.03
926-4494	5GA-Q56	56	.18	.15	.06	.04	.03
926-4499	5GA-Q68	68	.18	.15	.06	.04	.03
926-4504	5GA-Q75	75	.18	.15	.06	.04	.03
926-4508	5GA-Q82	82	.18	.15	.06	.04	.03
926-4527	5GA-T10	100	.18	.15	.06	.04	.03
926-4529	5GA-T12	120	.18	.15	.06	.04	.03
926-4532	5GA-T15	150	.18	.15	.06	.04	.03
926-4535	5GA-T18	180	.18	.15	.06	.04	.03
926-4537	5GA-T20	200	.18	.15	.06	.04	.03
926-4539	5GA-T22	220	.18	.15	.06	.04	.03
926-4542	5GA-T25	250	.18	.15	.06	.04	.03
926-4544	5GA-T27	270	.18	.15	.06	.04	.03
926-4547	5GA-T30	300	.18	.15	.06	.04	.03
926-4550	5GA-T33	330	.18	.15	.06	.04	.03
926-4553	5GA-T36	360	.18	.15	.06	.04	.03
926-4556	5GA-T39	390	.18	.15	.06	.04	.03
926-4562	5GA-T47	470	.18	.15	.06	.04	.03
926-4565	5GA-T50	500	.18	.15	.06	.04	.03
926-4568	5GA-T56	560	.18	.15	.06	.04	.03
926-4572	5GA-T68	680	.18	.15	.06	.04	.03
926-4575	5GA-T75	750	.18	.15	.06	.04	.03
926-4579	5GA-T82	820	.18	.15	.06	.04	.03
926-4401	5GA-D10	†.001	.18	.15	.06	.04	.03
926-4403	5GA-D12	†.0012	.18	.15	.06	.04	.03
926-4406	5GA-D15	†.0015	.18	.15	.06	.04	.03
926-4409	5GA-D18	†.0018	.18	.15	.06	.04	.03
926-4411	5GA-D20	†.0020	.18	.15	.06	.04	.03
926-4413	5GA-D22	†.0022	.18	.15	.06	.04	.03
926-4416	5GA-D25	†.0025	.18	.15	.06	.04	.03
926-4418	5GA-D27	†.0027	.18	.15	.06	.04	.03
926-4421	5GA-D30	†.0030	.18	.15	.06	.04	.03
926-4424	5GA-D33	†.0033	.18	.15	.06	.04	.03
926-4430	5GA-D39	†.0039	.18	.15	.06	.04	.03
926-4438	5GA-D47	†.0047	.18	.15	.07	.05	.03
926-4441	5GA-D50	†.005	.18	.15	.07	.05	.03
926-4517	5GA-S10	†.01	.18	.15	.08	.05	.04
926-4522	5GA-S20	†.02	.19	.15	.12	.08	.05

SERIES 5HK—1000 WVDC —20%, +80%. ‡500 WVDC.

Stock No.	Mfr's Type	μF	EACH 1-49	EACH 50-99	EA., Multiples of 100 Only 100-400	500-900	1000-Up
926-4610	5HK-D10	.001	.18	.15	.06	.04	.03
926-4615	5HK-D15	.0015	.18	.15	.06	.04	.03
926-4620	5HK-D20	.002	.18	.15	.06	.04	.03
926-4622	5HK-D22	.0022	.18	.15	.06	.04	.03
926-4633	5HK-D33	.0033	.18	.15	.06	.04	.03
926-4647	5HK-D47	.0047	.18	.15	.06	.04	.03
926-4650	5HK-D50	.005	.18	.15	.06	.04	.03
926-4668	5HK-D68	.0068	.18	.16	.07	.05	.03
926-4680	5HK-S10	.010	.18	.15	.07	.05	.03
926-4685	‡5HK-S15	.015	.18	.15	.07	.05	.03
926-4690	‡5HK-S20	.020	.18	.15	.08	.06	.04
926-4695	‡5HK-S25	.025	.18	.15	.09	.06	.04
926-4705	‡5HK-S40	.040	.33	.27	.20	.13	.09
926-4715	‡5HK-S50	.050	.33	.27	.21	.14	.09
926-4675	‡5HK-P10	.1	.67	.54	.40	.27	.18

SERIES BL BUFFER CERAMICS—2000 WVDC ±20%

Stock No.	Mfr's Type	μF	EACH 1-49	EACH 50-99	EA., Multiples of 100 Only 100-400	500-Up
926-0100	BL-D10	.001	.26	.21	.15	.13
926-0107	BL-D50	.005	.26	.21	.15	.13
926-0113	BL-S10	.01	.33	.27	.20	.17

Specify Stock No., Mfr's Type and Capacitance When Ordering

Cornell-Dubilier Capacitors

HERMETICALLY SEALED AC DYKANOL® CAPACITORS

236 VOLTS AC RATING

Stock No.	Mfr's Type	Cap. µF	Size LxWxH	EACH 1-24	25-99	100-Up
43 E 4321	KTL23P206Q	20	2 29/32 x 1 29/32 x 4 1/4"	7.76	3.91	3.03
43 E 4324	KTL23P256Q	25	2 29/32 x 1 29/32 x 5 1/4"	9.16	4.61	3.57
43 E 4325	KTL23P306Q	30	2 29/32 x 1 29/32 x 6 1/4"	10.91	5.48	4.25
43 E 4326	KBL23P356Q	35	3 21/32 x 1 31/32 x 5 3/4"	12.66	6.36	4.92
43 E 4327	KBL23P406Q	40	3 21/32 x 1 31/32 x 6 1/4"	14.59	7.32	5.66
43 E 4328	KBL23P506Q	50	3 21/32 x 1 31/32 x 8"	18.40	9.23	7.14

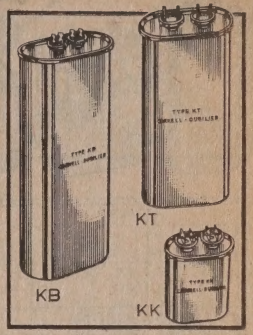
370 VOLTS AC RATING

Stock No.	Mfr's Type	Cap. µF	Size LxWxH	EACH 1-24	25-99	100-Up
43 E 4300	KKL37P205Q	2	2 3/16 x 1 5/16 x 2 1/16"	2.58	1.32	1.03
43 E 4301	KKL37P305Q	3	2 3/16 x 1 5/16 x 2 1/16"	2.86	1.46	1.14
43 E 4302	KKL37P405Q	4	2 3/16 x 1 5/16 x 2 5/16"	3.21	1.64	1.28
43 E 4303	KKL37P505Q	5	2 3/16 x 1 5/16 x 2 3/4"	3.56	1.81	1.41
43 E 4350	KKL37P755Q	7.5	2 3/16 x 1 5/16 x 3 3/4"	4.30	2.18	1.70
43 E 4351	KTL37P106Q	10	2 29/32 x 1 29/32 x 3 1/2"	5.21	2.63	2.05
43 E 4352	KTL37P156Q	15	2 29/32 x 1 29/32 x 4 3/4"	6.71	3.39	2.63
43 E 4353	KTL37P1755Q	17.5	2 29/32 x 1 29/32 x 5 1/4"	7.59	3.82	2.96
43 E 4354	KTL37P206Q	20	2 29/32 x 1 29/32 x 5 3/4"	8.64	4.35	3.37
43 E 4355	KTL37P256Q	25	2 29/32 x 1 29/32 x 7 3/4"	10.04	5.05	3.91
43 E 4356	KBL37P306Q	30	3 21/32 x 1 31/32 x 6 3/4"	11.79	5.92	4.58
43 E 4357	KBL37P356Q	35	3 21/32 x 1 31/32 x 8"	13.71	6.89	5.33
43 E 4358	KNL37P406Q*	40	4 9/16 x 2 7/8 x 5 3/16"	15.85	7.98	6.18
43 E 4359	KNL37P456Q*	45	4 9/16 x 2 7/8 x 5 3/4"	17.92	9.01	6.97
43 E 4360	KNL37P506Q*	50	4 9/16 x 2 7/8 x 6 1/4"	19.74	9.92	7.67

440 VOLTS AC RATING

Stock No.	Mfr's Type	Cap. µF	Size LxWxH	EACH 1-24	25-99	100-Up
43 E 4361	KKL44P205Q	2	2 3/16 x 1 5/16 x 2 1/16"	3.35	1.71	1.33
43 E 4362	KKL44P305Q	3	2 3/16 x 1 5/16 x 2 3/4"	3.56	1.81	1.41
43 E 4363	KKL44P405Q	4	2 3/16 x 1 5/16 x 3 1/8"	3.95	2.00	1.56
43 E 4364	KKL44P505Q	5	2 3/16 x 1 5/16 x 3 3/4"	4.93	2.49	1.94
43 E 4365	KTL44P755Q	7.5	2 29/32 x 1 29/32 x 4 1/4"	6.36	3.21	2.49
43 E 4366	KTL44P106Q	10	2 29/32 x 1 29/32 x 4 1/4"	6.68	3.37	2.61
43 E 4367	KTL44P156Q	15	2 29/32 x 1 29/32 x 6 3/4"	9.76	4.91	3.80
43 E 4368	KBL44P206Q	20	3 21/32 x 1 31/32 x 6 1/4"	12.31	6.19	4.79
43 E 4369	KNL44P306Q*	30	4 9/16 x 2 7/8 x 5 3/16"	15.92	8.01	6.20
43 E 4370	KNL44P506Q*	50	4 9/16 x 2 7/8 x 8 3/4"	26.98	13.54	10.47

- One-Piece Drawn Seamless Case
- Minimum Leakage
- Vinyl Paint Finish
- Welded Terminals



Motor-run capacitors designed for continuous AC duty with air conditioner motors, refrigerators, fans, blowers, business machines. Excellent for general purpose filtering, blocking power factor correction and similar applications. All types meet National Electrical Manufacturers' Association Standards set for AC capacitors.

Exclusive "Dykanol" impregnant

Maintains constant rated capacitance over entire operating temperature. One-piece drawn case is seamless and leakproof, hermetically sealed to prevent moisture or other contaminants affecting impregnant or capacitor performance.

Rugged welded terminal assembly

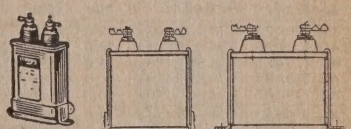
Provide vibration and leakage-proof connections; has phenolic cups and quick-connect terminals on cover, hermetically sealed to case. Quick-connect terminals accept standard female connectors; also have 3/32" hole for soldering wire leads directly to terminal. Leakage currents are reduced up to 80% through improved design and construction.

Cases are vinyl-painted

Painted to fight corrosion and are recognized under Component Program of Underwriter's Laboratories, Inc. Voltage ratings listed in table are measured at 60 Hz AC. Operating temperature: —30°C to +55°C (maximum case temperature, +70°C). Capacitance tolerance ±10%. All types listed have oval cases except *rectangular. Av. shpg. wt., 2 lbs.

TYPE CP70 CAPACITORS AND BRACKETS

Oil-filled paper capacitors designed for power supply, filter applications. Meet MIL-C-25C specifications as shown. Tolerance, ±10%. Terminals have ceramic pillar insulators. The hermetically sealed metal cases have soldered seams. Operating temp range, —55° C to +85° C. Dual marked with MIL No. and industrial CDE Type No. Brackets must be ordered with capacitors to obtain prices shown in table. Order the MIL CP07F Footed Bracket (sold in pairs) to get equivalent of CDE's capacitor Type TJH; Type TJU (sold singly) is universal bracket. All listings are Characteristic F, commercial type T-; except *Characteristic E, TCO-. **Contact Allied for prices on quantities of 500-999 or on brackets alone.** Shpg. wt., 4 oz.



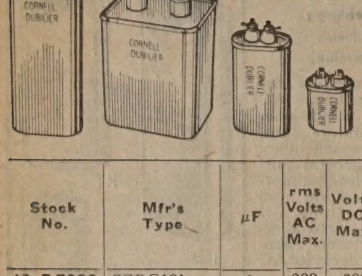
With TJU Bracket — With CP07S (TJH) Bracket — With CP07F (TJL) Bracket

1000 WVDC Shpg. wts., 5 oz. to 2 lbs.

Stock No.	MIL No. CP70E1-	Type T-	µF	Size (In.)	EACH 1-9	10-24	25-49	50-99	100-499	CAPACITOR MOUNTING BRACKETS Pr. of TJL Brackets Stock No.	MIL CP07F	Pr. of TJH Brackets Stock No.	PER PAIR	(One) Universal Bracket Stock No.	Type TJU	EA.
43 E 8973	EG504K1	10005X*	.5	1 1/16 x 1 1/16 x 2 1/4	5.54	4.07	3.14	2.59	2.32	43 E 8450	A2	43 E 8475	.32	43 E 8967	18402	.32
43 E 8974	FG105K1	10010	1.0	1 1/16 x 1 1/16 x 2 1/4	5.87	4.31	3.33	2.74	2.45	43 E 8450	A2	43 E 8475	.32	43 E 8967	18402	.32
43 E 8975	FG205K1	10020	2.0	1 1/16 x 1 1/16 x 3 7/8	6.34	4.65	3.59	2.97	2.64	43 E 9051	A5	43 E 9054	.32	43 E 8967	18402	.32
43 E 8977	FG405K1	10040	4.0	2 1/2 x 1 3/16 x 4 3/4	7.35	5.38	4.17	3.43	3.06	43 E 8455	B6	43 E 8480	.32	43 E 8971	18403	.32
43 E 8978	FG805K1	10080X	8.0	3 3/4 x 1 3/4 x 3 7/8	9.69	7.11	5.49	4.53	4.03	43 E 8459	D2	43 E 8484	.54	43 E 9057	18405	.32
43 E 8979	FG106K1	10100	10.0	3 3/4 x 1 3/4 x 4 3/4	10.98	8.05	6.23	5.13	4.57	43 E 8440	D5	43 E 8487	.54	43 E 9057	18405	.32
43 E 8980	FG126K1	10120X	12.0	3 3/4 x 2 1/4 x 4 1/2	12.82	9.40	7.26	5.99	5.34	43 E 8462	E4	43 E 8488	.54	43 E 9058	18406	.32
43 E 8981	FG156K1	10150	15.0	3 3/4 x 2 1/2 x 4 3/4	15.48	11.35	8.77	7.23	6.46	43 E 9053	F1	43 E 9056	1.16	43 E 9059	18407	.32
2000 WVDC (†2500 WVDC) Shpg. wts., 8 oz. to 6 lbs.										**CAPACITOR MOUNTING BRACKETS**						
43 E 8982	EK104K1†	25001X*	.1	2 1/2 x 1 3/16 x 2 1/2	7.67	5.62	4.35	3.58	3.19	43 E 9847	B1	43 E 9856	.32	43 E 8971	18403	.32
43 E 8983	EJ504K1	20005X*	.5	2 1/2 x 1 3/16 x 2 7/8	8.35	6.13	4.74	3.90	3.48	43 E 9843	B2	43 E 9851	.32	43 E 8971	18403	.32
43 E 8984	FJ105K1	20010X	1.0	2 1/2 x 1 3/16 x 3 1/2	8.14	5.97	4.61	3.81	3.40	43 E 8954	B3	43 E 8966	.32	43 E 8971	18403	.32
43 E 8985	FJ205K1	20020X	2.0	3 3/4 x 1 1/4 x 4 1/4	9.97	7.32	5.65	4.66	4.15	43 E 8457	C3	43 E 8482	.32	43 E 8972	18404	.32
43 E 8986	FJ405K1	20040	4.0	3 3/4 x 2 1/4 x 3 7/8	12.60	9.24	7.14	5.88	5.26	43 E 9844	E3	43 E 9852	.54	43 E 9058	18406	.32
43 E 8987	FJ805K1	20080X	8.0	3 3/4 x 3 3/16 x 5 1/8	19.44	14.26	11.02	9.08	8.10	43 E 9845	G3	43 E 9854	1.16	43 E 9060	18408	.54
43 E 8988	FJ106K1	20100	10.0	4 9/16 x 3 3/4 x 4 3/4	22.61	16.59	12.82	10.55	9.42	43 E 8469	J3	43 E 8495	1.16	43 E 9061	18409	1.16
43 E 8989	FJ126K1	20120	12.0	4 9/16 x 3 3/4 x 5 1/2	26.32	19.30	14.92	12.29	10.97	43 E 9846	J5	43 E 9855	1.16	43 E 9061	18409	1.16
3000 WVDC Shpg. wts., 8 oz. to 5 lbs.										**CAPACITOR MOUNTING BRACKETS**						
43 E 8990	FL104K1	30001X	.1	2 1/2 x 1 3/16 x 2 1/2	10.08	7.39	5.71	4.71	4.20	43 E 9847	B1	43 E 9856	.32	43 E 8971	18403	.32
43 E 8991	FL254K1	300025X	.25	2 1/2 x 1 3/16 x 2 7/8	11.23	8.25	6.37	5.25	4.68	43 E 9843	B2	43 E 9858	.32	43 E 8971	18403	.32
43 E 8992	FL504K1	30005X	.5	2 1/2 x 1 3/16 x 4 1/4	12.06	8.85	6.84	5.63	5.03	43 E 9848	B5	43 E 9859	.32	43 E 8971	18403	.32
43 E 8993	FL105K1	30010	1.0	3 3/4 x 2 1/4 x 3 7/8	14.37	10.54	8.14	6.71	5.79	43 E 9844	E3	43 E 9852	.54	43 E 9058	18406	.32
43 E 8994	FL205K1	30020X	2.0	3 3/4 x 3 3/16 x 4 1/2	18.58	13.62	10.53	8.68	7.74	43 E 9849	G1	43 E 9860	1.16	43 E 9060	18408	.54
43 E 8995	FL405K1	30040	4.0	4 9/16 x 3 3/4 x 4 3/4	25.89	18.99	14.67	12.09	10.79	43 E 8469	J3	43 E 8495	1.16	43 E 9061	18409	1.16
4000 WVDC Shpg. wts., 4 lbs. to 8½ lbs.										**CAPACITOR MOUNTING BRACKETS**						
43 E 8996	FM105K1	40010	1.0	3 3/4 x 2 1/4 x 5 1/8	25.03	13.26	10.25	8.44	7.54	43 E 8464	E6	43 E 8490	.54	43 E 9058	18406	.32
43 E 8997	FM205K1	40020	2.0	4 9/16 x 3 3/4 x 5 1/8	24.05	17.64	13.63	11.22	10.02	43 E 8470	J4	43 E 8496	1.16	43 E 9061	18409	1.16
43 E 8998	FM405K1	40040X	4.0	4 9/16 x 3 3/4 x 8 1/2	46.87	34.38	26.57	21.88	19.54	43 E 9850	J10	43 E 9861	1.16	43 E 9061	18409	1.16

Cornell-Dubilier Capacitors

CAPACITORS FOR SCR COMMUTATION APPLICATIONS



Reliable oil-filled capacitors, primarily designed for breadboard prototype work in specialized silicon controlled rectifier commutation and other similar square-wave voltage applications. Precision-made capacitors have low inductance and minimum equivalent series resistance; internal connections carry high currents frequently encountered in operation. Paint finish on cases increases emissivity and holds dielectric temperature increase to a minimum.

Oil dielectric maintains nominal (25°C) capacity within 2.5% over temperature range of —55°C to 80°C. Table below is based on 50 microseconds current pulse width. In no case should maximum voltage, current, ambient and case temperatures be exceeded. Capacitors are oil-impregnated paper, except *metallized paper and †polycarbonate. They have oval cases, except §rectangular. ‡Max. rms VA at maximum ambient and case temps. Av. Wt., 5 lbs.

Stock No.	Mfr's Type	μF	rms Volts AC Max.	Volts DC Max.	Size (Inches (WxDxH)	Bracket Key	Max. rms (Amps) Ambient Temperature 80° C Case Temperature 87° C	Max. rms (Amps) Ambient Temperature 60° C Case Temperature 80° C	EACH 1-9	10-24	25-49	50-99	100-999
43 E 7000	SCRG101	3	200	200	2 5/32x1 5/16x2 1/16	A	3.8	8.9	8.60	5.38	3.87	3.01	2.58
43 E 7001	SCRG102	5	200	200	2 5/32x1 5/16x2 9/16	D	5.5	12.8	9.40	5.88	4.23	3.29	2.82
43 E 7002	SCRG103	10	200	200	2 5/32x1 5/16x3 3/16	C	9.4	22.1	11.04	6.90	4.97	3.86	3.31
43 E 7003	SCRG105	20	200	200	2 11/16x1 9/16x4 1/2	H	16.1	37.7	14.56	9.10	6.55	5.10	4.37
43 E 7004	SCRG110	2	300	400	2 5/32x1 5/16x2 1/16	A	3.1	7.3	8.52	5.33	3.83	2.98	2.56
43 E 7005	SCRG114	15	300	400	2 29/32x1 29/32x4 3/4	L	15.1	35.4	17.28	10.80	7.78	6.05	5.18
43 E 7006	SCRG115	20	300	400	2 29/32x1 29/32x6 1/4	M	20.0	46.9	20.48	12.80	9.22	7.17	6.14
43 E 7007	SCRG116	30	300	400	3 21/32x1 31/32x6 3/4	O	27.8	50.0	27.52	17.20	12.38	9.63	8.26
43 E 7012	SCRG120	2	400	600	2 5/32x1 5/16x2 5/16	J	3.3	7.7	8.92	5.58	4.01	3.12	2.68
43 E 7013	SCRG121	3	400	600	2 5/32x1 5/16x2 13/16	G	4.4	10.4	9.92	6.20	4.46	3.47	2.98
43 E 7014	SCRG122	5	400	600	2 5/32x1 5/16x3 13/16	C	6.7	15.6	11.12	6.95	5.00	3.89	3.34
43 E 7015	SCRG123	10	400	600	2 29/32x1 29/32x4 1/4	K	11.7	27.3	15.04	9.40	6.77	5.26	4.57
43 E 7016	SCRG124	15	400	600	2 29/32x1 29/32x5 3/4	P	16.6	39.0	19.00	11.88	8.55	6.65	5.70
43 E 7017	SCRG125	20	400	600	3 21/32x1 31/32x5 3/4	P	21.0	49.2	22.96	14.35	10.33	8.04	6.89
43 E 7018	SCRG131	1	500	1000	2 5/32x1 5/16x2 1/16	A	2.2	5.1	8.32	5.20	3.74	2.91	2.50
43 E 7019	SCRG132	2	500	1000	2 5/32x1 5/16x3 1/16	B	3.8	8.9	9.36	5.85	4.21	3.28	2.81
43 E 7020	SCRG133	3	500	1000	2 5/32x1 5/16x3 13/16	C	5.2	12.1	10.24	6.40	4.61	3.58	3.07
43 E 7021	SCRG134	5	500	1000	2 11/16x1 9/16x4 1/4	K	7.8	18.3	12.20	7.63	5.49	4.27	3.66
43 E 7022	SCRG142	1	700	1500	2 5/32x1 5/16x3 1/16	B	2.7	6.3	9.20	5.75	4.14	3.22	2.76
43 E 7023	SCRG143	2	700	1500	2 11/16x1 9/16x3 7/8	C	4.7	11.0	10.92	6.83	4.91	3.82	3.28
43 E 7024	SCRG146§	10	700	1500	4 9/16x2 27/32x5 3/16	R	15.9	37.3	29.60	18.50	13.32	10.36	8.88
43 E 7025	SCRG152	.50	800	2000	2 5/32x1 5/16x2 9/16	D	1.7	4.0	9.04	5.66	4.07	3.17	2.71
43 E 7026	SCRG153	1	800	2000	2 5/32x1 5/16x3 7/16	E	2.8	6.6	9.60	6.00	4.32	3.36	2.88
43 E 7027	SCRG155	3	800	2000	2 29/32x1 29/32x4 3/4	L	6.8	15.8	13.84	8.65	6.23	4.84	4.15
43 E 7028	SCRG156	.5	800	2000	3 21/32x1 31/32x6 1/4	M	10.9	25.6	18.20	11.38	8.19	6.37	5.46
43 E 7029	SCRG164†	20	330	600	3 21/32x1 31/32x6		50.0	50.0	58.60	36.65	26.40	20.50	17.60
43 E 9477	KMSCR103§	10.0	165	200	3 3/4x1 1/4x4 1/4	X	22.0	39.5	19.80	12.35	8.91	6.93	5.94
43 E 9478	KMSCR104§	20.0	165	200	3 3/4x1 1/4x4 1/2	T	38.0	43.1	27.72	17.29	12.46	9.70	8.31
43 E 9483	KMSCR108§	5.0	330	600	3 3/4x1 1/4x4 3/4	S	15.8	28.4	19.60	12.24	8.82	6.86	5.88
43 E 9484	KMSCR109§	10.0	330	600	3 3/4x2 1/4x4 1/2	T	25.3	42.9	27.72	17.29	12.46	9.70	8.31
43 E 9485	KMSCR110§	20.0	330	600	3 3/4x3 3/16x5 1/2	Y	43.0	43.0	39.40	24.61	17.74	13.79	11.82
43 E 9490	KMSCR114§	2.0	700	2000	3 3/4x1 1/4x4 3/4	S	10.7	18.3	19.52	12.20	8.79	6.84	5.86
43 E 9491	KMSCR115§	3.0	700	2000	3 3/4x2 1/4x4 1/2	T	14.5	25.3	27.72	17.29	12.46	9.70	8.31
43 E 9492	KMSCR116§	5.0	700	2000	3 3/4x3 3/16x5 1/8	U	22.1	36.3	32.72	20.42	14.71	11.46	9.83
43 E 9493	KMSCR117§	10.0	700	2000	4 9/16x3 3/4x6	V	36.3	43.0	44.24	27.63	19.92	15.49	13.28
43 E 9494	SCR2025*	25.0	120	200	2 11/16x1 9/16x2 1/8	F	4.7	12.0	25.28	15.79	11.38	8.84	7.59
43 E 9495	SCR2050*	50.0	120	200	2 11/16x1 9/16x2 7/8	G	4.7	12.0	32.40	20.00	14.40	11.20	9.60
43 E 9496	SCR2100*	100.0	120	200	3 21/32x1 31/32x3 1/8	N	13.0	20.0	50.00	31.25	22.25	17.50	15.00
43 E 9497	SCR2125*	125.0	120	200	3 21/32x1 31/32x3 7/8	Z	16.3	20.0	54.08	33.80	24.34	18.93	16.23
43 E 9499	SCR20010†§	10.0	700	2000	4 9/16x3 3/4x5 1/8	W	43.0	43.0	107.60	67.40	48.50	37.70	32.30

TYPE DYR PAPER-OIL "BATH-TUB" CAPACITORS

For severe heat and humidity conditions. Rugged "bathtub" type metal shells; solder terminals. Capacity tolerance: single section, ±10%; others +20%, —10%. 600 WVDC, except *1000 volts. Satisfy MIL-C-25A test requirements. Similar to JAN CP53. Dual section units have common case. Temperature range: from —55°C to +85°C. Av. wt., 5 oz.

Stock No.	Type DYR-	μF	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
43 E 4621	6010	.1	2.55	1.70	1.49	1.15	1.03	.94
43 E 4622	6025	.25	2.59	1.73	1.51	1.16	1.04	.95
43 E 4623	6050	.5	2.89	1.93	1.68	1.30	1.15	1.06
43 E 4624	6100	1.0	3.45	2.30	2.01	1.55	1.38	1.26
43 E 4625	6200	2.0	4.50	3.00	2.62	2.03	1.80	1.65
43 E 4626	60055	.05-.05	3.41	2.28	1.99	1.54	1.36	1.25
43 E 4627	6011J	.1-.1	3.53	2.35	2.06	1.59	1.41	1.30
43 E 4628	6022	.25-.25	3.83	2.55	2.24	1.73	1.53	1.40
43 E 4629	6055	.5-.5	4.35	2.90	2.54	1.96	1.74	1.60
43 E 4630	6110	1.0-1.0	5.18	3.45	3.03	2.33	2.08	1.90
43 E 4631	6111	.1-.1-.1	4.09	2.73	2.39	1.84	1.64	1.50
43 E 4602	10005*	.05	2.48	1.65	1.44	1.11	.99	.91
43 E 4603	10010*	.1	2.59	1.73	1.51	1.16	1.04	.95
43 E 4615	10025*	.25	2.81	1.86	1.64	1.26	1.13	1.03
43 E 4616	10050*	.5	3.04	2.03	1.78	1.36	1.21	1.11
43 E 4604	10100*	1.0	4.05	2.70	2.36	1.83	1.63	1.49
43 E 4607	10055*	.5-.5	5.48	3.65	3.20	2.46	2.19	2.01

CAPACITOR BRACKETS FOR ABOVE

New ruggedly constructed capacitor brackets designed for easy mounting. Provide firm hold on PC boards. Av. shpg. wt. 2 oz.

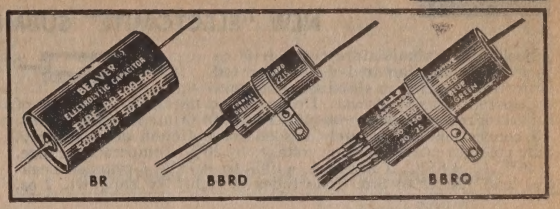
Stock No.	Mfr's Type	Key	Description	PER PAIR
43 E 7030	30434-32	A	Footed Oval	.25
43 E 7031	30434-48	B	Footed Oval	.25
43 E 7032	30434-60	C	Footed Oval	.25
43 E 7033	30434-40	D	Footed Oval	.25
43 E 7034	30434-54	E	Footed Oval	.25
43 E 7035	30434-34	F	Footed Oval	.25
43 E 7036	30434-44	G	Footed Oval	.25
43 E 7037	30434-62	H	Footed Oval	.25
43 E 7038	30434-36	J	Footed Oval	.25
43 E 7039	30828-67	K	Footed Oval	.25
43 E 7040	30828-75	L	Footed Oval	.25
43 E 7041	30828-99	M	Footed Oval	.25
43 E 7042	30828-49	N	Footed Oval	.25
43 E 7043	30828-107	O	Footed Oval	.25
43 E 7044	30828-91	P	Footed Oval	.25
43 E 7045	30879-46	R	Footed Rect.	.50
43 E 7046	30879-16	S	Footed Rect.	.32
43 E 7047	30879-25	T	Footed Rect.	.54
43 E 7048	30879-32	U	Footed Rect.	1.16
43 E 7049	30879-39	V	Footed Rect.	1.16
43 E 7050	30879-37	W	Footed Rect.	1.16
43 E 7051	30879-15	X	Footed Rect.	.32
43 E 7052	30879-33	Y	Footed Rect.	1.16
43 E 7053	30828-63	Z	Footed Oval	.40

Contact Allied for Prices on Quantities not Shown

Cornell-Dubilier "Blue Beaver" Capacitors

CDE

Tubular electrolytics for economy circuits. Sealed in aluminum cans, cardboard sleeves. Types BR and BBR have negative terminal grounded to can. Type BBR is miniature version of BR. Anodes and cathodes of BR and BBR units up to and including 150-V. types, are etched for use with junction rectifiers. BBRD, BBRT, BBRQ have 7" flexible vinyl-covered leads with color-coded positive, common neg. Operating temperature range is −20°C to +85°C up to 450 volts and to 65°C for higher voltages. Sizes are can-size only; add 1/16" to diameter and 3/16" to length for sleeve. Tolerance through 50 V is −10% to +150%; 51 V through 350 V, −10% to +100%; 351 V to 700 V, −10% to +50%. Specify Stock No., Mfr's Type and capacitance.



TYPES BR/*BBR SINGLE SECTION Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	µF	WV DC	Size Inches	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
755-0224	25-6*	25	6	3/8x1 1/16	.64	.51	.37	.29	.23	.20
755-0234	50-6*	50	6	3/8x1 1/16	.71	.57	.41	.32	.26	.22
755-0482	100-6	100	6	1/2x1 1/16	.86	.69	.50	.39	.31	.26
755-0510	250-6	250	6	1/2x1 1/16	.73	.81	.64	.50	.40	.34
755-0530	500-6	500	6	1/2x1 7/16	1.16	.93	.73	.57	.45	.38
755-0540	1000-6	1000	6	5/8x1 11/16	1.43	1.14	.89	.69	.55	.47
755-0552	2000-6	2000	6	3/4x2	1.73	1.38	1.04	.83	.67	.57
755-0483	100-15	100	15	1/2x1 1/16	.94	.75	.52	.41	.32	.28
755-0511	250-15	250	15	1/2x1 1/16	1.16	.93	.73	.57	.46	.40
755-0531	500-15	500	15	1/2x1 7/16	1.31	1.05	.82	.64	.51	.43
755-0541	1000-15	1000	15	5/8x1 11/16	1.76	1.41	1.07	.83	.67	.58
755-0553	2000-15	2000	15	3/4x2	2.10	1.68	1.26	.97	.78	.67
755-0561	3000-15	3000	15	7/8x2 3/16	2.96	2.37	1.82	1.42	1.14	.97
755-0566	4000-15	4000	15	7/8x2 3/4	3.75	3.00	2.25	1.75	1.40	1.20
755-0571	5000-15	5000	15	1x3	4.09	3.27	2.45	1.91	1.53	1.30
755-0214	10-25*	10	25	3/8x1 1/16	.75	.60	.42	.33	.26	.23
755-0220	20-25*	20	25	3/8x1 1/16	.75	.60	.43	.34	.27	.23
755-0228	25-25*	25	25	3/8x1 1/16	.75	.60	.44	.35	.28	.24
755-0455	50-25	50	25	1/2x1 1/16	.83	.66	.47	.37	.30	.25
755-0484	100-25	100	25	1/2x1 1/16	.98	.78	.57	.45	.36	.30
755-0512	250-25	250	25	1/2x1 7/16	1.28	1.02	.79	.62	.49	.42
755-0532	500-25	500	25	5/8x1 11/16	1.73	1.38	1.04	.83	.67	.57
755-0542	1000-25	1000	25	3/4x2	2.96	2.37	1.78	1.39	1.11	.95
755-0554	2000-25	2000	25	7/8x2 1/2	3.64	2.91	2.19	1.70	1.36	1.17
755-0209	5-50*	5	50	3/8x1 1/16	.74	.60	.42	.32	.26	.22
755-0216	10-50*	10	50	3/8x1 1/16	.75	.60	.42	.33	.27	.23
755-0425	25-50	25	50	1/2x1 1/16	.79	.63	.44	.35	.28	.24
755-0456	50-50	50	50	1/2x1 1/16	.90	.72	.51	.40	.32	.28
755-0485	100-50	100	50	1/2x1 7/16	1.01	.81	.59	.46	.37	.31
755-0495	150-50	150	50	5/8x1 7/16	1.13	.90	.66	.51	.41	.35
755-0513	250-50	250	50	3/4x1 7/16	1.31	1.05	.83	.64	.51	.44
755-0533	500-50	500	50	7/8x1 11/16	1.30	1.44	1.11	.86	.69	.59
755-0543	1000-50	1000	50	1x2 11/16	3.11	2.49	1.84	1.44	1.15	.98
755-0555	2000-50	2000	50	1 3/8x2 3/4	4.35	3.48	2.60	2.02	1.61	1.38
755-0205	4-150*	4	150	3/8x1 1/16	.75	.60	.43	.33	.27	.23
755-0370	8-150	8	150	1/2x1 1/16	.79	.63	.45	.34	.28	.24
755-0380	10-150	10	150	1/2x1 1/16	.79	.63	.46	.35	.29	.25
755-0389	12-150	12	150	1/2x1 1/16	.83	.66	.47	.37	.29	.25
755-0405	16-150	16	150	1/2x1 7/16	.86	.69	.49	.38	.31	.26
755-0415	20-150	20	150	1/2x1 7/16	.86	.69	.50	.39	.31	.27
755-0427	25-150	25	150	3/4x1 7/16	.94	.75	.53	.41	.33	.28
755-0435	30-150	30	150	3/4x1 7/16	.94	.75	.55	.43	.34	.29
755-0445	40-150	40	150	3/4x1 11/16	1.01	.81	.58	.45	.36	.31
755-0458	50-150	50	150	3/4x1 11/16	1.05	.84	.59	.46	.37	.32
755-0467	60-150	60	150	7/8x1 1/16	1.09	.87	.63	.49	.39	.34
755-0475	80-150	80	150	7/8x1 11/16	1.16	.93	.68	.54	.43	.36
755-0486	100-150	100	150	7/8x2	1.31	1.05	.74	.58	.46	.40
755-0496	150-150	150	150	1x2 3/16	1.39	1.11	.82	.63	.51	.44
755-0503	200-150	200	150	1x3	1.65	1.32	.98	.77	.62	.53
755-0518	300-150	300	150	1x3 13/16	2.21	1.77	1.35	1.04	.84	.72
755-0360	4-250	4	250	1/2x1 1/16	.79	.63	.47	.37	.30	.25
755-0371	8-250	8	250	1/2x1 7/16	.86	.69	.53	.41	.33	.28
755-0390	12-250	12	250	1/2x1 7/16	.94	.75	.57	.44	.35	.30
755-0406	16-250	16	250	3/4x1 7/16	.98	.78	.60	.47	.38	.32
755-0416	20-250	20	250	3/4x1 7/16	1.01	.81	.64	.49	.40	.34
755-0436	30-250	30	250	3/4x1 11/16	1.09	.87	.68	.53	.42	.36
755-0446	40-250	40	250	3/4x2	1.16	.93	.73	.57	.46	.40
755-0459	50-250	50	250	7/8x1 1/16	1.31	1.05	.80	.62	.50	.43
755-0468	60-250	60	250	1x1 11/16	1.35	1.08	.84	.65	.52	.44
755-0487	100-250	100	250	1x2 3/16	1.65	1.32	.96	.75	.60	.52
755-0361	4-350	4	350	5/8x1 1/16	.79	.63	.49	.38	.30	.26
755-0372	8-350	8	350	5/8x1 7/16	.90	.72	.55	.43	.34	.29
755-0391	12-350	12	350	3/4x1 7/16	.98	.78	.60	.47	.38	.32
755-0407	16-350	16	350	3/4x1 7/16	1.05	.84	.66	.51	.41	.35
755-0417	20-350	20	350	3/4x1 7/16	1.09	.87	.68	.52	.42	.36
755-0437	30-350	30	350	3/4x2	1.24	.99	.77	.60	.48	.41
755-0447	40-350	40	350	7/8x2	1.31	1.05	.81	.62	.51	.43
755-0469	60-350	60	350	1x2	1.46	1.17	.91	.71	.57	.48
755-0477	80-350	80	350	1x3	1.69	1.35	1.01	.78	.63	.54
755-0488	100-350	100	350	1x3	1.88	1.50	1.11	.86	.69	.59
755-0350	1-450	1	450	5/8x1 1/16	.83	.66	.51	.39	.32	.27
755-0355	2-450	2	450	5/8x1 1/16	.83	.66	.52	.40	.32	.28
755-0362	4-450	4	450	5/8x1 1/16	.86	.69	.53	.42	.34	.29
755-0373	8-450	8	450	3/4x1 7/16	.94	.75	.59	.46	.37	.31
755-0383	10-450	10	450	3/4x1 7/16	.98	.78	.62	.47	.38	.33
755-0392	12-450	12	450	3/4x1 7/16	1.01	.81	.64	.50	.40	.34
755-0408	16-450	16	450	3/4x1 11/16	1.05	.84	.65	.53	.42	.36
755-0418	20-450	20	450	7/8x1 11/16	1.16	.93	.73	.56	.45	.38
755-0438	30-450	30	450	1x2	1.28	1.02	.80	.62	.50	.42
755-0448	40-450	40	450	1x2 3/16	1.35	1.08	.83	.64	.52	.44
755-0470	60-450	60	450	1x3	1.76	1.41	1.08	.83	.67	.57
755-0478	80-450	80	450	1x3 9/16	2.10	1.68	1.26	.98	.79	.67
755-0489	100-450	100	450	1x3 13/16	2.40	1.92	1.48	1.15	.92	.80
755-0363	4-500	4	500	5/8x1 7/16	.90	.72	.56	.43	.35	.30
755-0374	8-500	8	500	3/4x1 7/16	.98	.78	.61	.47	.38	.33
755-0409	16-500	16	500	7/8x1 11/16	1.13	.90	.70	.54	.43	.37
755-0419	20-500	20	500	7/8x2	1.20	.96	.74	.58	.47	.40
755-0439	30-500	30	500	1x2	1.31	1.05	.82	.66	.52	.44
755-0376	8-700	8	700	15/16x3 3/16	2.18	1.74	1.31	1.02	.81	.70
755-0386	10-700	10	700	1 1/16x3 3/16	2.33	1.86	1.40	1.09	.87	.74
755-0411	16-700	16	700	1 1/16x4 5/16	2.81	2.25	1.69	1.31	1.05	.90

TYPE BBRD DUAL SECTION Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	µF	WV DC	Size Inches	EACH 1-9	10-24	25-49	50-99	100-Up
755-0245	115	10-10	50	3/4x1 1/16	1.05	.84	.72	.55	.44
755-0260	2215	20-20	150	3/4x1 11/16	1.24	.99	.79	.60	.48
755-0269	3315	30-30	150	7/8x1 11/16	1.35	1.08	.84	.64	.51
755-0275	4415	40-40	150	7/8x2	1.39	1.11	.87	.66	.53
755-0281	5315	50-30	150	7/8x2	1.46	1.17	.87	.67	.53
755-0283	5515	50-50	150	1x2	1.58	1.26	.87	.73	.59
755-0287	8415	80-40	150	1x2 3/16	1.69	1.35	.97	.77	.61
755-0249	0183.7	100-50	150	1x3	2.25	1.80	1.10	.83	.67
755-0292	101015	100-100	150	1x3	2.40	1.92	1.20	.91	.73
755-0262	2225	20-20	250	1x1 11/16	1.38	1.11	.92	.70	.56
755-0271	3325	30-30	250	1x2 3/16	1.68	1.35	1.02	.78	.62
755-0255	0286	150-100	300	1 3/8x4 3/16	3.93	3.15	2.40	1.84	1.47
755-0240	8D45	8-8	450	7/8x1 11/16	1.27	1.02	.91	.69	.55
755-0242	16D45	16-16	450	1x2 1/2	1.68	1.35	1.12	.85	.68
755-0265	2245	20-20	450	1x3	1.87	1.50	1.23	.94	.75
755-0278	4445	40-40	450	1x4 1/16	2.55	2.04	1.74	1.32	1.06

TYPE BBRT TRIPLE SECTION Av. shpg. wt., 6 oz.

Stock No.	Mfr's Type	µF	WV DC	Size Inches	EACH 1-9	10-24	25-49	50-99	100-Up
755-0320	33315	30-30-30	150	1x2	1.76	1.41	1.30	.99	.79
755-0223	42215	40-20-20	150	1x1 11/16	1.76	1.41	1.30	.99	.79
755-0225	43215	40-30-20	150	1x2	1.76	1.41	1.30	.99	.79
755-0327	44415	40-40-40	150	1x2 3/16	1.83	1.47	1.36	1.04	.83
755-0331	53215	50-30-20	150	1x3	1.83	1.47	1.31	1.00	.80
755-0335	84215	80-40-20	150	1x3	2.06	1.65	1.40	1.08	.86
755-0310	4215C	40-20, 20	150,25	1x1 11/16	1.61	1.29	1.24	.96	.76
755-0314	5315C	50-30, 20	150,25	1x1 11/16	1.76	1.41	1.30	.99	.79
755-0305	0185	40-40-40	300	1 1/8x3	3.45	2.76	1.71	1.30	1.04

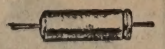
Allied offers fast, same-day shipment of industrial quantities at OEM price discounts. To assure the fastest and most accurate service, please specify manufacturer's type number, capacitance and stock number on each order. Depend on Allied for prompt off-the-shelf delivery in industrial quantities for all your electronic needs. Contact the nearest Allied Electronics facility for information on prices and delivery on quantities larger than shown. See page 3 for complete list of Allied offices, from coast-to-coast.

Standard CDE Products Available in Quantity at OEM Prices

Cornell-Dubilier Capacitors

NLW "ELECTOMITE" SUBMINIATURE ELECTROLYTIC CAPACITORS

"Electomite" subminiature electrolytic capacitors are manufactured of aluminum foil, hermetically sealed in aluminum cans with transparent plastic sleeves. Designed for use with a variety of transistorized equipment—mounts easily on printed circuit boards. All connections are securely welded for optimum dependability. Sure voltages exceed working voltages by 20%. Temperature range, −40°C to +85°C. Tolerance, −10% to +75%. Grounded negative lead. *Refer to Size Code Index at right. Av. shpg. wt., 2 oz.



SIZE CODE INDEX

Code*	Size	Code*	Size	Code*	Size
A	¼x1½"	H	⅜x⅝"	M	⅜x1¼"
B	¼x⅝"	J	⅜x¾"	N	⅜x1½"
C	5/16x⅝"	K	⅜x⅞"	.....	.....
F	5/16x¾"	L	⅜x1"	.....	.....

3 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3072	25	A	.64	.35	.27	.22	.18	.17
755-3122	75	C	.71	.39	.31	.25	.21	.20
755-3132	100	C	.71	.39	.31	.25	.21	.20
755-3171	200	F	.90	.50	.39	.31	.26	.25
755-3187	250	J	.94	.52	.40	.33	.27	.26
755-3195	300	J	.94	.52	.40	.33	.27	.26
755-3202	350	K	.98	.54	.42	.34	.28	.27
755-3212	450	K	1.01	.56	.44	.35	.29	.28
755-3218	500	L	1.01	.56	.44	.35	.29	.28
755-3228	1000	N	1.13	.65	.50	.39	.33	.32

6 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3047	10	A	.64	.35	.27	.22	.18	.17
755-3065	20	A	.64	.35	.27	.22	.18	.17
755-3083	30	A	.64	.35	.27	.22	.18	.17
755-3113	50	B	.71	.39	.31	.25	.21	.20
755-3133	100	C	.79	.45	.35	.28	.23	.22
755-3153	150	F	.94	.52	.40	.33	.27	.26
755-3188	250	K	.98	.54	.42	.34	.28	.27
755-3196	300	K	.98	.54	.42	.34	.28	.27
755-3219	500	M	1.05	.60	.46	.37	.31	.30
755-3224	800	N	1.13	.65	.50	.39	.33	.32

10 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3038	8	A	.64	.35	.27	.22	.18	.17
755-3114	50	C	.71	.39	.31	.25	.21	.20
755-3124	75	C	.90	.50	.39	.31	.26	.25
755-3144	125	F	.94	.52	.40	.33	.27	.26
755-3154	150	J	.98	.54	.42	.34	.28	.27
755-3183	225	K	1.01	.56	.44	.35	.29	.28

12 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3057	15	A	.64	.35	.27	.22	.18	.17
755-3075	25	A	.64	.35	.27	.22	.18	.17
755-3094	35	B	.64	.35	.27	.22	.18	.17
755-3135	100	F	.94	.52	.40	.33	.27	.26
755-3174	200	K	1.01	.56	.44	.35	.29	.28
755-3190	250	K	1.01	.56	.44	.35	.29	.28
755-3221	500	N	1.13	.65	.50	.39	.33	.32

16 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3019	4	A	.63	.35	.27	.22	.18	.17
755-3025	5	A	.63	.35	.27	.22	.18	.17
755-3050	10	A	.63	.35	.27	.22	.18	.17
755-3067	20	A	.63	.35	.27	.22	.18	.17
755-3076	25	B	.63	.35	.27	.22	.18	.17
755-3085	30	B	.71	.39	.31	.25	.21	.20
755-3106	40	C	.71	.39	.31	.25	.21	.20
755-3116	50	C	.71	.39	.31	.25	.21	.20
755-3136	100	F	.93	.52	.40	.33	.27	.26
755-3146	125	J	.93	.52	.40	.33	.27	.26
755-3156	150	J	.98	.54	.42	.34	.28	.27
755-3166	175	K	.98	.54	.42	.34	.28	.27
755-3175	200	K	1.01	.56	.44	.35	.29	.28
755-3191	250	L	1.01	.56	.44	.35	.29	.28
755-3199	300	M	1.05	.60	.46	.37	.31	.30
755-3209	400	N	1.13	.65	.50	.39	.33	.32
755-3215	450	N	1.20	.66	.51	.40	.34	.33

25 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3002	1	A	.63	.35	.27	.22	.18	.17
755-3008	2	A	.63	.35	.27	.22	.18	.17
755-3014	3	A	.63	.35	.27	.22	.18	.17
755-3026	5	A	.63	.35	.27	.22	.18	.17
755-3032	6	A	.63	.35	.27	.22	.18	.17
755-3041	8	A	.63	.35	.27	.22	.18	.17
755-3051	10	A	.63	.35	.27	.22	.18	.17
755-3059	15	B	.63	.35	.27	.22	.18	.17
755-3077	25	B	.71	.39	.31	.25	.21	.20
755-3086	30	C	.71	.39	.31	.25	.21	.20
755-3096	35	C	.71	.39	.31	.25	.21	.20
755-3107	40	C	.90	.50	.39	.31	.26	.25
755-3117	50	F	.90	.50	.39	.31	.26	.25
755-3127	75	J	.94	.52	.40	.33	.27	.26
755-3136	100	J	.97	.54	.42	.34	.28	.27
755-3157	150	L	1.01	.56	.44	.35	.29	.28
755-3176	200	M	1.08	.62	.48	.38	.32	.31
755-3192	250	N	1.12	.65	.50	.39	.33	.32

50 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3004	1	A	.63	.35	.27	.22	.18	.17
755-3010	2	A	.63	.35	.27	.22	.18	.17
755-3015	3	A	.63	.35	.27	.22	.18	.17
755-3021	4	A	.63	.35	.27	.22	.18	.17
755-3127	5	A	.63	.35	.27	.22	.18	.17
755-3033	6	A	.63	.35	.27	.22	.18	.17
755-3042	8	B	.63	.35	.27	.26	.18	.17
755-3052	10	B	.71	.39	.31	.25	.21	.20
755-3060	15	C	.71	.39	.31	.25	.21	.20
755-3069	20	C	.90	.50	.39	.31	.26	.25
755-3078	25	F	.90	.50	.39	.31	.26	.25
755-3087	30	H	.94	.52	.40	.33	.27	.26
755-3097	35	J	.94	.52	.40	.33	.27	.26
755-3108	40	J	.97	.54	.42	.34	.28	.27
755-3118	50	K	.97	.54	.42	.34	.28	.27
755-3128	75	L	1.01	.56	.44	.35	.29	.28
755-3138	100	M	1.05	.60	.46	.37	.31	.30
755-3148	125	N	1.12	.65	.50	.39	.33	.32

100 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3011	2	A	.71	.39	.31	.25	.21	.20
755-3028	5	C	.82	.48	.37	.29	.25	.24
755-3034	6	C	.90	.50	.39	.31	.26	.25
755-3043	8	H	.94	.52	.40	.33	.27	.26
755-3053	10	J	.94	.52	.40	.33	.27	.26
755-3070	20	L	1.01	.56	.44	.35	.29	.28
755-3109	40	N	1.12	.65	.50	.39	.33	.32

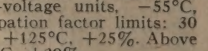
150 WVDC

Stock No.	µF	*	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
755-3006	1	A	.67	.38	.30	.24	.20	.19
755-3012	2	B	.71	.39	.31	.25	.21	.19
755-3017	3	C	.78	.45	.34	.27	.23	.22
755-3029	5	F	.90	.50	.39	.31	.26	.25
755-3044	8	J	.94	.52	.40	.33	.27	.26
755-3054	10	K	.97	.54	.42	.34	.28	.27
755-3062	15	M	1.01	.56	.44	.35	.29	.28

TYPE UHL EXTENDED TEMPERATURE RANGE CAPACITORS

Stock No.	Mfr's Type UHL-	µF	WV DC	Size L x Dia. In.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5077	560-5	560	5	⅜x1⅝	5.06	3.08	2.69	1.92	1.74	1.59
755-5086	820-5	820	5	⅜x2 3/16	5.45	3.30	2.90	2.06	1.88	1.71
755-5090	1000-5	1000	5	⅜x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5060	150-10	150	10	⅜x1 5/16	3.53	1.54	1.35	.96	.87	.80
755-5068	270-10	270	10	⅜x1⅜	4.95	3.00	2.62	1.87	1.71	1.56
755-5072	390-10	390	10	⅜x1⅝	5.06	3.08	2.69	1.92	1.74	1.59
755-5078	560-10	560	10	⅜x2 3/16	5.45	3.30	2.90	2.06	1.88	1.71
755-5082	680-10	680	10	⅜x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5033	33-40	33	40	⅜x1 5/16	2.53	1.54	1.35	.96	.87	.80
755-5048	68-40	68	40	⅜x1⅜	4.95	3.00	2.62	1.87	1.71	1.56
755-5054	100-40	100	40	⅜x1⅝	5.06	3.08	2.69	1.92	1.74	1.59
755-5064	180-40	180	40	⅜x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5022	15-75	15	75	⅜x1⅛	3.30	2.00	1.75	1.25	1.13	1.03
755-5035	33-75	33	75	⅜x1⅝	5.06	3.08	2.69	1.92	1.74	1.59
755-5043	47-75	37	75	⅜x2 3/16	5.45	3.30	2.90	2.06	1.88	1.71
755-5051	68-75	68	75	⅜x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5007	6-100	6	100	⅜x1⅜	2.37	1.44	1.25	.90	.82	.75
755-5015	12-100	12	100	⅜x1⅛	3.30	2.00	1.75	1.25	1.13	1.03
755-5027	22-100	22	100	⅜x1⅝	5.06	3.08	2.69	1.92	1.74	1.59
755-5036	33-100	33	100	⅜x2 3/16	5.45	3.30	2.90	2.06	1.88	1.71
755-5045	56-100	56	100	⅜x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5008	6-150	6	150	⅜x1 5/16	2.53	1.54	1.35	.96	.87	.80
755-5019	13-150	13	150	⅜x1⅜	4.95	3.00	2.62	1.87	1.71	1.56
755-5029	26-150	26	150	⅜x2 3/16	5.45	3.30	2.90	2.06	1.88	1.71
755-5039	39-150	39	150	⅜x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24
755-5004	3.3-200	3.3	200	⅜x1⅜	2.37	1.44	1.25	.90	.82	.75
755-5011	6.8-200	6.8	200	⅜x1⅛	3.30	2.00	1.75	1.25	1.13	1.03
755-5017	12-200	12	200	⅜x1⅝	5.06	3.08	2.62	1.92	1.74	1.59
755-5031	27-200	27	200	⅜x2 11/16	7.08	4.29	3.75	2.68	2.46	2.24

All-welded aluminum electrolytic capacitors for by-pass, filtering and coupling applications over a wide temperature range of −55° to +125°C (without derating voltage). Meets or exceeds established reliability specs of MIL-C-39018. Etched foil design replaces equivalent tantalums in case size and parameters, plus has greater capacitance per voltage range. All aluminum construction for minimum weight—ideal for airborne and space uses. Standard capacitance tolerance, −10%, +75%.



Can withstand 2000 hours of rated DC voltage at +125°C, with maximum capacitance change of only +15%. Also withstand prolonged periods of off-voltage storage without detrimental effects. Limits after 500 hours at 125°C: capacitance within 10% of initial measured value; DC leakage not more than 200% of initial requirement; dissipation factor not greater than 115% of initial requirement. May be operated and stored up to 80,000 feet without evidence of mechanical damage or electrolyte leakage. Meets or exceeds requirements of barometric pressure test per MIL-STD-202, Method 105.

Maximum capacitance change at temperature of −55°C is −30%; at +125°C, +25%. Average capacitance change; low-voltage units, −55°C, −20%; +125°C, +8%; high-voltage units, −55°C, −10%; +125°C, +8%. Maximum dissipation factor limits: 30 WVDC and below; at +25°C, +20%; at +125°C, +25%. Above 30 WVDC: at +25°C, +10%; at +125°C, +20%.

Withstand 1000 cycles (30 second surge, 5½ minute discharge) at +125°C. Capacitance remains within ±6% of initial value. Meets or exceeds requirements for vibration of 10-2000 cps at 15g (Method 204); shock of 50g, 11 msec (Method 205, Test Condition C) of MIL-STD-202B. Also moisture resistance test of MIL-STD-202, METHOD 106 (No polarizing voltage). Salt spray test (Method 101, Test Condition B per MIL-STD-202) shows no harmful corrosion on at least 90% of case area or terminals and no obliteration of markings. Wire leads. Av. shpg. wt., 4 oz.

Specify Stock No., Mfr's Type and Capacitance on All Orders

Dipped Silvered Mica Capacitors

CD E

SIZE CHART

Mfr's Type	Size (HxWxD)
CD6	.265x.135x.095"
CD7	.265x.260x.110" to .330x.310x.175"
CD10/CM04	.360x.330x.190" to .390x.380x.220"
CD15/CM05	.450x.360x.170" to .470x.400x.220"
CD19/CM06	.640x.510x.200" to .700x.580x.350"
CD30/CM07	.780x.860x.280" to .830x.920x.450"
CD42/CM08	1.420x.880x.310" to 1.470x.910x.450"

Oper. temperature range: —55 to +125°C without derating. Tolerance, ±5% or 0.5 pF, whichever is greater, except miniature types CD6 (minimum tolerance ±1 pF) and CD7 (minimum tolerance ±0.5 pF) which have ±2% tolerance. 500 WVDC, except *300 WVDC, †100 WVDC. Have 1¼" tinned brass wire leads, except CD10 which has copperweld leads. All units meet 10-2000 cycle vibration tests. Av. shpg. wt., 2 oz.
Military Types CM04, CM05, CM06, CM07 and CM08, corresponding to CD10, CD15, CD19, CD30 and CD42, respectively, available on Special Order.

INDUSTRIAL TYPES CD6, CD7, CD10

Stock No.	Mfr's Type	pF	EACH 1-24	25-99	100-499	500-999	1000-Up
755-0620	CD6CD030C03	3	.45	.23	.15	.11	.09
755-0624	CD6CD050C03	5	.45	.23	.15	.11	.09
755-0634	CD6CD100K03	10	.45	.23	.15	.11	.09
755-0638	CD6CD120C03	12	.52	.25	.16	.13	.11
755-0642	CD6CD180C03	18	.52	.25	.16	.13	.11
755-0645	CD6CD200J03	20	.52	.25	.16	.13	.11
755-0648	CD6CD220J03	22	.52	.25	.16	.13	.11
755-0652	CD6ED240J03	24	.56	.27	.17	.14	.11
755-0656	CD6ED270J03	27	.56	.27	.17	.14	.11
755-0659	CD6ED300J03	30	.56	.27	.17	.14	.11
755-0662	CD6ED330J03	33	.56	.28	.18	.14	.12
755-0665	CD6ED360J03	36	.56	.28	.18	.14	.12
755-0668	CD6ED390J03	39	.56	.28	.18	.14	.12
755-0671	CD6ED430J03	43	.56	.28	.18	.14	.12
755-0674	CD6ED470J03	47	.56	.28	.18	.14	.12
755-0680	CD6ED510G03	51	.90	.47	.30	.23	.19
755-0684	CD6ED560G03	56	.90	.47	.30	.23	.19
755-0688	CD6ED620G03	62	.90	.47	.30	.23	.19
755-0691	CD6ED680G03	68	.97	.48	.30	.24	.19
755-0692	CD6ED750G03	75	1.05	.52	.33	.26	.21
755-0650	CD6EC820G03*	82	1.01	.51	.33	.26	.21
755-0651	CD6EC910G03*	91	1.05	.53	.34	.27	.22
755-0702	CD6FC101G03*	100	1.05	.53	.34	.27	.22
755-0706	CD6FC111G03*	110	1.08	.55	.35	.27	.22
755-0710	CD6FC121G03*	120	1.08	.55	.35	.27	.22
755-0715	CD7CD131G03	130	1.12	.56	.36	.28	.23
755-0718	CD7CD151G03	150	1.12	.56	.36	.28	.23
755-0720	CD7CD161G03	160	1.16	.57	.36	.29	.23
755-0722	CD7CD181G03	180	1.16	.58	.37	.29	.23
755-0765	CD7FC201G03*	200	1.16	.58	.37	.29	.24
755-0767	CD7FC221G03*	220	1.20	.59	.38	.30	.24
755-0769	CD7FC241G03*	240	1.23	.63	.40	.31	.25
755-0771	CD7FC271G03*	270	1.38	.69	.44	.35	.28
755-0773	CD7FC301G03*	300	1.46	.73	.47	.37	.30
755-0737	CD7FA331G03†	330	1.53	.78	.50	.39	.41
755-0739	CD7FA361G03†	360	1.61	.80	.51	.40	.32
755-0741	CD7FA391G03†	390	1.65	.83	.53	.41	.33
755-0743	CD7FA431G03†	430	1.70	.85	.54	.43	.34
755-0745	CD7FA471G03†	470	1.75	.88	.56	.47	.35
755-0747	CD7FA511G03†	510	1.80	.90	.58	.45	.36
755-0750	CD7FA561G03†	560	1.83	.93	.59	.45	.37
755-0752	CD7FA621G03†	620	1.91	.95	.61	.48	.38
755-0754	CD7FA681G03†	680	2.40	1.20	.77	.60	.48
755-0756	CD7FA751G03†	750	2.58	1.30	.83	.65	.52
755-0758	CD7FA821G03†	820	2.70	1.35	.86	.68	.54
755-0760	CD7FA911G03†	910	2.81	1.40	.90	.70	.56
755-0725	CD7FA102G03†	1000	3.15	1.58	1.01	.79	.63
755-0727	CD7FA112G03†	1100	3.26	1 63	1.04	.71	.65
755-0729	CD7FA122G03†	1200	3.33	1.68	1.07	.84	.67
755-0731	CD7FA132G03†	1300	3.80	1.90	1.22	.95	.76
755-0733	CD7FA152G03†	1500	4.15	1.87	1.33	1.04	.83
755-0805	CD10CD050D03	5	.33	.19	.14	.12	.10
755-0808	CD10CD100J03	10	.33	.19	.14	.12	.10
755-0810	CD10CD120J03	12	.33	.19	.14	.12	.10
755-0812	CD10CD150J03	15	.33	.19	.14	.12	.10
755-0814	CD10CD180J03	18	.33	.19	.14	.12	.10
755-0835	CD10ED220J03	22	.30	.16	.12	.10	.08
755-0840	CD10ED240J03	24	.30	.16	.12	.10	.08
755-0850	CD10ED270J03	27	.30	.16	.12	.10	.08
755-0853	CD10ED300J03	30	.30	.16	.12	.10	.08
755-0855	CD10ED330J03	33	.30	.16	.12	.10	.08
755-0857	CD10ED390J03	39	.30	.16	.12	.10	.08
755-0860	CD10ED470J03	47	.33	.17	.13	.10	.09
755-0862	CD10ED510J03	51	.33	.17	.13	.10	.09
755-0864	CD10ED560J03	56	.33	.17	.13	.11	.09
755-0866	CD10ED620J03	62	.33	.17	.13	.11	.09
755-0868	CD10ED680J03	68	.33	.17	.13	.11	.09
755-0872	CD10ED820J03	82	.33	.18	.13	.11	.09
755-0818	CD10ED101J03	100	.33	.18	.13	.11	.09
755-0822	CD10ED121J03	120	.33	.18	.14	.11	.09
755-0826	CD10ED151J03	150	.37	.20	.15	.13	.10
755-0830	CD10ED181J03	180	.45	.23	.17	.15	.12
755-0832	CD10ED201J03	200	.45	.24	.18	.15	.12
755-0837	CD10ED221J03	220	.48	.25	.19	.16	.13
755-0842	CD10ED241J03	240	.48	.26	.20	.17	.14
755-0845	CD10ED251J03	250	.52	.27	.21	.17	.14

INDUSTRIAL TYPES CD15, CD19, CD30, CD42

Stock No.	Mfr's Type	pF	EACH 1-24	25-99	100-499	500-999	1000-Up
755-0905	CD15CD050K03	5	.30	.15	.11	.10	.08
755-0909	CD15CD100K03	10	.22	.12	.09	.08	.06
755-0912	CD15CD120K03	12	.22	.12	.09	.08	.06
755-0918	CD15CD180K03	18	.22	.12	.09	.08	.06
755-0923	CD15CD220J03	22	.26	.13	.10	.08	.07
755-0926	CD15ED240J03	24	.26	.13	.10	.08	.07
755-0928	CD15ED270J03	27	.26	.13	.10	.08	.07
755-0930	CD15ED300J03	30	.26	.13	.10	.08	.07
755-0932	CD15ED330J03	33	.26	.13	.10	.08	.07
755-0934	CD15ED360J03	36	.26	.13	.10	.08	.07
755-0936	CD15ED390J03	39	.26	.13	.10	.08	.07
755-0938	CD15ED470J03	47	.26	.13	.10	.08	.07
755-0940	CD15ED500J03	50	.26	.13	.10	.08	.07
755-0942	CD15ED510J03	51	.26	.13	.10	.08	.07
755-0944	CD15ED560J03	56	.26	.13	.10	.08	.07
755-0946	CD15ED620J03	62	.26	.13	.10	.08	.07
755-0948	CD15ED680J03	68	.26	.13	.10	.08	.07
755-0951	CD15ED750J03	75	.26	.13	.10	.08	.07
755-0953	CD15ED820J03	82	.26	.13	.10	.08	.07
755-0956	CD15FD101J03	100	.26	.13	.10	.08	.07
755-0960	CD15FD121J03	120	.26	.14	.11	.09	.07
755-0964	CD15FD151J03	150	.30	.15	.11	.09	.08
755-0973	CD15FD201J03	200	.30	.16	.12	.10	.08
755-0976	CD15FD221J03	220	.30	.16	.12	.10	.08
755-0979	CD15FD241J03	240	.30	.16	.12	.10	.09
755-0982	CD15FD271J03	270	.33	.18	.14	.11	.09
755-0985	CD15FD301J03	300	.37	.18	.14	.12	.10
755-0988	CD15FD331J03	330	.37	.20	.15	.12	.10
755-0991	CD15FD361J03	360	.41	.21	.16	.13	.11
755-0994	CD15FD391J03	390	.41	.21	.15	.13	.11
755-0997	CD15FD501J03	500	.48	.25	.19	.16	.13
755-0999	CD15FD511J03	510	.48	.25	.19	.16	.13
755-1030	CD19FD431J03	430	.33	.18	.14	.11	.09
755-1034	CD19FD471J03	470	.37	.20	.15	.13	.10
755-1038	CD19FD511J03	510	.37	.20	.15	.13	.10
755-1040	CD19FD561J03	560	.37	.20	.15	.13	.10
755-1042	CD19FD621J03	620	.41	.22	.17	.14	.11
755-1044	CD19FD681J03	680	.41	.22	.17	.14	.11
755-1046	CD19FD751J03	750	.41	.22	.17	.14	.11
755-1048	CD19FD821J03	820	.41	.22	.17	.14	.11
755-1051	CD19FD911J03	910	.48	.26	.20	.16	.13
755-1005	CD19FD102J03	1000	.52	.28	.21	.18	.14
755-1007	CD19FD112J03	1100	.56	.30	.23	.19	.15
755-1009	CD19FD122J03	1200	.56	.30	.23	.19	.15
755-1011	CD19FD152J03	1500	.67	.36	.27	.23	.18
755-1013	CD19FD182J03	1800	.75	.40	.30	.25	.20
755-1015	CD19FD202J03	2000	.78	.42	.32	.26	.21
755-1017	CD19FD222J03	2200	.82	.44	.33	.28	.22
755-1019	CD19FD242J03	2400	.93	.50	.38	.31	.25
755-1021	CD19FD272J03	2700	1.05	.56	.42	.35	.28
755-1023	CD19FD302J03	3000	1.12	.60	.45	.38	.30
755-1025	CD19FD332J03	3300	1.20	.64	.48	.40	.32
755-1027	CD19FD392J03	3900	1.35	.72	.54	.45	.36
755-1032	CD19FD432J03	4300	1.42	.76	.57	.48	.38
755-1036	CD19FD472J03	4700	1.53	.82	.62	.51	.41
755-1150	CD30FD512J03	5100	1.16	.62	.47	.39	.31
755-1152	CD30FD562J03	5600	1.27	.68	.51	.42	.34
755-1154	CD30FD622J03	6200	1.38	.74	.56	.46	.37
755-1156	CD30FD682J03	6800	1.53	.82	.62	.51	.41
755-1158	CD30FD752J03	7500	1.65	.88	.65	.55	.40
755-1160	CD30FD822J03	8200	1.80	.96	.72	.60	.48
755-1162	CD30FD912J03	9100	1.95	1.04	.78	.65	.52
755-1107	CD30FD123J03	12,000	2.51	1.34	1.01	.84	.67
755-1109	CD30FD133J03	13,000	2.73	1.46	1.10	.91	.73
755-1113	CD30FD163J03	16,000	3.30	1.76	1.32	1.10	.88
755-1115	CD30FD183J03	18,000	3.67	1.96	1.47	1.23	.98
755-1117	CD30FD203J03	20,000	4.08	2.18	1.64	1.36	1.09
755-1170	CD42FD223J03	22,000	6.93	3.70	2.78	2.32	1.85
755-1174	CD42FD273J03	27,000	8.10	4.32	3.24	2.70	2.16
755-1176	CD42FD303J03	30,000	8.85	4.72	3.54	2.95	2.36
755-1178	CD42FD333J03	33,000	9.60	5.12	3.84	3.20	2.56
755-1180	CD42FD363J03	36,000	11.02	5.88	4.41	3.67	2.94
755-1182	CD42FD393J03	39,000	11.40	6.08	4.56	3.80	3.04
755-1184	CD42FD473J03	47,000	13.50	7.20	5.40	4.50	3.60
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Specify Manufacturer's Type No. and Capacitance on All Capacitor Orders

Cornell-Dubilier Capacitors

SILVERED, MOLDED DIPPED MICA CAPACITORS

Meet MIL-C-5 and EIA RS-143 specifications. Sturdy phenolic cases resist extreme humidity, moisture. All units are rated at 500 WVDC. Temperature range, −55° C to +85° C. Tolerance, ±5%. Size: CM-15, 33/64x19/64x3/16"; CM-20, 47/64x7/16x3/16"; CM-30, 51/64x51/64x1/4"; CM-35, 51/64x51/64x5/16". Letter C in Manufacturer's Type No. indicates ±200 parts per million per °C and ±5% drift; letter E in Mfr's Type No., −20 to +100 parts per million per °C, ±0.1 pF drift; letter F in Mfr's Type No., 0 to +70 parts per million per °C, ±0.05% and 0.1 pF drift. Average shpg. wt., 2 oz.

Stock No.	Type CM-	Cap. pF	EACH 1-24	25-99	100-499	500-999	1000-Up
755-1302	15CD100JN3	10	.30	.15	.11	.10	.08
755-1306	15CD150JN3	15	.26	.14	.11	.09	.07
755-1310	15CD200JN3	20	.26	.13	.10	.08	.07
755-1314	15CD240JN3	24	.26	.13	.10	.08	.07
755-1319	15ED330JN3	33	.26	.13	.10	.08	.07
755-1325	15ED470JN3	47	.26	.13	.10	.08	.07
755-1327	15ED510JN3	51	.26	.13	.10	.08	.07
755-1365	15FD620JN3	62	.26	.13	.10	.08	.07
755-1367	15FD680JN3	68	.26	.13	.10	.08	.07
755-1329	15FD101JN3	100	.26	.13	.10	.08	.07
755-1331	15FD111JN3	110	.26	.14	.10	.09	.07
755-1333	15FD121JN3	120	.26	.14	.11	.09	.07
755-1337	15FD151JN3	150	.30	.15	.11	.09	.08
755-1339	15FD181JN3	180	.30	.16	.12	.10	.08
755-1341	15FD201JN3	200	.30	.16	.12	.10	.08
755-1343	15FD221JN3	220	.30	.16	.12	.10	.08
755-1345	15FD241JN3	240	.30	.16	.12	.10	.09
755-1397	15FD271JN3	270	.33	.18	.14	.11	.09
755-1349	15FD301JN3	300	.37	.18	.14	.12	.10
755-1351	15FD331JN3	330	.37	.20	.15	.12	.10
755-1355	15FD391JN3	390	.41	.21	.15	.13	.11
755-1359	15FD471JN3	470	.45	.24	.18	.15	.12
755-1361	15FD511JN3	510	.48	.25	.19	.16	.13
755-1388	20FD621JN3	620	.37	.21	.15	.13	.11
755-1390	20FD681JN3	680	.37	.21	.15	.13	.11
755-1394	20FD821JN3	820	.41	.23	.17	.14	.12
755-1374	20FD102JN3	1000	.48	.26	.19	.16	.13
755-1402	20FD122JN3	1200	.52	.28	.21	.17	.138
755-1406	20FD152JN3	1500	.60	.33	.24	.20	.17
755-1412	30FD202JN3	2000	.75	.39	.29	.24	.20
755-1414	30FD222JN3	2200	.78	.42	.31	.26	.21
755-1418	30FD272JN3	2700	.82	.45	.33	.28	.23
755-1422	30FD332JN3	3300	1.05	.56	.42	.35	.28
755-1427	35FD362JN3	3600	1.08	.58	.44	.36	.29
755-1429	35FD392JN3	3900	1.12	.61	.46	.38	.31
755-1433	35FD472JN3	4700	1.38	.74	.56	.46	.38

TYPE WCR FILM WRAP POLYCARBONATE CAPACITORS

A recent development in capacitor dielectrics, these film wrap polycarbonate capacitors offer characteristics similar to polystyrene types at considerably lower cost. High operating temperature range from −55°C to +85°C without voltage derating and up to 125°C with 50% derating—overcoming one of the limitations of polystyrene units. Tolerance is ±10%. Measured at 1000 Hz, the average capacitance charge is within −1%; +3% of the 25°C value throughout the temperature range from −55°C to +125°C. Average shpg. wt., 2 oz.

50 WVDC

Stock No.	Type WCR-	Cap. μF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5520	05S1	.01	11/64x5/8"	.63	.39	.30	.26	.22	.18
755-5526	05S22	.022	7/32x5/8"	.67	.40	.31	.27	.22	.18
755-5529	05S33	.033	1/4x5/8"	.71	.42	.33	.29	.24	.19
755-5532	05S47	.047	9/32x5/8"	.75	.45	.35	.30	.25	.20
755-5502	05P1	.1	21/64x3/4"	.86	.52	.41	.35	.29	.24
755-5508	05P22	.22	7/16x3/8"	1.08	.64	.50	.43	.36	.29
755-5511	05P33	.33	15/32x1"	1.27	.77	.60	.52	.43	.35
755-5514	05P47	.47	1/2x1 1/8"	1.50	.89	.69	.60	.50	.40
755-5537	05W1	1.0	5/8x1 1/2"	2.32	1.40	1.09	.94	.78	.63
755-5545	05W2	2.0	25/32x1 3/4"	4.12	2.28	1.93	1.65	1.38	1.10

100 WVDC

Stock No.	Type WCR-	Cap. μF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5556	1S1	.01	15/64x3/4"	.60	.35	.27	.24	.20	.16
755-5558	1S22	.022	19/64x3/4"	.60	.36	.28	.24	.20	.16
755-5550	1P1	.1	29/64x1"	.78	.47	.37	.32	.27	.21
755-5552	1P22	.22	19/32x1 3/8"	.97	.59	.46	.39	.33	.26
755-5553	1P33	.33	41/64x1 3/8"	1.16	.70	.54	.47	.39	.31
755-5554	1P47	.47	47/64x1 5/8"	1.35	.81	.63	.54	.45	.36
755-5563	1W1	1.0	59/64x1 7/8"	2.13	1.27	.99	.85	.71	.57

200 WVDC

Stock No.	Type WCR-	Cap. μF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5566	2D1	.001	1/5x15/16"	.60	.35	.27	.24	.20	.16
755-5567	2D22	.0022	7/32x15/16"	.60	.35	.27	.24	.20	.16
755-5569	2D47	.0047	19/64x15/16"	.60	.35	.27	.24	.20	.16
755-5580	2S1	.01	13/64x15/16"	.60	.35	.27	.24	.20	.16
755-5582	2S22	.022	25/64x15/16"	.71	.42	.32	.28	.24	.19
755-5583	2S33	.033	15/32x15/16"	.78	.46	.36	.31	.26	.21
755-5584	2S47	.047	13/32x15/16"	.86	.51	.39	.34	.29	.23
755-5572	2P1	.1	19/32x1 3/16"	1.05	.63	.49	.42	.35	.28
755-5574	2P22	.22	43/64x1 7/8"	1.38	.82	.64	.55	.46	.37
755-5575	2P33	.33	13/16x1 7/8"	1.61	.96	.74	.64	.54	.43
755-5576	2P47	.47	61/64x1 7/8"	1.83	1.10	.86	.74	.62	.49

TYPE MCR METALLIZED POLYCARBONATE CAPACITORS

Non-inductively wound. Operating temp. −55° to +125° C. Capacitance change over this range is only −2.5%, +2.0% (25° C measurement as reference). Capacitance tolerance, ±20%. Film-wrap, epoxy end-seal encasement construction provides superior moisture resistance in a compact package. Capacitance drift, .5% maximum while dissipation factor is less than .75% at +25° C. May be operated at temperatures up to 125° C with 50% voltage derating. Lead length, 1½" minimum. Av. shpg. wt., 2 oz.

INSULATION RESISTANCE FACTOR

Temperature (°C)	Megs x μF	Need Not Exceed
+25	50,000	200,000 Meg
+85	3000	30,000 Meg
+125	200	2000 Meg

100 WVDC

Stock No.	Type MCR-	Cap. μF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2234	1P22	.22	19/64x1 1/16"	1.50	.90	.70	.60	.50	.40
755-2236	1P33	.33	11/32x1 1/16"	1.65	.99	.77	.66	.55	.44
755-2238	1P47	.47	11/32x7/8"	1.91	1.15	.89	.77	.64	.51
755-2242	1W1	1.0	7/16x1"	2.51	1.51	1.17	1.01	.84	.68
755-2244	1W2	2.0	9/16x1 1/4"	3.52	2.12	1.65	1.41	1.18	.94
755-2246	1W3	3.0	5/8x1 3/8"	4.35	2.61	2.03	1.74	1.45	1.16
755-2248	1W4	4.0	43/64x1 1/2"	5.36	3.22	2.50	2.15	1.79	1.43
755-2250	1W5	5.0	3/4x1 1/2"	6.33	3.80	2.96	2.54	2.11	1.69

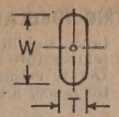
200 WVDC

Stock No.	Type MCR-	Cap. μF	Size Dia. x L.	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2260	2S1	.01	5/32x9/16"	.90	.54	.42	.36	.20	.24
755-2261	2S15	.015	11/64x9/16"	.90	.54	.42	.36	.30	.24
755-2262	2S22	.022	7/16x9/16"	.90	.54	.42	.36	.30	.24
755-2264	2S47	.047	1/4x9/16"	1.01	.61	.47	.41	.34	.27
755-2265	2S68	.068	7/32x1 1/16"	1.08	.65	.51	.44	.37	.29
755-2253	2P1	.1	9/32x1 1/16"	1.12	.68	.53	.45	.38	.30
755-2254	2P15	.15	5/16x1 1/16"	1.23	.74	.58	.50	.42	.33
755-2256	2P33	.33	7/16x1 1/16"	1.50	.90	.70	.60	.50	.40
755-2257	2P47	.47	3/8x1"	1.72	1.04	.81	.69	.58	.46
755-2258	2P68	.68	7/16x1"	1.95	1.17	.91	.78	.65	.52
755-2268	2W1P5	1.5	9/16x1 1/4"	2.81	1.69	1.31	1.13	.94	.75
755-2269	2W2	2.0	21/32x1 1/4"	3.22	1.94	1.51	1.29	1.08	.86
755-2270	2W3	3.0	11/16x1 1/2"	3.97	2.39	1.86	1.59	1.33	1.06
755-2271	2W4	4.0	3/4x1 3/4"	4.87	2.93	2.28	1.95	1.63	1.30
755-2272	2W5	5.0	13/16x1 3/4"	5.77	3.47	2.70	2.31	1.93	1.54

Allied Can Supply CDE Capacitors in Any Quantity at Factory Prices

Cornell-Dubilier Capacitors

TYPE MFP FLAT-OVAL "MYLAR" CAPACITORS



Solve tight space problems. Similar type WMF tubular on facing page, but with flat pressed section for oval configuration. Mylar dielectric with tough yellow outer film wrap, epoxy end seals bonded to wrapper and leads. Moisture and humidity resistant. Copper-weld leads, 1½" long for easy connections to circuitry. Temperature range, −55°C to +85°C at full rated voltage. Derate 10% for 100°C, 50% for 125° C operation. All units listed have tolerance of ±10%. Av. shpg. wt. 2 oz.

50 WVDC

Stock No.	Type MFP-	µF	Size, In. LxWxT	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
775-2286	05S1	.01	7/64x15/64x1/2	.45	.27	.21	.18	.15	.12
775-2291	05S22	.022	9/64x17/64x1/2	.48	.29	.23	.20	.17	.13
775-2295	05S47	.047	5/32x9/32x5/8	.48	.29	.23	.20	.17	.13
775-2275	05P1	.1	11/64x19/64x13/16	.56	.34	.26	.23	.19	.15
775-2279	05P22	.22	17/64x25/64x13/16	.63	.38	.30	.26	.22	.17
775-2281	05P33	.33	19/64x31/64x13/16	.71	.43	.33	.29	.24	.19
775-2270	05P5	.50	9/32x15/32x11/16	.78	.47	.37	.32	.27	.21
775-2302	05W1	1.0	23/64x9/16x1 3/8	1.20	.72	.56	.48	.40	.32
775-2305	05W2	2.0	13/32x45/64x1 5/8	1.91	1.15	.89	.77	.64	.51
775-2308	05W5	5.0	19/32x63/64x1 7/8	3.09	2.32	1.80	1.55	1.29	1.03

100 WVDC

775-2326	1S13	.033	5/8x5/16x3/16	.41	.24	.18	.16	.13	.11
775-2328	1S47	.047	3/4x5/16x3/16	.41	.24	.18	.16	.13	.11
775-2310	1P1	.1	7/8x1 1/32x7/32	.45	.27	.21	.19	.16	.13
775-2314	1P22	.22	1x15/32x9/32	.52	.32	.25	.22	.18	.15
775-2316	1P33	.33	1 1/8x1/2x5/16	.60	.35	.27	.24	.20	.16
775-2318	1P47	.47	1 1/4x17/32x3/8	.63	.37	.29	.25	.21	.17
775-2332	1W1	1.0	1 1/2x23/32x1/2	.93	.57	.44	.38	.32	.26
775-2338	1W2	2.0	1 3/4x1 1/16x27/32	1.53	.92	.72	.62	.52	.41

200 WVDC

775-2358	2S22	.022	5/8x1 1/32x7/32	.33	.21	.16	.14	.12	.10
775-2362	2S47	.047	3/4x3/8x1/4	.41	.24	.18	.16	.13	.11
775-2341	2P1	.1	7/8x1/2x5/16	.45	.27	.21	.19	.16	.13
775-2345	2P22	.22	1 1/8x9/16x13/32	.52	.32	.25	.22	.18	.15
775-2350	2P47	.47	1 1/4x21/32x1/2	.63	.37	.29	.25	.21	.17
775-2366	2W1	1.0	1 3/4x1 3/16x5/8	.93	.57	.44	.38	.32	.26
775-2372	2W2	2.0	1 7/8x1 1/16x27/32	1.53	.92	.72	.62	.52	.41

400 WVDC

775-2393	4S47	.047	7/8x1/2x1 1/32	.41	.26	.20	.18	.15	.12
775-2375	4P1	.1	1x17/32x3/8	.52	.27	.21	.19	.16	.13
775-2379	4P22	.22	1 1/8x5/8x1/2	.93	.32	.25	.22	.18	.15
775-2402	4W1P5	1.5	2 1/4x1 1/16x27/32	1.57	.95	.74	.63	.53	.42

DPMS PAPER-"MYLAR" DIELECTRIC CAPACITORS

Dual-dielectric for high reliability operation. "Fix-fil" impregnant. Crimped leads permit uniform parallel mounting. Temp. range, —55°C to 125°C. Tolerance ±10%. Av. shpg. wt., 2 oz.

200 WVDC

Stock No.	Mfr's Type DPMS	µF	Size, Inches	EACH 1-24	25-49	50-99	100-499	500-Up
755-1823	2S22	.022	.350x .855	.22	.15	.11	.10	.08
755-1826	2S47	.047	.450x .855	.26	.16	.12	.11	.09
755-1815	2P1	.1	.470x1.180	.30	.19	.15	.13	.11
755-1817	2P22	.22	.590x1.300	.45	.27	.21	.18	.15
755-1820	2P47	.47	.730x1.600	.56	.35	.27	.23	.20

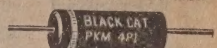
400 WVDC

755-1836	4S1	.01	.390x .690	.22	.15	.11	.10	.08
755-1840	4S22	.022	.390x .855	.22	.15	.11	.10	.08
755-1841	4S33	.033	.440x .855	.26	.15	.12	.10	.08
755-1838	4S5	.05	.415x1.150	.26	.17	.13	.11	.10
755-1829	4P1	.1	.520x1.180	.33	.20	.16	.14	.12
755-1833	4P22	.22	.620x1.560	.45	.27	.21	.18	.15
755-1834	4P25	.25	.650x1.560	.52	.32	.25	.22	.18

600 WVDC

755-1845	6D1	.001	.340x .690	.22	.15	.11	.10	.08
755-1853	6D15	.0015	.340x .660	.22	.15	.11	.10	.08
755-1855	6D22	.0022	.340x .660	.22	.15	.11	.10	.08
755-1858	6D33	.0033	.370x .660	.22	.15	.11	.10	.08
755-1860	6D47	.0047	.400x .690	.22	.15	.11	.10	.08
755-1849	6D5	.005	.400x .690	.22	.15	.11	.10	.08
755-1862	6D68	.0068	.430x .690	.22	.15	.11	.10	.08
755-1872	6S1	.01	.390x .870	.22	.15	.11	.10	.08
755-1879	6S15	.015	.415x .870	.22	.15	.11	.10	.08
755-1883	6S33	.033	.430x1.150	.30	.18	.14	.12	.10
755-1885	6S47	.047	.490x1.150	.33	.20	.16	.14	.12
755-1876	6S5	.050	.490x1.150	.33	.20	.16	.14	.12
755-1865	6P1	.1	.640x1.300	.45	.26	.20	.18	.15
755-1868	6P22	.22	.750x1.560	.63	.39	.30	.26	.22
755-1869	6P25	.25	.830x1.560	.71	.42	.33	.28	.24

TYPE PKM KRAFT-PAPER "MYLAR" CAPACITORS



Extremely moisture resistant. Molded plastic cases. Note: 400 WVDC units are identical in price and size to 200 WVDC units. —55°C to +125°C. Tolerance, ±10%. Av. 3 oz.

400 WVDC

Stock No.	Type PKM-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000 Up
755-3514	4S1	.01	5/16x1"	.26	.15	.12	.11	.09	.07
755-3520	4S39	.039	3/8x1 1/4"	.30	.18	.14	.12	.10	.08
755-3515	4S5	.05	7/16x1 1/4"	.33	.20	.16	.14	.12	.09
755-3502	4P1	.1	1/2x1 1/2"	.33	.20	.16	.14	.12	.09
755-3504	4P15	.15	1/2x1 1/2"	.45	.27	.21	.18	.15	.12
755-3506	4P22	.22	5/8x1 7/8"	.45	.27	.21	.18	.15	.12
755-3507	4P25	.25	5/8x1 7/8"	.52	.32	.25	.21	.18	.14
755-3503	4P5	.5	11/16x1 15/16"	.78	.47	.37	.32	.27	.21

600 WVDC

755-3530	6D22	.0022	5/16x1"	.26	.15	.12	.11	.09	.07
755-3555	6S15	.015	3/8x1 1/4"	.26	.15	.12	.11	.09	.07
755-3561	6S39	.039	1/2x1 1/2"	.30	.18	.14	.12	.10	.08
755-3562	6S47	.047	1/2x1 1/2"	.30	.18	.14	.12	.10	.08
755-3553	6S5	.05	1/2x1 1/2"	.33	.20	.16	.14	.12	.09
755-3564	6S68	.068	1/2x1 1/2"	.33	.20	.16	.14	.12	.09
755-3538	6P1	.1	5/16x1 3/16"	.41	.25	.19	.17	.14	.11
755-3544	6P25	.25	11/16x1 15/16"	.78	.47	.37	.32	.27	.21
755-3548	6P47	.47	1x2 1/8"	1.08	.65	.51	.44	.37	.29
755-3539	6P5	.5	1x2 1/8"	1.16	.70	.54	.47	.39	.31

1000 WVDC

755-3568	10D5	.005	3/8x1 1/4"	.30	.17	.13	.12	.10	.08
755-3572	10S1	.01	7/16x1 1/4"	.33	.20	.16	.14	.12	.09
755-3573	10S15	.015	7/16x1 1/4"	.37	.23	.18	.15	.13	.10
755-3574	10S22	.022	1/2x1 1/2"	.37	.23	.18	.15	.13	.10
755-3576	10S47	.047	9/16x1 9/16"	.52	.36	.28	.24	.20	.14
755-3577	10S68	.068	5/8x1 7/8"	.52	.36	.28	.24	.20	.14

1600 WVDC

755-3583	16D33	.0033	3/8x1 1/4"	.33	.20	.16	.14	.12	.09
755-3586	16S1	.01	1/2x1 1/2"	.60	.36	.28	.24	.20	.16
755-3591	16S47	.047	5/8x1 7/8"	.82	.50	.39	.33	.28	.22

DMF DIPPED POLYESTER FILM CAPACITORS

Flat, space saving capacitors. Moisture resistant casing, phenolic dipped and epoxy impregnated. "Fix-fil" impregnated; no leakage even at maximum operating temperature. 1½" copperweld leads. Operating temp., —55° C to 85° C. Derate voltage, 10% at 100° C, 50% at 125° C. Tol., ±10%. Av. shpg. wt., 2 oz.

100 WVDC

Stock No.	Type DMF	µF	Size, Inches LxWxT	EACH 1-24	25-49	50-99	100-499	500-Up
755-1740	1S22-10	.022	3/4x5/16x3/16	.26	.16	.13	.11	.09
755-1745	1S47-10	.047	3/4x1 1/32x3/32	.30	.17	.14	.12	.10
755-1725	1P1-10	.1	3/4x7/16x5/16	.33	.20	.16	.14	.12
755-1730	1P22-10	.22	3/4x3/4x3/8	.48	.29	.23	.20	.17
755-1732	1P33-10	.33	3/4x27/32x7/16	.56	.33	.26	.22	.18
755-1735	1P47-10	.47	1 1/8x3/4x3/8	.63	.38	.30	.26	.21
755-1748	1W1-10	1.0	1 1/8x1 5/16x3/16	.93	.57	.44	.38	.32

200 WVDC

755-1764	2S1-10	.01	3/4x5/16x3/16	.26	.16	.13	.11	.09
755-1767	2S22-10	.022	3/4x3/8x1/4	.26	.16	.13	.11	.09
755-1771	2S47-10	.047	3/4x3/8x1/4	.30	.17	.14	.12	.10
755-1774	2S68-10	.068	3/4x13/32x9/32	.30	.18	.14	.12	.10
755-1752	2P1-10	.91	3/4x23/32x5/16	.33	.20	.16	.14	.12
755-1758	2P33-10	.33	3/4x31/32x9/16	.56	.33	.26	.22	.18
755-1760	2P47-10	.47	1 1/8x7/8x1/2	.63	.38	.30	.26	.21

400 WVDC

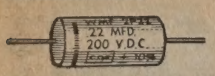
755-1784	4S47-10	.047	3/4x23/32x1 1/32	.30	.18	.14	.12	.10
755-1776	4P1-10	.1	3/4x29/32x1/2	.37	.23	.18	.15	.13
755-1779	4P22-10	.22	1 1/8x7/8x15/32	.48	.29	.23	.23	.17

600 WVDC

755-1788	6D22-10	.0022	3/4x5/16x3/16	.26	.16	.13	.11	.09
755-1798	6S4-710	.047	3/4x7/8x15/32	.37	.23	.18	.15	.13
755-1794	6P1-10	.1	1 1/8x1 3/16x7/16	.48	.29	.23	.19	.16

Cornell-Dubilier Capacitors

TYPE WMF "MYLAR" DIELECTRIC TUBULAR CAPACITORS



Encased in "Mylar" film and end-sealed with a high-density thermosetting epoxy. Outstanding features are high resistance to humidity, excellent capacitance stability, wide temperature range and long life. Operating temperature range: —55°C to +125°C. Full rated voltage at 85°C. Derate voltage 10% at 100°C, and 50% at 125°C. Capacitance tolerance, ±10%. Av. shpg. wt., 2 oz.

50 WVDC

Stock No.	Type WMF-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5702	05P1	.1	1/4x13/16"	.41	.24	.19	.17	.14	.11
755-5711	05P22	.22	21/64x13/16"	.45	.26	.21	.18	.15	.12
755-5715	05P33	.33	13/32x13/16"	.53	.31	.24	.21	.18	.14
755-5704	05P5	.50	13/32x11/16"	.64	.39	.30	.26	.22	.18
755-5722	05P68	.68	1/2x11/16"	.83	.49	.38	.33	.27	.22
755-5775	05W1	1.0	1/2x13/8"	1.12	.68	.53	.46	.38	.31
755-5728	05W2	2.0	37/64x15/8"	1.88	1.12	.87	.75	.63	.50
755-5735	05W5	5.0	27/32x17/8"	3.86	2.32	1.80	1.55	1.29	1.03

100 WVDC

Stock No.	Type WMF-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5740	1D1	.001	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5742	1D15	.0015	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5744	1D22	.0022	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5746	1D33	.0033	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5748	1D47	.0047	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5750	1D68	.0068	11/64x1/2"	.33	.20	.15	.14	.11	.09
755-5766	1S1	.01	13/64x1/2"	.33	.20	.15	.14	.11	.09
755-5768	1S15	.015	15/64x1/2"	.33	.20	.15	.14	.11	.09
755-5770	1S22	.022	9/32x5/8"	.33	.20	.15	.14	.11	.09
755-5772	1S33	.033	19/64x5/8"	.33	.20	.15	.14	.11	.09
755-5774	1S47	.047	17/64x3/4"	.33	.21	.16	.14	.12	.10
755-5776	1S68	.068	9/32x3/4"	.37	.22	.17	.15	.12	.10
755-5753	1P1	.1	19/64x7/8"	.37	.22	.17	.15	.13	.10
755-5755	1P15	.15	31/64x7/8"	.37	.23	.18	.15	.13	.10
755-5757	1P22	.22	25/64x1"	.41	.24	.19	.16	.14	.11
755-5759	1P33	.33	27/64x11/8"	.49	.28	.22	.19	.16	.13
755-5761	1P47	.47	15/32x11/4"	.56	.34	.27	.23	.20	.16
755-5763	1P68	.68	9/16x11/4"	.75	.44	.34	.30	.25	.20
755-7779	1W1	1.0	5/8x11/2"	1.05	.62	.48	.42	.35	.28
755-5780	1W1P5	1.5	25/32x13/4"	1.38	.84	.65	.56	.47	.38
755-5782	1W2	2.0	61/64x13/4"	1.69	1.02	.79	.68	.57	.46

200 WVDC

Stock No.	Type WMF-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5785	2D1	.001	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5786	2D15	.0015	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5787	2D22	.0022	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5788	2D33	.0033	5/32x1/2"	.33	.20	.15	.14	.11	.09
755-5789	2D47	.0047	11/64x1/2"	.33	.20	.15	.14	.11	.09
755-5790	2D68	.0068	13/64x1/2"	.33	.20	.15	.14	.11	.09
755-5801	2S1	.01	15/64x1/2"	.33	.20	.15	.14	.11	.09
755-5802	2S15	.015	19/64x1/2"	.33	.20	.15	.14	.11	.09
755-5803	2S22	.022	9/32x5/8"	.33	.20	.15	.14	.11	.09
755-5804	2S33	.033	17/64x3/4"	.33	.20	.15	.14	.11	.09

200 WVDC (Cont'd)

Stock No.	Type WMF-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5805	2S47	.047	21/64x3/4"	.33	.21	.16	.14	.12	.10
755-5806	2S68	.068	11/32x3/4"	.37	.22	.17	.15	.12	.10
755-5793	2P1	.1	13/32x7/8"	.45	.26	.20	.18	.15	.12
755-5794	2P15	.15	1/2x7/8"	.45	.28	.22	.19	.16	.13
755-5795	2P22	.22	1/2x11/8"	.48	.29	.23	.20	.17	.13
755-5796	2P33	.33	35/64x11/8"	.56	.33	.26	.23	.19	.15
755-5797	2P47	.47	19/32x11/4"	.63	.38	.29	.26	.21	.17
755-5798	2P68	.68	21/32x15/8"	.75	.44	.34	.30	.25	.20
755-5808	2W1	1.0	3/4x13/4"	1.05	.62	.48	.42	.35	.28
755-5809	2W1P5	1.5	29/32x13/4"	1.38	.84	.65	.56	.47	.38
755-5811	2W2	2.0	63/64x17/8"	1.68	1.02	.79	.68	.57	.46

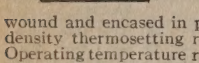
400 WVDC

Stock No.	Type WMF-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5815	4D22	.0022	5/32x5/8"	.37	.22	.17	.15	.13	.10
755-5817	4D47	.0047	13/64x5/8"	.37	.22	.17	.15	.13	.10
755-5827	4S1	.01	19/64x5/8"	.37	.22	.17	.15	.13	.10
755-5828	4S15	.015	23/64x5/8"	.37	.22	.17	.15	.13	.10
755-5829	4S22	.022	5/16x3/4"	.37	.22	.17	.15	.13	.10
755-5830	4S33	.033	11/32x7/8"	.37	.22	.17	.15	.13	.10
755-5831	4S47	.047	13/32x7/8"	.37	.23	.18	.16	.13	.11
755-5832	4S68	.068	25/64x1"	.41	.25	.19	.17	.14	.11
755-5820	4P1	.1	15/32x1"	.41	.25	.20	.17	.14	.12
755-5821	4P15	.15	33/64x11/4"	.45	.26	.20	.18	.15	.12
755-5822	4P22	.22	9/16x13/8"	.52	.30	.24	.21	.17	.14
755-5823	4P33	.33	19/32x15/8"	.82	.49	.38	.33	.28	.22
755-5824	4P47	.47	45/64x15/8"	.97	.58	.46	.39	.33	.26
755-5825	4P68	.68	11/64x13/4"	1.20	.71	.56	.48	.40	.32
755-5835	4W1	1.0	7/8x2"	1.42	.85	.66	.57	.48	.38
755-5836	4W1P5	1.5	31/32x21/4"	1.76	1.06	.82	.71	.59	.47
755-5838	4W2	2.0	1 1/4x21/4"	2.32	1.39	1.08	.93	.77	.62

600 WVDC

Stock No.	Type WMF-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-5841	6D1	.001	11/64x3/4"	.41	.26	.20	.17	.15	.12
755-5843	6D22	.0022	3/16x3/4"	.41	.26	.20	.17	.15	.12
755-5845	6D47	.0047	15/64x3/4"	.41	.26	.20	.17	.15	.12
755-5857	6S1	.01	19/64x3/4"	.41	.26	.20	.17	.15	.12
755-5859	6S22	.022	21/64x7/8"	.41	.26	.20	.17	.15	.12
755-5861	6S47	.047	27/64x1"	.41	.26	.20	.17	.15	.12
755-5850	6P1	.1	33/64x13/8"	.56	.33	.26	.22	.19	.15
755-5852	6P22	.22	21/32x15/8"	.67	.39	.31	.27	.22	.18
755-5854	6P47	.47	55/64x2"	1.42	.86	.67	.58	.48	.39
755-5864	6W1	1.0	1 1/16x2 1/2"	3.03	1.81	1.41	1.21	1.01	.81

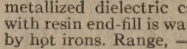
TYPE MMW MINIATURE METALLIZED FILM TUBULARS



Ideal for transistorized circuits—can be used in conventional manner or imbedded in sub-assemblies. Constructed of metallized polyester film dielectric, tightly wound and encased in poly-film tape wrap; and sealed with high-density thermosetting resin. Resistant to humidity and moisture. Operating temperature range, —55°C to +85°C. Tolerance, ±20%. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type MMW-	µF	WV DC	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2470	05P1	.1	50	.170x11/16"	.86	.51	.39	.34	.29	.23
755-5476	05P22	.22	50	.215x11/16"	1.01	.61	.47	.41	.34	.27
755-2479	05P33	.33	50	.265x11/16"	1.16	.69	.54	.46	.39	.31
755-2482	05P47	.47	50	.315x11/16"	1.20	.71	.55	.48	.40	.32
755-2488	05W1	1.0	50	.325x1"	1.43	.86	.67	.58	.48	.39
755-2494	05W2	2.0	50	.405x11/4"	2.06	1.25	.97	.83	.70	.56
755-2503	05W5	5.0	50	.510x13/4"	3.75	2.24	1.74	1.49	1.24	.95
755-2514	2S33	.033	200	.180x9/16"	.78	.47	.36	.32	.26	.21
755-2509	2S47	.047	200	.200x9/16"	.78	.47	.36	.32	.26	.21
755-2506	2P1	.1	200	.240x11/16"	.86	.51	.39	.34	.29	.23
755-2508	2P22	.22	200	.340x11/16"	1.01	.61	.47	.41	.34	.27
755-2509	2P33	.33	200	.390x11/16"	1.16	.69	.54	.46	.39	.31
755-2510	2P47	.47	200	.370x1"	1.20	.71	.55	.48	.40	.32
755-2518	2W1	1.0	200	.500x1"	1.42	.86	.67	.58	.48	.39
755-2520	2W2	2.0	200	.620x11/4"	2.06	1.25	.97	.83	.70	.56
755-2528	4S1	.01	400	.180x9/16"	.75	.45	.35	.30	.25	.20
755-2530	4S22	.022	400	.210x11/16"	.78	.47	.36	.32	.26	.21
755-2532	4S47	.047	400	.300x11/16"	.86	.51	.39	.34	.29	.23
755-2522	4P1	.1	400	.325x1"	.93	.57	.44	.38	.32	.26
755-2524	4P22	.22	400	.400x11/4"	1.16	.69	.54	.46	.39	.31
755-2526	4P47	.47	400	.520x11/2"	1.53	.91	.71	.61	.51	.41
755-2535	4W1	1.0	400	.675x13/4"	2.17	1.30	1.01	.87	.73	.58

TYPE MPY 125°C METALLIZED PAPER



For applications where low impedance is required. Feature superior moisture resistance, and self-healing properties of metallized dielectric capacitors. Resin impregnated Triclad tube with resin end-fill is wax-free for clean handling; virtually unaffected by hot irons. Range, —55°C to +85°C. Tolerance, ±20%. 3 oz.

200 WVDC

Stock No.	Mfr's Type MPY-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2562	2S22	.022	1/4x5/8"	.56	.34	.26	.23	.19	.15
755-2564	2S47	.047	1/4x5/8"	.56	.34	.26	.23	.19	.15
755-2555	2P1	.1	3/8x5/8"	.63	.38	.30	.26	.22	.17
755-2557	2P22	.22	15/32x5/8"	.78	.47	.37	.32	.27	.21
755-2559	2P47	.47	7/16x11/8"	.93	.56	.44	.38	.32	.25
755-2566	2W1	1.0	9/16x11/8"	1.35	.81	.63	.54	.45	.36
755-2568	2W2	2.0	5/8x11/16"	1.83	1.10	.86	.74	.62	.49

400 WVDC

Stock No.	Mfr's Type MPY-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2574	4S22	.022	5/16x5/8"	.56	.34	.26	.23	.19	.15
755-2570	4P1	.1	3/8x11/8"	.71	.43	.33	.29	.24	.19
755-2572	4P22	.22	1/2x11/8"	.90	.54	.42	.36	.30	.24
755-2578	4W1	1.0	11/16x113/16"	1.65	.99	.77	.66	.55	.44
755-2580	4W2	2.0	13/16x23/8"	2.17	1.31	1.02	.87	.73	.58

600 WVDC

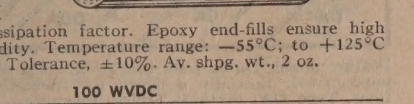
Stock No.	Mfr's Type MPY-	µF	Size	EACH 1-24	25-49	50-99	100-499	500-999	1000-Up
755-2588	6S1	.01	1/4x5/8"	.56	.34	.26	.23	.19	.15
755-2590	6S22	.022	3/8x5/8"	.60	.36	.28	.24	.20	.16
755-2592	6S47	.047	15/32x5/8"	.68	.41	.32	.27	.23	.18
755-2582	6P1	.1	3/8x11/8"	.75	.45	.35	.30	.25	.20
755-2586	6P47	.47	5/8x17/16"	1.42	.86	.67	.57	.48	.38
755-2596	6W1	1.0	23/32x113/16"	1.80	1.08	.84	.72	.60	.48
755-2598	6W2	2.0	29/32x23/8"	2.62	1.58	1.23	1.05	.88	.70

Allied Can Supply CDE Capacitors in Any Quantity at Factory Prices

"Mylar" and Variable Capacitors

TRW "MYLAR" CAPACITORS

TYPE 663UW "MYLAR" CAPACITORS



Space-saving capacitors have "skin-tight" cases. Offer long, stable life, high insulation resistance, and low dissipation factor. Epoxy end-fills ensure high resistance to humidity. Temperature range: —55°C; to +125°C with 50% derating. Tolerance, ±10%. Av. shpg. wt., 2 oz.

100 WVDC

Stock No.	μF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
960-6010	.001	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6030	.0022	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6040	.0033	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6050	.0047	5/32x1/2"	.91	.44	.32	.29	.25	.23
960-6060	.0068	5/32x1/2"	.91	.44	.32	.29	.25	.23
960-6070	.01	5/32x1/2"	.96	.46	.34	.30	.26	.24
960-6090	.022	13/64x5/8"	.96	.46	.34	.30	.26	.24
960-6105	.033	7/32x5/8"	1.01	.48	.35	.32	.28	.25
960-6115	.047	15/64x3/4"	1.01	.48	.35	.32	.28	.25
960-6125	.068	17/64x3/4"	1.01	.48	.35	.32	.28	.25
960-6135	.10	9/32x7/8"	1.07	.52	.37	.34	.29	.26
960-6155	.22	21/64x1"	1.20	.56	.41	.37	.33	.30
960-6165	.33	3/8x1 1/8"	1.23	.59	.44	.39	.35	.32
960-6175	.47	15/32x1 1/4"	1.36	.65	.47	.42	.37	.35
960-6185	.68	9/16x1 1/4"	1.48	.70	.51	.46	.41	.37
960-6200	1.0	19/32x1 1/2"	1.65	.79	.57	.51	.46	.42
960-6210	2.0	13/16x1 3/4"	2.16	1.03	.75	.68	.59	.54

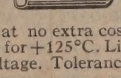
200 WVDC

Stock No.	μF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
960-6011	.001	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6021	.0015	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6031	.0022	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6041	.0033	5/32x1/2"	.85	.41	.29	.26	.24	.22
960-6051	.0047	5/32x1/2"	.91	.44	.32	.29	.25	.23
960-6071	.01	11/64x1/2"	.96	.46	.34	.30	.26	.24
960-6116	.047	19/64x3/4"	1.01	.48	.35	.32	.28	.25
960-6136	.10	3/8x7/8"	1.07	.52	.37	.34	.29	.26
960-6156	.22	7/16x1 1/8"	1.20	.56	.41	.37	.33	.30
960-6166	.33	31/64x1 1/8"	1.23	.59	.44	.39	.35	.32
960-6176	.47	35/64x1 1/4"	1.36	.65	.47	.42	.37	.35
960-6201	1.0	43/64x1 3/4"	1.65	.79	.57	.51	.46	.42
960-6211	2.0	7/8x1 7/8"	2.16	1.03	.75	.68	.59	.54

400 WVDC

Stock No.	μF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
960-6032	.0022	5/32x5/8"	.91	.44	.32	.29	.25	.23
960-6052	.0047	3/16x5/8"	.96	.46	.34	.30	.26	.24
960-6072	.01	1/4x5/8"	1.01	.48	.35	.32	.28	.25
960-6092	.022	5/16x3/4"	1.07	.52	.37	.34	.29	.26
960-6117	.047	11/32x7/8"	1.12	.54	.40	.35	.32	.29
960-6137	.10	27/64x1"	1.20	.56	.41	.37	.33	.30
960-6157	.22	35/64x1 3/8"	1.36	.65	.47	.42	.37	.35
960-6177	.47	43/64x1 5/8"	1.65	.79	.57	.51	.46	.43
960-6202	1.0	13/16x2"	2.37	1.16	.83	.75	.67	.59

TYPE X663F METALLIZED "MYLAR" CAPACITORS



Thin, oval design. Extended-foil metallized "Mylar" dielectric is self-healing, has high insulation resistance and low dissipation factor. NOTE: the 200 WVDC units listed below are identical in price and size to 100 WVDC units (not listed)—you get this higher voltage rating at no extra cost. Temperature range: —55° to +100°C; derate 50% for +125°C. Life test: 250 hours at 100°C. and 125% of rated voltage. Tolerance: ±10%. Av. shpg. wt., 2 oz.

200 WVDC

Stock No.	μF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
960-3005	.01	5/32x13/64x7/16"	1.93	.94	.67	.61	.54	.50
960-3010	.022	13/64x17/64x7/16"	1.80	.87	.64	.56	.50	.47
960-3015	.033	7/32x9/32x7/16"	1.68	.81	.58	.53	.47	.43
960-3020	.047	11/64x17/64x5/16"	1.55	.75	.54	.48	.43	.40
960-3025	.10	1/4x23/64x3/16"	1.41	.68	.48	.45	.40	.37
960-3030	.22	17/64x3/8x11/16"	1.62	.78	.55	.51	.45	.41
960-3035	.33	19/64x31/64x11/16"	1.97	.95	.68	.62	.55	.51
960-3040	.47	23/64x35/64x11/16"	2.22	1.07	.78	.70	.62	.57
960-3045	.68	11/32x33/64x15/16"	2.47	1.19	.86	.78	.68	.64
960-3050	1.00	27/64x11/32x15/16"	2.78	1.33	.97	.87	.78	.72
960-3055	1.5	9/16x23/64x1 1/4"	3.12	1.50	1.09	.98	.87	.80
960-3060	2.00	27/64x23/32x1 1/4"	3.46	1.66	1.20	1.09	.96	.88
960-3065	3.00	23/64x49/64x1 1/2"	4.13	1.98	1.44	1.30	1.16	1.07
960-3070	4.00	1/2x57/64x1 1/2"	5.46	2.49	1.79	1.62	1.43	1.32
960-3075	5.00	33/64x29/32x1 3/4"	5.85	2.81	2.04	1.83	1.62	1.50

TYPE 608 MICROMINIATURE "MYLAR" CAPACITORS

Foil-wound mylars for high-component-density applications. Temperature range, —55°C to +85°C.; to 125°C. with 50% derating. Dissipation factor less than 1.0% at 1000 Hz., 25°C. Humidity resistance meets MIL-C-27287 paragraph 3.12 when tested at 40°C for 240 hours. Life: 1000 hours at 85°C and 125% of rated voltage. Tolerance: ±10%. 100 WVDC. Av. shpg. wt., 1 oz.

Stock No.	μF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
960-4305	.001	5/64x3/8"	1.90	1.11	.83	.75	.66	.61
960-4310	.0015	3/32x3/8"	1.92	1.12	.84	.76	.67	.62
960-4315	.0022	3/32x3/8"	1.95	1.13	.85	.76	.67	.63
960-4320	.0033	7/64x3/8"	1.96	1.14	.86	.77	.68	.63
960-4325	.0047	7/64x3/8"	2.00	1.16	.87	.78	.69	.64
960-4330	.0068	1/8x3/8"	2.02	1.18	.88	.79	.69	.65
960-4335	.0082	1/8x3/8"	2.03	1.19	.89	.80	.70	.65
960-4340	.01	9/64x3/8"	2.03	1.19	.89	.80	.70	.65
960-4345	.015	5/32x3/8"	2.08	1.21	.90	.81	.73	.67
960-4350	.022	11/64x3/8"	2.08	1.21	.90	.81	.73	.67
960-4355	.033	7/32x3/8"	2.17	1.27	.95	.85	.75	.69
960-4360	.047	1/4x3/8"	2.22	1.29	.97	.87	.77	.70
960-4365	.068	11/32x17/32"	3.12	1.50	1.09	.98	.87	.80
960-4370	.10	3/8x17/32"	3.30	1.58	1.16	1.03	.91	.85

TYPE 601PE "MYLAR" CAPACITORS

Space-saving capacitors are designed for transistor printed circuits. Replace ceramic discs where stability with temperature change is important. Temp. range: —55°C to +85°C. Derate 50% for +125°C. Life test: 500 hours at +85°C and 125% of rated voltage. Dipped epoxy coating seals winding and lead entries, provides high-dielectric strength, and humidity resistance. Rated 50 WVDC. Tolerance, ±10%. Av. shpg. wt., 1 oz.

960-4020	.01	13/32x11/32x13/64"	1.03	.50	.35	.32	.28	.26
960-4025	.022	27/64x25/64x13/64"	1.13	.55	.40	.35	.32	.29
960-4030	.033	17/32x13/32x3/16"	1.20	.57	.41	.37	.33	.31
960-4035	.047	17/32x29/64x13/64"	1.25	.61	.44	.39	.35	.32
960-4040	.068	17/32x1/2x7/32"	1.31	.63	.45	.41	.36	.34
960-4045	.10	21/32x11/32x15/64"	1.41	.68	.50	.45	.39	.36
960-4050	.15	43/64x21/32x17/64"	1.48	.72	.51	.46	.41	.37
960-4055	.22	47/64x11/16x5/16"	1.60	.76	.56	.50	.44	.41
960-4060	.33	13/16x3/4x5/16"	1.70	.83	.59	.53	.47	.44

RADIO CONDENSER VARIABLE CAPACITORS

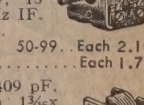
2-GANG CAPACITORS

For superhets without RF stage, or 2-stage TRF receivers. 29 plates per section. 15.5 pF to 467.8 pF. Ccw increase. Use series padder in oscillator circuits. 3/8" dia. shaft. 15/16x113/16x21 3/16". 8 oz.
909-0149. 1-9...Each 3.69 10-49...Each 3.36 50-99...Each 3.00
100-249.....Each 2.62 250-Up.....Each 2.44

2- AND 3-GANG CAPACITORS

Choice of two or three sections on one shaft. Trimmers on side, slotted plates. Range: 12 to 367 pF each section. Shaft dia. 3/8". Size of two-gang: 2 3/16x1 13/16x1 3/8". Size of 3-gang: 3 3/16x1 13/16x1 3/8". Av. shpg. wt., 6 oz.
909-0110. 2-Gang. 1-9.Each 3.85 10-49.Each 3.50
50-99.....Each 3.10 100-249.....Each 2.70
250-Up.....Each 2.50
909-0160. 3-Gang. 1-9. Each 5.75 10-49. Each 5.23 50-99. Each 4.54
100-249.....Each 3.98 250-Up.....Each 3.76

2-SECTION SUPERHET



19-plate oscillator section with 10.6 to 172.6 pF. 27-plate RF section with 14.5 to 434 pF. Both have 2-17 pF trimmer. Ccw increase. 15/8x1 13/16x2 3/16". 1/4" dia. shaft. 8 oz.
909-0130. 1-9...Ea. 3.12 10-49....Ea. 2.84
50-99.Ea. 2.46 100-249.Ea. 2.14 250-Up.Ea. 1.99

MIDGET SUPERHET AND TRF TYPES

Midget Superhet. RF section—14.5 to 368 pF, 27 plates. Oscillator section—11.6 to 136.6 pF, 15 plates. Counter-clockwise increase. For 455 kHz IF. Trimmers. 1 1/16x1 1/2x1 5/16". 1/4" dia. shaft. 6 oz.
909-0180. 1-9...Each 2.64 10-49...Each 2.40 50-99..Each 2.10
100-249.....Each 1.91 250-Up.....Each 1.72

Midget TRF. 33-plate single-gang capacitor. 15-409 pF. Increases its capacity with clockwise rotation. 1 3/16x 1 3/8x1 5/16" high. 1/4" dia. shaft. 3/4" long. 5 oz.
909-0199. 1-9. Ea. 1.98 10-49 Ea. 1.80 50-99. Ea. 1.65
100-249.....Each 1.53 250-Up.....Each 1.35

Centralab Ceramic Capacitors

SERIES DD DISC CERAMICS

Recommended for use where high capacity is required and control stability is secondary. Operate for long periods under extreme moisture, vibration, and temperature conditions. *Price code. 1000 WVDC except: DD-6-103, DD-153 through DD-503, 600 WVDC. Tolerance: ±10% except †GMV; ‡±20%; §—20%, +80%. Size, ¼"x5/32". Av. shpg. wt., 2 oz.

PRICES FOR DD SERIES

*	EACH	EACH, Pkgs. of 100 Only			EACH, Pkgs. of 1000 Only	
Code	1-99	100	200-400	500-1000	1000-3000	4000-5000
A	.15	.12	.08	.06	.05	.04
B	.15	.12	.08	.06	.084	.03
C	.15	.12	.08	.06	.059	.04
D	.15	.12	.08	.06	.054	.04
E	.15	.12	.08	.06	.054	.03
F	.15	.12	.08	.06	.05	.04
G	.24	.19	.12	.09	.05	.047
H	.24	.19	.12	.09	.06	.054
J	.45	.36	.23	.17	.05	.05
K	.45	.36	.23	.17	.16	.15

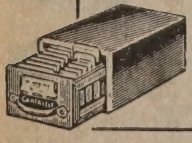
Stock No.	Mfr's Type	pF	*	Stock No.	Mfr's Type	pF	*
748-0437	DD-050	5	A	748-0667	DD-471	470	C
748-0443	DD-100	10	B	748-0687	DD-501	500	C
748-0466	DD-150	15	B	748-0707	DD-561	560	C
748-0493	DD-200	20	B	748-0717	DD-681	680	C
748-0502	DD-220	22	B	748-0730	DD-751	750	C
748-0526	DD-250	25	B	748-0736	DD-821	820	C
748-0542	DD-270	27	B	748-0447	DD-102	1000	D
748-0564	DD-300	30	B	748-0449	DD-102G	1000†	E
748-0588	DD-330	33	B	748-0470	DD-152	1500	D
748-0636	DD-390	39	B	748-0488	DD-182	1800	D
748-0665	DD-470	47	B	748-0497	DD-202	2000†	B
748-0685	DD-500	50	B	748-0506	DD-222	2200†	B
748-0705	DD-560	56	B	748-0530	DD-252	2500†	B
748-0715	DD-680	68	B	748-0546	DD-272	2700†	B
748-0734	DD-820	82	B	748-0568	DD-302	3000†	B
748-0445	DD-101	100	B	748-0592	DD-332	3300†	D
748-0460	DD-121	120	B	748-0669	DD-472	4700‡	F
748-0468	DD-151	150	B	748-0689	DD-5022	5000‡	F
748-0486	DD-181	180	B	748-0745	DD-502	5000†	D
748-0495	DD-201	200	B	748-0719	DD-682	6800†	D
748-0504	DD-221	220	B	748-0452	DD-103	10,000†	G
748-0528	DD-251	250	C	748-0740	DD-1032	10,000‡	H
748-0544	DD-271	270	C	748-0795	DD-6-103	10,000†	D
748-0566	DD-301	300	C	748-0472	DD-153	15,000§	G
748-0590	DD-331	330	C	748-0499	DD-203	20,000§	J
748-0638	DD-391	390	C	748-0691	DD-503	50,000§	K

HIGH-VOLTAGE DISC CERAMICS

Buffer capacitors. Capacitance tolerance: ±20%, except *guaranteed minimum value. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	pF	WV DC	EACH	EACH, Pkgs. of 100		
				1-99	100	200-400	500-1000
748-0815	DD16-502	5000*	1600	.34	.21	.14	.10
748-0805	DD16-103	10,000*	1600	.34	.21	.14	.10
748-0892	DD30-330	33	3000	.30	.19	.12	.09
748-0865	DD30-101	100	3000	.30	.19	.12	.09
748-0910	DD30-501	500	3000	.30	.19	.12	.09
748-0867	DD30-102	1000	3000	.38	.24	.15	.12
748-0912	DD30-502	5000	3000	.38	.24	.15	.12
748-0940	DD60-100	10	6000	.45	.29	.18	.14
748-0948	DD60-150	15	6000	.45	.29	.18	.14
748-0975	DD60-500	50	6000	.45	.29	.18	.14
748-0942	DD60-101	100	6000	.45	.29	.18	.14
748-0977	DD60-501	500	6000	.45	.29	.18	.14
748-0990	DD60-751	750	6000	.45	.29	.18	.14
748-0944	DD60-102	1000	6000	.75	.48	.30	.23
748-0955	DD60-202	2000	6000	.75	.48	.30	.23

CERAMIC CAPACITOR KIT

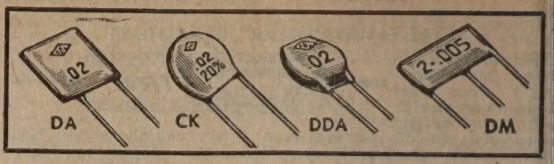


DDK-200 Ceramic Capacitor Kit. Handy assortment contains 200 of the most commonly used Type DD Ceramic Discs in a convenient metal storage tray. All capacitors in clearly labeled reusable plastic packages.

All are 1000 WVDC unless otherwise specified. Five each: 5, 10, 25, 33, 47, 50, 68, 120, 150, 180, 220, 250, 270, 300, 330, 390, 470, 500, 680, 1500, 3000, 4700, 10,000 (600 V) pF. Ten each: 100, 200 pF. Fifteen each: 1000, 5000; 20,000 (600 V) pF. Twenty: 10,000 pF. Cabinet size, 4x6x11". Shpg. wt., 6 lbs.

748-0765 ..... Each 34.10

LOW-VOLTAGE CAPACITORS



Feature double-Durex resin insulation. All are high-vacuum wax impregnated. Specially designed for transistor circuit applications. Type DA: ½x½x3/16" thick; tolerance, —20% to +100%. Type DDA: 5/8" dia. x 5/32" thick; tolerance —30% to +80%. Type DM: 17/32x7/32x7/64" thick; tolerance *—20% to +50% and †—20% to +80%. Type CK, —20% to +80%; sizes: 502 and 103, 3/8" dia. x5/32" thick; 203, 253 and 303 are 9/16" dia. x 5/32"; 503, 11/16x5/32"; 104 3/4x15/64". Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	μF	WV DC	EA.	EA., Pkgs. of 100		EA., Pkgs. of 1000	
				1-99	100	200-400	500-1000	1000-3000	4000-5000
748-0420	DA-203	.02	30	.45	.29	.18	.14	.10	.09
748-0425	DA-503	.05	30	1.01	.64	.41	.30	.24	.21
748-0415	DA-104	.1	30	1.69	1.07	.68	.51	.40	.35
748-0385	CK-502	.005	50	.26	.17	.11	.08	.05	.04
748-0365	CK-103	.01	50	.26	.17	.11	.08	.05	.04
748-0373	CK-203	.02	50	.26	.17	.11	.08	.08	.07
748-0377	CK-253	.025	50	.26	.17	.11	.08	.08	.07
748-0381	CK-303	.03	50	.26	.17	.11	.08	.08	.07
748-0389	CK-503	.05	50	.38	.24	.15	.11	.08	.07
749-0369	CK-104	.1	50	.75	.48	.30	.23	.22	.20
748-0759	DDA-503	.05	75	.38	.24	.15	.13	.08	.07
748-0753	DDA-104	.1	75	.75	.48	.30	.23	.20	.18
748-3118	DM-501*	.0005	150	1.13	.72	.45	.34	.....	.....
748-3102	DM-102*	.001	150	1.13	.72	.45	.34	.....	.....
748-3108	DM-202†	.002	150	1.13	.72	.45	.34	.....	.....
748-3113	DM-302†	.003	150	1.13	.72	.45	.34	.....	.....
748-3120	DM-502†	.005	150	1.13	.72	.45	.34	.....	.....
748-3104	DM-103†	.01	150	1.13	.72	.45	.34	.....	.....

CE AND CF CERAMIC DISC CAPACITORS

Type CE: temperature stable "K", operate from —55° C to +85° C with ±7½% capacity variation; Type CF: temperature semi-stable "K", ±15% variation. Phenolic vacuum insulation is impregnated with high-melting-point wax. All are 500 WVDC. Life test: 1000 hours at 1000 volts at +85° C. Leakage resistance: initial, 10,000 megohms minimum; after humidity, over 1000 megohms. Power factor: 2% maximum at 1 kHz. Tolerance: ±10%. 1½" minimum lead length. No. 22 copper leads. Capacities range from 150 to 10,000 picofarads. All types are 5/32" thick. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	pF	Dia. (In.)	EACH	EACH, Pkgs. of 100		
				1-99	100	200-400	500-1000
748-0228	CE-151	150	.290	.23	.15	.09	.07
748-0231	CE-221	220	.290	.23	.15	.09	.07
748-0234	CE-331	330	.290	.23	.15	.09	.07
748-0237	CE-471	470	.290	.23	.15	.09	.07
748-0240	CE-501	500	.390	.23	.15	.09	.07
748-0243	CE-561	560	.390	.23	.15	.09	.07
748-0246	CE-681	680	.390	.23	.15	.09	.07
748-0249	CE-751	750	.390	.23	.15	.09	.07
748-0252	CE-801	800	.390	.23	.15	.09	.07
748-0225	CE-102	1000	.590	.23	.15	.09	.07
748-0273	CF-122	1200	.390	.23	.15	.09	.07
748-0276	CF-152	1500	.390	.23	.15	.09	.07
748-0279	CF-182	1800	.390	.23	.15	.09	.07
748-0282	CF-202	2000	.590	.26	.17	.11	.08
748-0285	CF-222	2200	.590	.26	.17	.11	.08
748-0288	CF-332	3300	.590	.26	.17	.11	.08
748-0291	CF-392	3900	.590	.26	.17	.11	.08
748-0294	CF-472	4700	.690	.26	.17	.11	.08
748-0300	CF-502	5000	.690	.26	.17	.11	.08
748-0303	CF-622	6200	.690	.26	.17	.11	.08
748-0305	CF-822	8200	.920	.30	.19	.12	.09
748-0270	CF-103	10,000	.920	.30	.19	.12	.09

DD-2 CERAMIC DISC CAPACITORS

Single disc, dual capacity. Double-Durex insulation. Stamped with capacity. Operating temperature: —55° C to +85° C. Dissipation factor: 2% maximum at 1 kHz. Tolerance: (GM Vexcept*)—20% to +80%. 600 WVDC. Average shpg. wt., 1 oz.

Stock No.	Mfr's Type	pF	Dia. (In.)	EACH	EACH, Pkgs. of 100		
				1-99	100	200-400	500-1000
748-0775	DD2-102	2x.001	.408	.30	.19	.12	.09
748-0779	DD2-152	2x.0015	.594	.30	.19	.12	.09
748-0787	DD2-502*	2x.005	.719	.45	.29	.18	.14

Specify Stock No., Mfr's Type No. and Capacitance When Ordering

Centralab Capacitors

850 SERIES TRANSMITTING CAPACITORS

850S

Designed for transmitters, induction heaters, electronic welding equipment, X-ray, diathermy, and other high voltage, high frequency circuits. Have extremely low power factor, stable retrace characteristics, and long leakage paths. All ±10% tol., except 858 types— ±20%. Type nos. with N have temp. coeff. of neg. 750 parts/million/°C, types with Z have zero (NPO) coeff., types with no suffix letter are Hi-K, variable. Type 850S and type 858S have ⅛″ axial hex studs tapped 6-32; Type 857 has axial studs tapped 10-32 NF-2, ¼″ deep. *Typical RF characteristics @ 30 MHz.

Types 850S, 858S, 1 3/16″ dia. x ⅝″ long. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	pF	WV DC	*RF Load, Amps	EACH 1-4	EACH, Pkgs. of 5: 5-25	30-100	105-250
748-7305	850S-25Z	25	7500	7	3.38	2.43	2.14	1.92
748-7310	850S-50Z	50	7500	10	3.38	2.43	2.14	1.92
748-7315	850S-100N	100	5000	9.8	3.38	2.43	2.14	1.92
748-7397	858S-500	500	5000	.....	3.38	2.43	2.14	1.92
748-7399	858S-1000	1000	5000	.....	3.38	2.43	2.14	1.92

Type 857. 1 9/32″ dia., 1 57/64″ long. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	pF	WV DC	*RF Load, Amps	EACH 1-9	10-24	25-99	100-249
748-7380	857-25Z	25	15,000	12	10.50	7.56	6.65	5.99
748-7385	857-50Z	50	15,000	12	10.50	7.56	6.65	5.99
748-7390	857-100N	100	15,000	14.4	9.00	6.48	5.70	5.13
748-7395	857-200N	200	7500	18.2	9.00	6.48	5.70	5.13

FEED-THRU CERAMIC HI-KAPS

Type FT. For high-frequency circuits where feed-thru plus capacity ground is required. Double-flatted bushing, .281″ long with 12-28 thread bushing and nut; .050″ dia. tinned copper leads. Length, 1 5/32″. Av. shpg. wt., 3 oz.

Type MFT. Miniature version of FT, above. ¼″ max.-dia. flange eyelet for insertion in .160″ hole. Solder to chassis; #16 leads. Max. length, 1⅜″. 500 WVDC; 1000 VDC test. Tol.: *±20%; †—20 to +50%; §±10%; ‡guaranteed min. value. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	pF	EACH 1-99	EACH, Pkgs. of 100: 100	200-400	500-1000
748-3500	FT-500	*500	.75	.59	.38	.28
748-3502	FT-1000	*1000	.75	.59	.38	.28
748-3504	FT-1500	†1500	.75	.59	.38	.28
748-3506	FT-1800	†1800	.75	.59	.38	.28
748-3508	FT-2300	†2300	.75	.59	.38	.28
748-4000	MFT-50	§50	.38	.24	.15	.11
748-4002	MFT-100	§100	.38	.24	.15	.11
748-4004	MFT-500	*500	.38	.24	.15	.11
748-4006	MFT-1000	‡1000	.38	.24	.15	.11

SERIES 829 TRIMMERS

Small, lightweight ceramic trimmers. Rugged steatite bodies with fired silver stator plates. Initial resistance: 10,000 megohms, minimum; resistance after humidity: 1000 megs. Rated at 500 WVDC; 1000 VDC test. Power factor: less than 0.25% at 1 MHz. Supplied with locknut for mounting against metal panel or chassis. Av. shpg. wt., 2 oz.

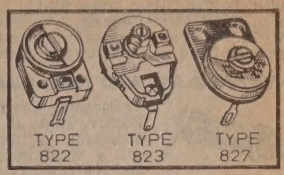
Stock No.	Mfr's Type	pF	L.	EACH 1-24	EACH, Pkgs. of 25: 25-100	125-475	500-1000
748-7185	829-3	0.5-3	½″	.38	.24	.15	.11
748-7190	829-6	1.0-6	⅝″	.38	.24	.15	.11
748-7195	829-10	1.5-10	¾″	.38	.24	.15	.11

TYPE CI CERAMIC BY-PASS CAPACITORS

Recommended for AC line by-pass application, or where a steady or intermittent higher voltage may occur. Leakage resistance: initial, over 10,000 megohms; after humidity, over 1000 megohms. Dissipation factor: 2% maximum at 1 kHz. Tolerance: ±20%. Operating temperature: to +85° C. Working voltage: 1000 VDC minimum (suitable for continuous operation at 150 VAC rms, 60 Hz). Leads: #22 tinned copper, 1½″ long. Case stamped with capacity, tolerance, and voltage. U.L. Component Program-Recognized. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	pF	Dia. (in.)	EACH 1-99	EACH, Pkgs. of 100: 100	200-400	500-1000
748-0345	CI-471	470	.440	.23	.14	.09	.07
748-0355	CI-681	680	.440	.23	.14	.09	.07
748-0330	CI-102	1000	.640	.26	.17	.11	.08
748-0340	CI-222	2200	.640	.23	.14	.09	.07
748-0350	CI-502	5000	.730	.23	.14	.09	.07
748-0335	CI-103	10,000	.840	.30	.19	.12	.09

CERAMIC DIELECTRIC TRIMMERS



Feature ceramic dielectric for high insulating strength. Full capacity range with 180° rotation. Designed to compensate for variation in tube capacities. Rated at 500 WVDC. Power factor: less than 0.2% at 1 MHz. Insulation resistance is 10,000 megohms min. Types 822 and 823 have steatite base; Type 827 phenolic base. Letter N in Type Number indicates negative temperature coefficient; letter Z in Type Number indicates zero temperature coefficient. Mounting holes of Type 822 take #4 machine screws; Type 823 is tapped for #4-40 machine screws; Type 827 has 5/16″ mounting centers. Terminals are silver-plated brass. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	pF	Base Size	EACH 1-4	EACH, Pkgs. of 5: 5-25	30-100	105-Up
748-7050	822-EN	4-30	4 1/64x2 7/32″	1.43	.95	.90	.76
748-7040	822-CN	4.5-25		1.43	.95	.90	.76
748-7030	822-BN	7-45		1.43	.95	.90	.76
748-7020	822-AN	8-50		1.43	.95	.90	.76
748-7054	822-EZ	1.5-7	4 1/64x2 7/32″	1.43	.95	.90	.76
748-7034	822-BZ	2.5-13		1.43	.95	.90	.76
748-7064	822-FZ	3-12		1.43	.95	.90	.76
748-7024	822-AZ	4.5-25		1.43	.95	.90	.76
748-7090	823-DN	8-50	1 5/16x1 7/32″	4.50	3.00	2.85	2.40
748-7080	823-BN	10-100		4.50	3.00	2.85	2.40
748-7070	823-AN	20-125		4.50	3.00	2.85	2.40
748-7074	823-AZ	12-62		4.50	3.00	2.85	2.40
748-7160	827-A	2.5-7	1 7/32x¾″	1.13	.75	.71	.60
748-7165	827-B	3.5-12		1.13	.75	.71	.60
748-7170	827-C	6-30		1.13	.75	.71	.60
748-7175	827-D	7-35		1.13	.75	.71	.60

SERIES 825 TRIMMERS (Av. wt., 2 oz.)

Ceramic trimmers meet MIL-C-81 specs and are marked with MIL No. Pure silver stator plate fired on top of low-loss steatite base. Rated at 500 WVDC; 1500 VDC test. Power factor: less than 0.2% at 1 MHz. Body size, 2 7/32x4 1/64″. *Temperature characteristic.

Stock No.	MIL No. CV 11-	CRL No.	pF	*Temp. Char.	EACH 1-4	EA., Pkgs. of 5: 5-25	30-100	105-250
748-7135	A070	825-EZ	1.5-7.0	NP0	1.46	.98	.93	.78
748-7144	A120	835-FZ	3.0-12.0	NP0	1.46	.98	.93	.78
748-7114	A250	825-AZ	4.5-25.0	NP0	1.46	.98	.93	.78
748-7140	B200	825-FN	5.0-20.0	N300	1.46	.98	.93	.78
748-7125	C300	825-CN	4.0-30.0	N500	1.46	.98	.93	.78
748-7149	C450	825-GN	7.0-45.0	N500	1.46	.98	.93	.78
748-7120	D450	825-BN	7.0-45.0	N650	1.46	.98	.93	.78

UK ULTRA-KAP MINIATURE DISC CAPACITORS

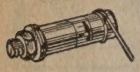
Miniature ceramic disc capacitors for transistor circuitry. Designed for low-voltage applications requiring high capacities and low power factors. Insulated with double coating of "Durez" and impregnated with high-vacuum wax. Dissipation factor at 1 kHz, 5-10%. Tolerance: 3 WVDC types, guaranteed minimum value; 10 and 20 WVDC, +80 —20%. 5/32″ thick; ¼ to ¾″ diameter. All types listed have No. 22 leads. Av. shpg. wt., 1 oz.

Stock No.	Type UK-	μF	WV DC	EACH 1-99	EA., Pkgs./100: 100	200-400	500-1000	EA., Pkgs./1000: 1000-3000	4000-5000
748-6004	104	.1	3	.53	.33	.21	.16	.15	.13
748-6010	224	.22	3	.38	.24	.15	.11	.10	.09
748-6016	474	.47	3	.38	.24	.15	.11	.10	.09
748-6005	105	1.0	3	.45	.29	.18	.14	.13	.11
748-6011	225	2.2	3	.53	.34	.21	.16	.16	.14
748-6047	10-503	.05	10	.23	.15	.09	.07	.06	.053
748-6035	10-104	.1	10	.23	.15	.09	.07	.07	.06
748-6039	10-204	.2	10	.38	.24	.15	.11	.10	.08
748-6043	10-474	.47	10	.53	.33	.21	.16	.15	.13
748-6088	20-503	.05	20	.23	.15	.09	.08	.07	.06
748-6080	20-140	.1	20	.26	.17	.11	.09	.08	.07
748-6084	20-204	.2	20	.49	.31	.20	.15	.14	.13
748-6110	25-103	.01	25	.20	.13	.09	.08	.05	.046
748-6116	25-223	.022	25	.24	.15	.11	.10	.08	.076
748-6122	25-503	.05	25	.30	.19	.14	.12	.09	.076
748-6111	25-104	.1	25	.31	.20	.15	.13	.09	.076
748-6165	50-103	.01	50	.24	.16	.10	.08	.056	.05
748-6180	50-503	.05	50	.64	.41	.24	.21	.139	.12
748-6166	50-104	.1	50	1.08	.69	.42	.35	.24	.22

JFD Tubular Piston Trimmer Capacitors

Precision-bore solid dielectric, with anti-corrosion metalizing. Meet MIL-C-14409B. Glass types usable from −55° to +125°C (Q 500 min. @ 20 MHz); quartz, −55° to +150°C (Q 1500 min. @ 20 MHz). Five dielectric materials and matched metalizing for homogeneous bond of metalizing to dielectric. Low temperature coefficient, low loss and inductance. High shock and vibration resistance. Green Glass "N" prefix units with higher Q increase delta C's 30% over other similar-size units, and include Hi-Life "Y" mechanism. Low-cost "V" suffix units combine Hi-Life mechanism with standard glass dielectric; interchangeable with standard units.

NVC/VC GLASS AND NMQ QUARTZ MINIATURE TRIMMERS



Telescoping assembly for 50% savings in length. Positive stops at both ends. NVC and VC glass dielectric, ¼" dia. NMQ quartz dielectric, ¼" dia. Y Series interchangeable with standard VC, and NMQ with standard MQ with added features of longer life and lower cost. Av. shpg. wt. 1 oz. Write for larger-quantity prices.

PANEL MOUNT TYPES

Stock No.	Mfr's Type	Mil Type	Cap., pF Min.-Max.	Lgth., In.	EACH 1-24	25-49	50-99	100-Up
827-2385	NVC20G	PC50J110	0.8-11.0	35/64	4.20	3.80	3.40	3.00
827-2387	NVC21G	PC50J5R5	0.8- 5.5	1 9/64	3.80	3.40	3.05	2.65
827-2389	NVC22G	PC50H160	0.8-16.0	3/4	4.80	4.30	3.85	3.35
827-2391	NVC23G	PC50H230	0.8-23.0	53/64	5.40	4.85	4.35	3.80
827-2393	NVC24G	PC50H380	1.0-38.0	1 19/32	6.00	5.40	4.85	4.25
827-4750	VC20GY	PC40J8R5	0.8- 8.5	35/64	3.40	3.05	2.70	2.25
827-4752	VC21GY	PC40J4R5	0.8- 4.5	1 9/64	3.20	2.95	2.50	2.10
827-4754	VC22GY	PC40H120	0.8-12.0	3/4	3.75	3.40	2.95	2.45
827-4756	VC23GY	PC40H180	0.8-18.0	43/64	4.35	3.95	3.40	2.85
827-4758	VC24GY	PC40H300	1.0-30.0	1 19/32	4.55	4.15	3.60	3.05
827-2105	NMQ101	PC40Q1R8	0.6- 1.8	1 9/64	5.00	4.50	4.05	3.55
827-2110	NMQ103	PC40Q5R8	0.6- 5.5	35/64	5.60	5.05	4.55	4.00
827-2115	NMQ106	PC40Q9R5	0.6- 9.5	63/64	7.40	6.65	6.00	5.25
827-2120	NMQ109	PC40Q160	0.8-16.0	1 19/32	9.20	8.30	7.45	6.55

PRINTED CIRCUIT TYPES—*Lug, †Wire Mtg.

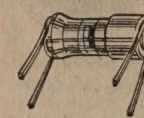
827-2377	†VC9GWY	PC51J110	0.8-11.0	9/16	3.80	3.40	3.05	2.65
827-2382	†NVC10GW	PC51J5R5	0.8- 5.5	5/16	3.40	3.05	2.75	2.40
827-2408	†NVC31GW	PC51H160	0.8-16.0	49/64	4.40	3.95	3.55	3.10
827-2414	†NVC32GW	PC51H230	0.8-23.0	1	5.00	4.50	4.05	3.55
827-2419	†NVC43GW	PC51H380	1.0-38.0	1 39/64	5.60	5.05	4.55	4.00
827-4730	†VC9GWY	PC41J8R5	0.8- 8.5	9/16	3.00	2.75	2.40	2.00
827-4735	†VC10GWY	PC41J4R5	0.8- 4.5	5/16	2.80	2.60	2.20	1.85
827-4770	†VC31GWY	PC41H120	0.8-12.0	49/64	3.35	3.05	2.65	2.20
827-4774	†VC32GWY	PC41H180	0.8-18.0	1	3.95	3.60	3.10	2.60
827-4779	†VC43GWY	PC41H300	1.0-30.0	1 39/64	4.15	3.80	3.30	2.80
827-2375	*NVC9G	.....	0.8-11.0	9/16	3.80	3.40	3.05	2.65
827-2380	*NVC10G	.....	0.8- 5.5	5/16	3.40	3.05	2.75	2.40
827-2407	*NVC31G	.....	0.8-16.0	49/64	4.40	3.95	3.55	3.10
827-2412	*NVC32G	.....	0.8-23.0	1	5.00	4.50	4.05	3.55
827-2417	*NVC43G	.....	1.0-38.0	1 39/64	5.60	5.05	4.55	4.00
827-4732	*VC9GY	.....	0.8- 8.5	9/16	3.00	2.75	2.40	2.00
827-4737	*VC10GY	.....	0.8- 4.5	5/16	2.80	2.60	2.20	1.85
827-4772	*VC31GY	.....	0.8-12.0	49/64	3.35	3.05	2.65	2.20
827-4776	*VC32GY	.....	0.8-18.0	1	3.95	3.60	3.10	2.60
827-4781	*VC43GY	.....	1.0-30.0	1 39/64	4.15	3.80	3.30	2.80
827-2125	*NMQ111	.....	0.6- 1.8	5/16	4.60	4.15	3.75	3.30
827-2130	*NMQ113	.....	0.6- 5.5	9/16	5.20	4.70	4.20	3.70
827-2135	*NMQ116	.....	0.6- 9.5	1	7.00	6.30	5.65	4.95
827-2140	*NMQ119	.....	0.8-16.0	1 39/64	8.80	7.90	7.10	6.20
827-2145	†NMQ121	PC41Q1R8	0.6- 1.8	5/16	4.60	4.15	3.75	3.30
827-2150	†NMQ123	PC41Q5R5	0.6- 5.5	9/16	5.20	4.70	4.20	3.70
827-2155	†NMQ126	PC41Q9R5	0.6- 9.5	1	7.00	6.30	5.65	4.95
827-2160	†NMQ129	PC41Q160	0.8-16.0	1 39/64	8.80	7.90	7.10	6.20

SCY/NSC/NQS SEALCAP MINIATURE PANEL-MOUNT SERIES

Sealed against moisture, atmospheric effects, corona and voltage breakdown. SCY (glass), NQS (quartz), NSC (High-K, High-Q Green Glass) miniature panel mount. Hi-Life adjustment mechanism has a 500 cys adjustment life, exceeding MIL-C-14409B by 600%. "Y" series SC interchangeable with std. SC series and NQS with QS. NSC has 30% greater delta C than SC, and superior Q. NQS has longer-adjustment-life mechanism and TC 25 ±25. Av. wt., 1 oz.

Stock No.	Mfr's Type	Mil Type	Cap., pF Min.-Max.	Lgth., In.	EACH 1-24	25-49	50-99	100-Up
827-2310	NSC131	PC48J5R5	0.8- 5.5	23/64	4.60	4.15	3.75	3.30
827-2315	NSC133	PC48J110	0.8-11.0	19/32	5.00	4.50	4.05	3.55
827-2317	NSC134	PC48H160	0.8-16.0	13/16	5.60	5.05	4.55	4.00
827-2320	NSC136	PC48H230	0.8-23.0	1 1/16	6.20	5.60	5.05	4.45
827-2324	NSC139	PC48H380	1.0-38.0	1 21/32	6.80	6.10	5.50	4.80
827-4010	SC131Y	PC38J4R5	0.8- 4.5	23/64	3.80	3.40	3.05	2.65
827-4015	SC133Y	PC38J8R5	0.8- 8.5	19/32	4.00	3.60	3.25	2.85
827-4020	SC134Y	PC38H120	0.8-12.0	13/16	4.40	3.95	3.55	3.10
827-4025	SC136Y	PC38H180	0.8-18.0	1 1/16	5.00	4.50	4.05	3.55
827-4030	SC139Y	PC38H300	1.0-30.0	1 21/32	5.20	4.70	4.20	3.70
827-2180	NQS171	PC38Q1R8	0.6- 1.8	23/64	7.00	6.30	5.65	4.95
827-2183	NQS173	PC38Q5R5	0.6- 5.5	19/32	7.60	6.80	6.10	5.30
827-2187	NQS176	PC38Q9R5	0.6- 9.5	1 1/16	9.40	8.45	7.65	6.70
827-2192	NQS179	PC38Q160	0.8-16.0	1 21/32	11.20	10.10	9.10	8.00

MAX-C EXTENDED-RANGE SERIES



Max-C embedded electrode technique gives three times more capacity than standard metalizing in standard glass. All units sealed. "Y" Series positive mechanical stops at both ends of adjustment. Offers longer adjustment life and lower cost. "N" series has approximately 30% greater delta C and Hi-Life mechanism. Av. shpg. wt., 1 oz.

PANEL MOUNT TYPES

Stock No.	Mfr's Type	Mil Type	Cap., pF Min.-Max.	Lgth., In.	EACH 1-24	25-49	50-99	100-Up
827-2010	NMC601	PC39J160	1.0-16.0	15/32	10.20	9.20	8.30	7.30
827-2015	NMC603	PC39J360	1.0-36.0	45/64	10.50	9.45	8.50	7.45
827-2020	NMC604	PC39J520	1.0-52.0	59/64	10.80	9.70	8.70	7.60
827-2025	NMC606	PC39J750	1.0-75.0	1 11/64	11.40	10.25	9.25	8.10
827-2030	NMC609	PC39J121	1.0-120.0	1 49/64	12.60	11.35	10.20	8.95
827-1510	MC601Y	PC38J140	1.0-14.0	15/32	6.20	5.60	5.05	4.45
827-1515	MC603Y	PC39J280	1.0-28.0	45/64	6.50	5.85	5.25	4.60
827-1520	MC604Y	PC39J420	1.0-42.0	59/64	6.80	6.10	5.50	4.80
827-1525	MC606Y	PC39J600	1.0-60.0	1 11/64	7.40	6.65	6.00	5.25
827-1530	MC609Y	PC39J900	1.0-90.0	1 49/64	8.60	7.75	7.00	6.15

PRINTED CIRCUIT BOARD TYPES

827-2060	NMC621	PC43J160	1.0-16.0	.750	10.20	9.20	8.30	7.30
827-2065	NMC623	PC43J360	1.0-36.0	.990	10.50	9.45	8.50	7.45
827-2070	NMC624	PC43J520	1.0-52.0	1.205	10.80	9.70	8.70	7.60
827-2075	NMC626	PC43J750	1.0-75.0	1.450	11.40	10.25	9.25	8.10
827-2080	NMC629	PC43J121	1.0-120.0	2.050	12.60	11.35	10.20	8.95
827-1560	MC621Y	PC43J140	1.0-14.0	.750	6.20	5.60	5.05	4.45
827-1565	MC623Y	PC43J280	1.0-28.0	.990	6.50	5.85	5.25	4.60
827-1570	MC624Y	PC43J420	1.0-42.0	1.205	6.80	6.10	5.50	4.80
827-1575	MC626Y	PC43J600	1.0-60.0	1.450	7.40	6.65	6.00	5.25
827-1580	MC629Y	PC43J900	1.0-90.0	2.050	8.60	7.75	7.00	6.15

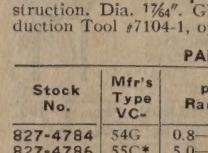
STANDARD PANEL-MOUNT SERIES

With Long-Life Adjustment Mechanism

Available in glass, quartz and new Green Glass with improved long-life adjustment mechanism. VC99 is designed for unusually high-voltage and power RF use: has closed end to prevent arcing at high altitudes. Rated 5000 WVDC. Use production tool 7104-1 on opposite page. *Glass, †Quartz, ‡Green Glass. Quartz under 5/16" dia., glass and green glass measure ¼". Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Mil Type	Cap., pF Min.-Max.	EACH 1-24	25-49	50-99	100-199	200-Up
827-4760	*VC25G	.....	0.5-3.0	1.74	1.55	1.35	1.14	1.14
827-4710	*VC1GC	.....	0.7-9.0	1.66	1.50	1.34	1.12	1.12
827-4762	*VC26G	.....	0.7-9.0	1.74	1.55	1.35	1.14	1.14
827-4010	*VC27G	.....	0.8-18.0	1.80	1.60	1.42	1.20	1.20
827-4017	*VC4G	.....	0.8-18.0	1.70	1.53	1.35	1.31	1.13
827-4766	*VC28G	.....	0.8-30.0	2.00	1.80	1.55	1.30	1.30
827-2395	‡NVC25G	PC35H4R5	0.5-4.5	2.50	2.25	2.00	1.75	1.75
827-2397	‡NVC26G	PC35H130	0.8-13.0	2.60	2.35	2.10	1.85	1.85
827-2402	‡NVC27G	PC35H240	1.0-24.0	3.00	2.70	2.40	2.10	2.10
827-2404	‡NVC28G	PC35H400	1.0-40.0	3.40	3.05	2.75	2.40	2.40
827-4713	†VC2	PC37Q4R5	0.7-4.5	4.35	3.91	3.91	3.62	3.26
827-4721	†VC5	PC37Q060	0.6-6.0	5.25	4.72	4.72	4.37	3.94
827-4740	†VC11	PC37Q100	0.8-10.0	6.00	5.40	5.40	5.00	4.50
827-4742	†VC12	PC37Q210	0.9-21.0	7.95	7.15	7.15	6.62	5.96
827-4805	†VC99	.....	0.8-10.0	8.55	7.69	7.69	7.12	6.41

LOW-COST STANDARD PANEL MOUNTS



Glass and ceramic dielectric direct-traverse trimmers. For commercial and industrial applications not requiring MIL specs. Positive spring-loaded torque mechanism. No split bushings to cause erratic tuning, noise or short adjustment life. Std. panel mount construction. Dia. 17/64". Glass, except *ceramic dielectric. Use Production Tool #7104-1, opposite page. Av. shpg. wt., 1 oz.

PANEL MOUNTING TYPES

Stock No.	Mfr's Type VC-	pF Range	WV DC	Body Length Inches	EACH 1-24	25-99	100-199	200-Up
827-4784	54G	0.8—13.0	2500	13/16	1.65	1.48	1.37	1.24
827-4786	55C*	5.0—50.0	1250	1	1.95	1.75	1.62	1.46
827-4789	57G	1.0—12.0	750	1	.99	.89	.83	.74

PRINTED CIRCUIT BOARD TYPES

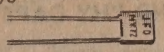
827-4787	56C*	5.0—50.0	1250	1 13/64	1.95	1.75	1.62	1.46
827-4791	58G	1.0—12.0	750	1 13/64	.99	.89	.83	.74

Specify Stock No., Mfr's Type and Capacitance on Capacitor Orders

-D Air, Ceramic Variable; Fixed Ceramic Capacitors

GH-K UNICERAM CAPACITORS (±10% TOLERANCE)

r greatly increased capacitance per unit ime (up to 48 μF/in³). Ceramic multi- r unit construction and glass encapsu- d package. Meet or exceed MIL-C-11015C. ed 50 WVDC. TC of +5%, —15% from 5° C to +125° C. Dissipation factor at 25° C, 1 kHz; 3% max. t VDC, 300% rated. Insulation resistance 10^5 megohms or 100 n-farads, whichever is less. Av. shpg. wt., 1 oz.



ACTUAL SIZE

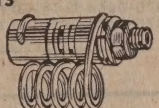
Stock No.	Type UY-	μF	EACH 1-49	50-99	100-249	250-499	500-Up
27-4605	12102K	.001	2.25	2.03	1.76	1.50	1.13
27-4610	12222K	.0022	2.31	2.06	1.80	1.54	1.14
27-4614	12472K	.0047	2.31	2.06	1.80	1.54	1.14
27-4607	12103K	.01	2.40	2.16	1.86	1.59	1.20
27-4629	14223K	.022	3.19	2.87	2.49	2.14	1.59
27-4634	14473K	.047	3.56	3.21	2.78	2.38	1.78
27-4625	14104K	.1	4.22	3.81	3.30	2.81	2.12
27-4639	15224K	.22	6.56	5.91	5.12	4.39	3.28
27-4643	15474K	.47	10.78	9.71	8.42	7.20	5.40

MVM MINIATURE AIR-VARIABLE CAPACITORS

is air-variable capacitor series is specifically signed for high frequency applications that nand extreme stability, small size and high Q. VM's are ruggedly constructed and are com- tely interchangeable with competitive devices. Metal housing ments provide smoother and more constant torque during cycling. addition, they provide reliable electrical contact over a large a, assuring reduced minimum noise levels. A positive stop beyond ximum rated capacitance prevents electrical shorting. Guiding ment keeps rotor centered even under conditions of intense shock d vibration. All-metal rotor with integral spring contact elements. values: MVM010, greater then 3000; MVM020, greater than 00; MVM003 and 006, greater than 5000. Sizes, MVM010, x9/32"; MVM020, 3/4x9/32"; MVM003, 1/2x9/64"; MVM006, 1/2x 0". *Turret terminal. †Lug terminal.

Stock No.	Mfr's Type	Range, pF	Mounting	EACH 1-9	10-99	100-Up
27-1585	MVM010	0.8-10.0	Panel*	4.05	3.15	2.45
27-1587	MVM010M	0.8-10.0	Panel†	4.05	3.15	2.45
27-1588	MVM010W	0.8-10.0	PC	4.05	3.15	2.45
27-1589	MVM020	1.0-20.0	Panel*	6.88	5.49	4.62
27-1591	MVM020M	1.0-20.0	Panel†	6.88	5.49	4.62
27-1592	MVM020W	1.0-20.0	PC	6.88	5.49	4.62
27-1594	MVM003	0.35-3.5	Panel*	6.03	4.69	4.12
27-1595	MVM003W	0.35-3.5	PC	6.03	4.69	4.12
27-1596	MVM006	0.40-6.0	Panel*	6.75	5.25	4.65
27-1597	MVM006W	0.40-6.0	PC	6.75	5.25	4.65

MINIATURE TANK CIRCUITS



his well built inductor-capacitor comes in convenient miniature size. It employs a ecision-wound air core coil across a mini- ure trimmer piston capacitor. Cost is little ore than cost of trimmer alone with only ie small unit to mount instead of two. Have nominal Q of 230. Trimmer varies from 0.8 8.5 pF. Size: approximately 9/16x1/2x1/4" with 10-32x1/4" mtg. ishing and nut. *Indicates self-resonating frequency range. Av. pg. wt., 2 oz.

Stock No.	Mfr's Type	Range* MHz	EACH 1-24	25-99	100-199	200-Up
27-1075	LC371	450-1000	4.05	3.64	3.37	3.04
27-1078	LC372	280-765	4.05	3.64	3.37	3.04
27-1081	LC373	225-580	4.05	3.64	3.37	3.04
27-1084	LC374	190-485	4.05	3.64	3.37	3.04
27-1087	LC375	170-415	4.05	3.64	3.37	3.04

VC900 SUBMINIATURE PISTON TRIMMERS

xtremely small size with very wide Delta C. "Hi- ife" telescope mechanism. Temperature Coefficient, -75/—75ppm/°C. *Panel mount; other types are rinted circuit mountings. 500 WVDC range. Shpg. t., 1/2 oz.

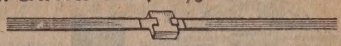
Stock No.	Mfr's Type	Min. pF	Max. pF	Body Lgth.	EACH 1-24	25-49	50-99	100-299	300-Up
27-4820	VC950	1.0	10.0	17/64"*	4.20	3.80	3.40	3.00	2.70
27-4822	VC951	1.2	16.0	5/16"*	6.20	5.60	5.05	4.45	4.05
27-4830	VC960	1.0	10.0	17/64"	3.80	3.40	3.05	2.65	2.40
27-4832	VC961	1.2	16.0	5/16"	5.80	5.22	4.70	4.15	3.70

TUNING (PRODUCTION) TOOLS

Stock No.	Mfr's Type	Description	Wt., Oz.	EACH
27-4890	7104-1	.115" aperture, internal .019" screw blade	6	2.50
27-4875	5284	.015" screwdriver and .050" hex wrench	5	.85

HIGH "Q" UNICERAM CAPACITORS (±5% TOLERANCE)

Microminiature multi- layer ceramic dielectric capacitors. Up to 10 times more capacitance- to-unit-volume-ratio than competitive units, up to .206 μF/in.³. Meet or exceed MIL-C-11272B. Encapsulated in glass with bonded solid silver ribbon leads for low inductance (or round, wire leads on Special Order). Drift-free, low TC of 95 ±20 ppm stability and reliability plus high Q. Low dissipation factor, .0002. No derating, —55°C to +125°C. 300 WVDC, *except 200 WVDC. †±.25 pF tol. max. UY01, 9/64" sq.; UY02 1 1/64" sq.; UY03 7/32" sq.; UY05, 7/16" sq. and 3/32" thick. UY04, 9/32" sq. x 1/8" thick. Av. wt., 1 oz.



ACTUAL SIZE

CAPACITANCE RANGE—SPECIFY pF

1.0	3.9	8.2	22	68	120	220	510	1000
1.5	4.7	9.1	24	75	130	270	560	1800
2.2	5.1	10	30	82	150	300	620	2200
2.7	5.6	12	33	91	160	330	680	2700
3.0	6.2	15	43	100	180	390	750	3000
3.3	6.8	20	47	110	200	470	910	

Stock No.	Mfr's Type	pF Range—Specify	EACH 1-49	50-99	100-249	250-499	500-Up
827C4505	UY01†	1 to 4.7	1.98	1.78	1.54	1.31	.99
827C4510	UY01	5.1 to 24	2.00	1.80	1.56	1.34	1.00
827C4515	UY01	27 to 62	2.10	1.89	1.64	1.40	1.05
827C4520	UY02	5.1 to 12	1.91	1.71	1.49	1.28	.95
827C4525	UY02	13 to 39	1.98	1.78	1.54	1.31	.99
827C4530	UY02	43 to 82	2.00	1.80	1.56	1.34	1.00
827C4535	UY02	91 to 130	2.06	1.86	1.61	1.38	1.04
827C4540	UY03	150 to 200	2.13	1.91	1.66	1.43	1.06
827C4545	UY03	220 to 300	2.25	2.03	1.75	1.50	1.13
827C4550	UY03	330 to 470	2.48	2.23	1.93	1.65	1.24
827C4555	UY04	510 to 680	2.81	2.54	2.20	1.88	1.41
827C4560	UY04	750 to 1000*	3.13	2.81	2.44	2.09	1.56
827C4565	UY05	1100 to 1500	4.06	3.66	3.18	2.71	2.04
827C4570	UY05	1600 to 2000	4.38	3.94	3.41	2.93	2.19
827C4575	UY05	2200 to 3000	5.16	4.64	4.03	3.45	2.58

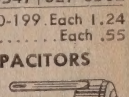
STANDARD VARIABLE DISC TRIMMERS

Miniature ceramic variable trimmer capacitors have disc-type tuning, come in 4 temperature coefficients and 4 mounting types. Type PS has short crimped printed circuit leads; Type A has axial leads; Type P has standard printed circuit leads; Type PR has right-angle printed circuit leads. Size, .375" dia.x.275" deep. Wt., 2 oz.

Range pF	Type DV11-	Temp. Coeff.	TYPE PS ERIE EQUIVALENT 538-011	TYPE A ERIE EQUIVALENT 538-000	TYPE P ERIE EQUIVALENT 538-002	TYPE PR ERIE EQUIVALENT 538-006
2.0-8.0	8A	NP0	827-0390	827-0310	827-0340	827-0375
2.5-11.0	11B	N300	827-0392	827-0312	827-0342	827-0377
3.0-10.0	10C	N500	827-0391	827-0311	827-0341	827-0376
3.0-15.0	15D	N650	827-0393	827-0313	827-0343	827-0378
5.5-18.0	18A	NP0	827-0394	827-0314	827-0344	827-0379
7.0-25.0	25B	N300	827-0395	827-0315	827-0345	827-0380
8.0-25.0	25C	N500	827-0396	827-0316	827-0346	827-0381
9.0-35.0	35D	N650	827-0397	827-0317	827-0347	827-0382

1-24 Each 1.68 25-49 Each 1.60 50-99 Each 1.34 100-199 Each 1.24
200-499 Each .74 500-Up Each .55

DV-5 SUBMINIATURE-DISC VARIABLE CAPACITORS



Ceramic 5mm dia. discs combine the best features of DV and Modutrim configurations. Occupy less than .050 square inches of printed circuit board space. Choice of wide ΔC's in small and stable units. Q—measured at 1 MHz and +25°C = 500 Min.

Stock No.	Mfr's Type	Δ C pF Min.-Max.	EACH 1-49	50-99	100-Up
827-0301	DV 510H	2-10	6.95	6.25	5.20
827-0303	DV 525H	3.5-25			
827-0305	DV 530H	5-30			

MODUTRIM CERAMIC VARIABLE CAPACITORS

Subminiature variable capacitors for micro-module and hybrid circuits. Choice of 9 wide Delta C ranges. Overall size: 1/4x1/4x1/8". All are 50 WVDC except *500 V. Specify Series MT300 or MT400. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Capacity Range, pF	EACH 1-24	25-99	100-199	200-299	300-Up
827C1710	MT300, 400	4.0-15.0*	6.00	5.40	5.00	4.50	4.00
827C1716	MT306, 406	1.1- 5.0	6.00	5.40	5.00	4.50	4.00
827C1719	MT309, 409	1.6- 9.0	6.00	5.40	5.00	4.50	4.00
827C1722	MT312, 412	3.0-12.0	6.00	5.40	5.00	4.50	4.00
827C1730	MT320, 420	3.5-20.0	6.00	5.40	5.00	4.50	4.00
827C1740	MT330, 430	5.0-30.0	6.00	5.40	5.00	4.50	4.00
827C1743	MT340, 440	6.5-40.0	6.00	5.40	5.00	4.50	4.00
827C1746	MT350, 450	8.5-50.0	6.00	5.40	5.00	4.50	4.00
827C1749	MT360, 460	12.0-60.0	6.00	5.40	5.00	4.50	4.00

Contact Allied for Prices on Quantities Larger than Shown

Nytronics Miniature Ceramic Capacitors

"Deci-Caps" "Hy-Caps"

"DECI-CAPS" AND "HY-CAPS" CERAMIC CAPACITORS

"DECI-CAPS." Ultraminiature ceramic capacitors. All in .250 x .100" dia. rugged epoxy molded envelope (¼-watt resistor size). Standardized size permits high-density cordwood packaging. Feature high stability—less than 7½% capacitance change from —55°C to +125°C operating range. ±10% tol. Meet MIL-C-11015.

"HY-CAPS." New solid-state ceramic capacitc Extremely stable—offer less than ±12% cap itance change from —55°C to +125°C. Hi ±20% tolerance. Rated 100 WVDC with derating to 125°C. Dissipation factors: less th 2½% at 25°C. With #26 AWG tinned cop leads. Meet MIL-C-11015 requirements.

"DECI-CAPS" ULTRAMINIATURE CERAMIC CAPACITORS (Av. shpg. wt., 1 oz.)

Stock No.	Mfr's Type	pF	WV DC	EACH 1-24	25-49	50-99	100-249	250-Up
870-0300	DC-047K	4.7	200	.66	.42	.36	.33	.31
870-0302	DC-056K	5.6	200	.66	.42	.36	.33	.31
870-0304	DC-068K	6.8	200	.66	.42	.36	.33	.31
870-0306	DC-082K	8.2	200	.66	.42	.36	.33	.31
870-0308	DC-100K	10	200	.66	.42	.36	.33	.31
870-0313	DC-120K	12	200	.66	.42	.36	.33	.31
870-0318	DC-150K	15	200	.66	.42	.36	.33	.31
870-0323	DC-180K	18	200	.66	.42	.36	.33	.31
870-0328	DC-220K	22	200	.66	.42	.36	.33	.31
870-0333	DC-270K	27	200	.66	.42	.36	.33	.31
870-0348	DC-330K	33	200	.66	.42	.36	.33	.31
870-0342	DC-390K	39	200	.66	.42	.36	.33	.31
870-0350	DC-470K	47	200	.66	.42	.36	.33	.31
870-0354	DC-560K	56	200	.66	.42	.36	.33	.31
870-0358	DC-680K	68	200	.66	.42	.36	.33	.31
870-0362	DC-820K	82	200	.66	.42	.36	.33	.31
870-0309	DC-101K	100	200	.66	.42	.36	.33	.31
870-0314	DC-121K	120	200	.66	.42	.36	.33	.31
870-0319	DC-151K	150	200	.66	.42	.36	.33	.31
870-0324	DC-181K	180	200	.66	.42	.36	.33	.31
870-0329	DC-221K	220	200	.66	.42	.36	.33	.31
870-0334	DC-271K	270	200	.66	.42	.36	.33	.31
870-0339	DC-331K	330	200	.66	.42	.36	.33	.31

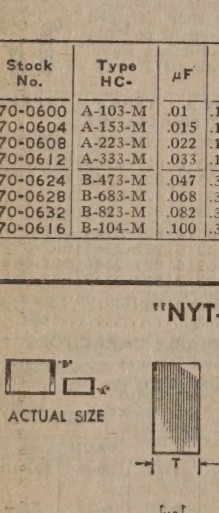
Stock No.	Mfr's Type	pF	WV DC	EACH 1-24	25-49	50-99	100-249	25 Up
870-0343	DC-391K	390	200	.66	.42	.36	.33	.3
870-0351	DC-471K	470	200	1.12	.71	.62	.56	.5
870-0355	DC-561K	560	100	1.12	.71	.62	.56	.5
870-0359	DC-681K	680	100	1.12	.71	.62	.56	.5
870-0363	DC-821K	820	100	1.12	.71	.62	.56	.5
870-0310	DC-102K	1000	100	1.52	.97	.84	.76	.7
870-0315	DC-122K	1200	100	1.67	1.07	.93	.84	.7
870-0320	DC-152K	1500	100	1.71	1.09	.95	.87	.8
870-0325	DC-182K	1800	100	1.88	1.22	1.05	.96	.8
870-0330	DC-222K	2200	100	1.91	1.23	1.07	.97	.9
870-0335	DC-272K	2700	100	2.12	1.36	1.18	1.08	1.0
870-0340	DC-332K	3300	100	2.23	1.43	1.25	1.13	1.0
870-0344	DC-392K	3900	100	2.33	1.50	1.30	1.18	1.0
870-0352	DC-472K	4700	100	2.41	1.56	1.34	1.22	1.1
870-0356	DC-562K	5600	100	2.72	1.74	1.51	1.38	1.2
870-0360	DC-682K	6800	100	3.00	1.93	1.67	1.52	1.4
870-0364	DC-822K	8200	100	3.28	2.10	1.82	1.66	1.5
870-0311	DC-103K	10,000	100	3.61	2.32	2.01	1.83	1.6
870-0316	DC-123K	12,000	100	3.77	2.42	2.09	1.91	1.7
870-0321	DC-153K	15,000	100	4.12	2.64	2.29	2.08	1.9
870-0326	DC-183K	18,000	100	4.12	2.64	2.29	2.08	1.9
870-0331	DC-223K	22,000	100	4.18	2.69	2.33	2.12	1.9
870-0336	DC-273K	27,000	100	4.71	3.02	2.62	2.39	2.2

"HY-CAPS" SOLID-STATE CERAMIC CAPACITORS (Av. shpg. wt., 2 oz.)

Stock No.	Type HC-	μF	Size (HWD) (Inches)	EACH 1-9	10-24	25-49	50-99	100-Up
870-0600	A-103-M	.01	.175x.225x.110	1.57	1.43	1.14	1.00	.91
870-0604	A-153-M	.015	.175x.225x.110	1.95	1.78	1.42	1.24	1.12
870-0608	A-223-M	.022	.175x.225x.110	2.37	2.16	1.73	1.50	1.37
870-0612	A-333-M	.033	.175x.225x.110	3.20	2.91	2.33	2.03	1.84
870-0624	B-473-M	.047	.310x.325x.150	3.83	3.49	2.79	2.43	2.20
870-0628	B-683-M	.068	.310x.325x.150	4.43	4.03	3.21	2.80	2.54
870-0632	B-823-M	.082	.310x.325x.150	4.69	4.27	3.41	2.98	2.71
870-0616	B-104-M	.100	.310x.325x.150	4.96	4.51	3.61	3.13	2.85

Stock No.	Type HC-	μF	Size (HWD) (Inches)	EACH 1-9	10-24	25-49	50-99	100 Up
870-0636	C-154-M	.15	.335x.670x.150	5.08	4.62	3.70	3.21	2.9
870-0644	C-224-M	.22	.355x.670x.150	5.59	5.09	4.07	3.54	3.2
870-0648	C-274-M	.27	.355x.670x.150	5.90	5.37	4.30	3.73	3.3
870-0652	C-334-M	.33	.355x.670x.150	6.69	6.09	4.54	3.94	3.5
870-0660	C-474-M	.47	.355x.670x.150	7.24	6.59	5.27	4.58	4.1
870-0664	D-105-M	1.0	.550x.800x.225	11.44	10.40	8.32	7.24	6.5
870-0676	G-255-M	2.5	.550x.800x.375	23.51	21.38	17.11	14.87	13.5

"NYT-CHIP" CERAMICS FOR IC'S AND PRINTED CIRCUIT BOARDS



- Convenient Installation
- Provide Ultra-High Stability
- Extremely Low Loss
- Low Dissipation Factors

Chip-type capacitors designed for convenient mounting and installation with integrated circuits and PC board constructions. Provide ultra-high stability and low loss. High packaging density and mounting flexibility. Temperature coefficient, 1 less than ±25 PPM/° C. Dissipation factors less than 0.100 at 25°C. 200 WVDC. Tolerance, ±10%. Average shpg. wt. per 100 capacitors is approximately 2 oz.

PHYSICAL DIMENSIONS (†SIZE CODE)

†	L	W	T	MB
A	.170" (±.015)	.065" (±.015)	.070" max.	.035" (+.020, —.010)
B	.280" (±.020)	.195" (±.020)	.070" max.	.035" (+.020, —.010)

PRICES FOR "NYT-CHIP" CAPACITORS

Capacity Range μF	Size	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
4.7 to 82	.170x.065x.070"	1.75	1.12	.96	.88	.80	.74
100 to 220	.170x.065x.070"	1.85	1.18	1.02	.92	.84	.78
270 to 470	.280x.195x.070"	3.07	1.97	1.70	1.53	1.42	1.32
560 to 1000	.280x.195x.070"	4.25	2.71	2.34	2.13	1.96	1.82
200 to 4700	.280x.195x.070"	5.33	3.42	2.96	2.69	2.48	2.31

Stock No.	Mfr's Type	PF	†
870-2500	NCU-047	4.7	A
870-2502	NCU-056	5.6	A
870-2504	NCU-068	6.8	A
870-2506	NCU-082	8.2	A
870-2508	NCU-100	10	A
870-2513	NCU-120	12	A
870-2518	NCU-150	15	A
870-2523	NCU-180	18	A
870-2528	NCU-220	22	A
870-2530	NCU-270	27	A
870-2538	NCU-330	33	A
870-2543	NCU-390	39	A
870-2550	NCU-470	47	A
870-2555	NCU-560	56	A
870-2560	NCU-680	68	A
870-2565	NCU-820	82	A
870-2509	NCU-101	100	A
870-2514	NCU-121	120	A
870-2519	NCU-151	150	A

Stock No.	Mfr's Type	PF	†
870-2524	NCU-181	180	A
870-2529	NCU-221	220	A
870-2534	NCU-271	270	B
870-2539	NCU-331	330	B
870-2544	NCU-391	390	B
870-2551	NCU-471	470	B
870-2556	NCU-561	560	B
870-2556	NCU-681	680	B
870-2566	NCU-821	820	B
870-2510	NCU-102	1000	B
870-2515	NCU-122	1200	B
870-2520	NCU-152	1500	B
870-2525	NCU-182	1800	B
870-2530	NCU-222	2200	B
870-2535	NCU-272	2700	B
870-2540	NCU-332	3300	B
870-2545	NCU-392	3900	B
870-2552	NCU-472	4700	B

Allied Electronics Has the Best Record of Orders Filled in the Country

Plastic Capacitors, Inc. and Elmenco Capacitors

PLASTIC CAPACITORS, INC.

PLASTIC DIELECTRIC, GLASS-ENCASED CAPACITORS

emely long life even under high temper-
Operate 10,000 hours at 85°C at rated
ge. Range: —55°C to +85°C; derate
at 150°C. Units meet or exceed MIL-C-
specs, except high-altitude flashover.
ance: ±10%. Mounting terminals: 8-32x3/8" for capacitors
lia. or larger; smaller units have No. 18 tinned-copper axial
ils.

TYPE OF-20 2000 WVDC. Av. shpg. wt., 4 oz.

ock lo.	Mfr's Type	µF	Size (Dia. x L.)	EACH 1-9	10-24	25-49	50-99	100-Up
0402	103	.01	1 9/32x1 3/16"	2.78	2.64	2.40	2.16	1.89
0410	203	.02	1 9/32x1 3/16"	2.78	2.64	2.40	2.16	1.89
0418	503	.05	3/4x1 3/4"	3.00	2.84	2.61	2.34	2.04
0406	104	.1	3/4x2 1/4"	3.40	3.22	2.95	2.67	2.31
0414	254	.25	2 9/32x2 3/4"	3.86	3.67	3.36	3.01	2.64
0422	504	.5	1 3/8x2"	4.22	4.02	3.57	3.32	2.88

TYPE OF-30 3000 WVDC. Av. shpg. wt., 6 oz.

0430	103	.01	1 9/32x1 3/16"	3.23	3.07	2.86	2.62	2.07
0438	203	.02	3/4x1 3/4"	3.46	3.29	3.07	2.84	2.16
0446	503	.05	3/4x2 1/4"	3.53	3.34	3.13	2.91	2.22
0434	104	.1	1 1/8x1 3/4"	4.15	3.92	3.65	3.38	2.57
0442	254	.25	1 3/8x2"	4.70	4.43	4.10	3.80	2.89
0451	504	.5	1 5/8x2 3/4"	5.80	5.51	5.13	4.77	3.61

TYPE OF-50 5000 WVDC. Av. shpg. wt., 8 oz.

0460	102	.001	1 9/32x1 3/16"	4.40	4.18	3.70	3.47	3.00
0480	502	.005	1 9/32x1 5/8"	4.50	4.22	3.75	3.53	3.05
0464	103	.01	3/4x1 3/4"	4.52	4.24	3.81	3.56	3.09
0472	203	.02	3/4x2 1/4"	5.00	4.72	4.18	3.94	3.38
0484	503	.05	2 9/32x2 1/4"	5.40	5.14	4.50	4.25	3.63
0468	104	.1	1 3/8x2 1/4"	7.30	6.90	6.08	5.72	4.90
0476	254	.25	1 5/8x3"	9.15	8.67	7.68	7.22	6.20
0488	504	.5	1 5/8x6"	10.90	9.99	8.80	8.33	7.13

TYPE OF-80 8000 WVDC. Av. shpg. wt., 1 lb., *3 lbs.

ock lo.	Mfr's Type	µF	Size (Dia. x L.)	EACH 1-9	10-24	25-49	50-99	100-Up
0504	102	.001	1 9/32x1 3/16"	4.60	4.37	3.89	3.65	3.18
0520	502	.005	3/4x1 3/4"	4.72	4.49	3.94	3.70	3.26
0508	103	.01	3/4x2 1/4"	5.25	4.80	4.25	4.01	3.45
0516	203	.02	2 9/32x2 3/4"	6.25	5.19	4.63	4.27	3.71
0524	503	.05	1 3/8x2 3/4"	8.50	6.69	5.90	5.53	4.77
0512	104*	.1	1 5/8x3 5/8"	9.60	7.86	7.33	6.71	5.64

TYPE OF-100 10,000 WVDC. Av. shpg. wt., 1½ lbs.

0543	202	.002	3/4x1 9/32"	5.00	4.46	3.89	3.76	3.29
0535	103	.01	2 9/32x2 1/4"	6.30	5.47	4.96	4.65	4.05
0547	203	.02	1 1/8x2 3/4"	8.05	7.20	6.51	6.12	5.31
0552	503	.05	1 5/8x2 3/4"	11.70	10.11	9.15	8.62	7.50
0539	104	.1	1 5/8x5"	13.10	11.03	9.99	9.38	8.14

TYPE OF-300 30,000 WVDC. Av. shpg. wt., 4 lbs.

0589	502	.005	1 3/8x5"	19.00	16.44	14.52	13.61	11.90
0580	103	.01	1 5/8x6 1/2"	22.50	19.73	17.34	16.21	14.17
0584	203	.02	1 5/8x9"	23.10	20.19	18.25	16.66	14.29

TYPE OF-200 20,000 WVDC. Av. shpg. wt., 3 lbs.

0560	102	.001	3/4x3 1/2"	9.70	8.35	7.53	6.89	5.89
0568	202	.002	1 3/16x3 1/2"	10.00	8.64	7.82	7.12	6.13
0572	502	.005	1 1/8x3 1/2"	10.70	9.29	8.40	7.65	6.59
0564	103	.01	1 1/8x4 1/2"	12.60	11.03	9.92	9.12	7.82

HIGH-VOLTAGE FILTER CAPACITORS

ller than comparable CP-70 style. Range: —50°C
+60°C for 10,000 hours. MIL-C-25A dielectric
stance. Tolerance: —10%, +20%. With footed
kets; nuts and solder lugs on terminals.

TYPE EP30—3000 WVDC. Shpg. wt., 4 lbs., *7 lbs.

tock No.	Mfr's Type	µF	Size	EACH 1-9	10-24	25-49	50-99	100-Up
-0023	504	.5	2 1/2x1 3/16x2 1/2"	8.22	5.72	5.27	4.76	4.19
-0015	105	1.0	2 1/2x1 3/16x3 3/4"	9.24	6.46	5.84	5.39	4.76
-0018	205*	2.0	3 3/4x1 1/4x4 1/2"	12.25	8.46	7.71	7.14	6.27
-0021	405*	4.0	3 3/4x2 1/4x4 3/4"	18.72	12.87	11.57	10.71	9.41
-0026	805*	8.0	4 9/16x3 3/4x4 3/4"	33.11	23.13	20.81	19.28	16.96

TYPE EP50—5000 WVDC. Shpg. wt., 7 lbs., *4 lbs.

-0044	504*	.50	2 1/2x1 3/16x4"	8.79	6.27	5.64	5.22	4.59
-0035	105	1.0	3 3/4x1 1/4x3 3/4"	13.33	9.53	8.62	7.94	7.03
-0038	205	2.0	3 3/4x2 1/4x4 3/4"	19.73	14.12	12.70	11.79	10.38
-0041	405	4.0	4 9/16x3 3/4x4 3/4"	32.89	23.41	21.09	19.56	17.74

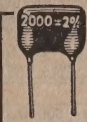
TYPE EP100—10,000 WVDC. Shpg. wt., 10 lbs.

-0060	105	1.0	4 9/16x3 3/4x5 1/2"	44.79	34.02	28.80	26.64	23.59
-0064	205	2.0	4 9/16x3 3/4x10"	70.31	49.90	44.37	41.50	36.74

EM Prices—Prompt Shipment—Largest Stocks

ELMENCO CAPACITORS

"DM" DIPPED MICA TYPES



SIZE CHART (INCHES)

Dual-Marked With MIL and Commercial Type Nos.

DM-10	.360x.330x.190 to .380x.380x.220	DM-19/ CMO6	.650x.520x.220 to .680x.550x.280
DM-15/ CMO5	.450x.360x.170 to .490x.420x.240	DM-30/ CMO7	.780x.870x.300 to .800x.890x.340

Special extra-tough epoxy coating resists extreme humidity and moisture. All are rated 500 WVDC, except †300 WVDC and §100 WVDC. Operate in temperatures from —55°C to +150°C without derating. Compact size of these capacitors makes them very suitable for delay lines, computers, test equipment, missiles, etc. Capacitance drift ±(.05%, +.1 pF) (Char. F). Meet or exceed MIL-C-5C and RETMA specifications for mica capacitors. Tolerance, ± 5%, except *±.5 pF. See Size Chart above for approximate dimensions. Av. shpg. wt., 2 oz. Units are dual-marked in both MIL and Commercial Type Numbers.

Stock No.	Mfr's Type	pF	EACH 1-24	25-99	100-499	500-Up
782-1204	DM-10-030D*	3	.39	.24	.19	.140
782-1206	DM-10-050D*	5	.39	.24	.19	.140
782-1208	DM-10-100J	10	.39	.24	.19	.140
782-1215	DM-10-150J	15	.39	.24	.20	.143
782-1221	DM-10-200J	20	.28	.16	.13	.095
782-1225	DM-10-220J	22	.28	.16	.13	.095
782-1223	DM-10-270J	27	.28	.17	.13	.097
782-1240	DM-10-330J	33	.28	.17	.13	.097
782-1245	DM-10-470J	47	.29	.18	.14	.103
782-1248	DM-10-500J	50	.29	.18	.14	.103
782-1251	DM-10-680J	68	.31	.19	.15	.108
782-1254	DM-10-750J	75	.31	.19	.15	.108
782-1209	DM-10-101J	100	.33	.20	.16	.116
782-1212	DM-10-121J	120	.35	.21	.17	.123
782-1216	DM-10-151J	150	.40	.24	.19	.141
782-1222	DM-10-201J	200	.49	.30	.24	.174
782-1226	DM-10-221J	220	.50	.30	.24	.180
782-1230	DM-10-251J	250	.56	.34	.27	.200
782-1236	DM-10-301J	300†	.59	.35	.28	.207
782-1265	DM-15-010D*'	1	.28	.17	.13	.097
728-1267	DM-15-020D*	2	.28	.17	.13	.097
728-1269	DM-15-030D*	3	.28	.17	.13	.097
728-1271	DM-15-050D*	5	.28	.17	.13	.097
728-1275	DM-15-100J	10	.28	.17	.13	.097
728-1281	DM-15-120J	12	.28	.17	.13	.097
782-1285	DM-15-150J	15	.28	.17	.13	.097
782-1290	DM-15-200J	20	.23	.14	.11	.079
782-1293	DM-15-220J	22	.23	.14	.11	.079
782-1302	DM-15-270J	27	.23	.14	.11	.079
782-1306	DM-15-300J	30	.23	.14	.11	.079
782-1309	DM-15-330J	33	.23	.14	.11	.079
782-1316	DM-15-390J	39	.23	.14	.11	.079
782-1323	DM-15-470J	47	.23	.14	.11	.079
782-1327	DM-15-500J	50	.23	.14	.11	.079
782-1338	DM-15-680J	68	.23	.14	.11	.081
782-1342	DM-15-750J	75	.23	.14	.11	.081
782-1346	DM-15-820J	82	.23	.14	.11	.081
782-1376	DM-15-101J	100	.23	.14	.11	.081
782-1382	DM-15-121J	120	.25	.15	.12	.086
782-1386	DM-15-151J	150	.26	.16	.13	.094
782-1288	DM-15-181J	180	.31	.19	.15	.108
782-1291	DM-15-201J	200	.31	.19	.15	.108
782-1294	DM-15-221J	220	.33	.20	.16	.116
782-1297	DM-15-251J	250	.35	.21	.17	.123
782-1303	DM-15-271J	270	.36	.22	.18	.130
782-1307	DM-15-301J	300	.39	.23	.19	.138
782-1310	DM-15-331J	330	.43	.26	.21	.152
782-1313	DM-15-361J	360	.45	.27	.22	.160
782-1317	DM-15-391J	390	.48	.28	.23	.167
782-1324	DM-15-471J	470	.53	.32	.25	.187
782-1328	DM-15-501J	500	.54	.33	.26	.195
782-1331	DM-15-511J	510	.56	.34	.27	.202
782-1334	DM-15-561J	560†	.56	.34	.27	.202
782-1339	DM-15-681J	680†	.66	.40	.32	.239
782-1343	DM-15-751J	750†	.71	.43	.34	.253
782-1347	DM-15-821J	820†	.78	.46	.37	.275
782-1277	DM-15-102J	1000§	.73	.44	.35	.261
782-1410	DM-19-102J	1000	.51	.31	.25	.184
782-1415	DM-19-122J	1200	.59	.35	.28	.209
782-1420	DM-19-152J	1500	.70	.42	.34	.250
782-1425	DM-19-202J	2000	.85	.51	.41	.303
782-1455	DM-19-252J	2500	1.01	.61	.49	.362
782-1540	DM-30-502J	5000	1.44	.86	.69	.516
782-1545	DM-30-622J	6200	1.69	1.02	.81	.608
782-1510	DM-30-103J	10,000	2.65	1.59	1.27	.951

Mica, Trimmer and Variable Capacitors

Elmenco MICA CAPACITORS

DM5 MINIATURE DUR-MICA CAPACITORS

Volumetric savings through decreased area of mica film and use of a new dip-coat material that provides improved protection with a far thinner coat than on larger mica capacitors. Approx. size less leads, 3/16x1/4x1/8". Final letter in Type No. indicates tolerance: J—±5%, K—±10%, WVDC, 300 except *100, †50. Av. wt., 1 oz.

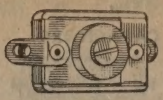
Stock No.	Mfr's No.	pF	EACH 1-24	25-99	100-499	500-Up
782-1005	DM5-050K	5	.47	.29	.23	.169
782-1007	DM5-060K	6	.48	.30	.24	.174
782-1009	DM5-070K	7	.48	.30	.24	.174
782-1011	DM5-080K	8	.48	.30	.24	.174
782-1013	DM5-100J	10	.48	.30	.24	.174
782-1018	DM5-120J	12	.50	.30	.24	.180
782-1023	DM5-150J	15	.50	.30	.24	.180
782-1028	DM5-180J	18	.52	.31	.25	.185
782-1031	DM5-200J	20	.35	.21	.17	.123
782-1033	DM5-220J	22	.36	.22	.17	.127
782-1035	DM5-240J	24	.36	.22	.17	.127
782-1037	DM5-270J	27	.36	.22	.18	.130
782-1039	DM5-300J	30	.36	.22	.18	.130
782-1041	DM5-330J	33	.37	.23	.18	.134
782-1043	DM5-360J	36	.38	.24	.19	.140
782-1045	DM5-390J	39	.38	.24	.19	.140
782-1047	DM5-430J	43	.40	.24	.20	.143
782-1049	DM5-470J	47	.41	.25	.20	.147
782-1051	DM5-500J	50	.41	.25	.20	.147
782-1053	DM5-510J	51	.43	.26	.21	.154
782-1055	DM5-560J	56	.46	.28	.22	.163
782-1057	DM5-620J	62	.48	.29	.23	.173
782-1059	DM5-680J	68	.50	.30	.24	.180
782-1061	DM5-750J	75	.52	.32	.26	.189
782-1063	DM5-820J	82	.57	.35	.28	.206
782-1065	DM5-910J	91	.62	.37	.30	.222
782-1014	DM5-101J	100	.65	.39	.31	.231
782-1016	DM5-111J	110	.70	.42	.33	.248
782-1019	DM5-121J*	120	.73	.45	.36	.264
782-1021	DM5-131J*	130	.62	.37	.30	.222
782-1024	DM5-151J*	150	.70	.42	.33	.248
782-1026	DM5-161J†	160	.72	.43	.35	.257
782-1029	DM5-181J†	180	.78	.48	.38	.283

SCDM THIN-COAT DIPPED MICAS

Ideal where space is at a premium. Single resin coat instead of series of dips. Meet MIL-C-5 except for case insulation (3.5.3) and moisture resistance (3.14). Operate well where not exposed to extensive periods of high humidity. 500 WVDC except *300 WVDC and †100 WVDC. Tol., ± 5% except ‡ ± .5 pF. Av. shpg. wt., 2 oz.

Stock No.	Type SCDM-	pF	Size (LxWxT) (Inches)	EACH 1-24	25-99	100-499	500-Up
782-2002	10-030D‡	3	.310x.230x.120	.38	.24	.19	.14
782-2004	10-050D‡	5	.310x.230x.120	.38	.24	.19	.14
782-2008	10-100J	10	.310x.230x.120	.38	.24	.19	.140
782-2018	10-150J	15	.310x.230x.120	.38	.24	.20	.143
782-2026	10-200J	20	.310x.230x.120	.27	.16	.13	.095
782-2030	10-220J	22	.310x.230x.120	.27	.16	.13	.095
782-2040	10-270J	27	.310x.230x.120	.27	.17	.13	.097
782-2051	10-330J	33	.310x.230x.120	.27	.17	.13	.097
782-2057	10-390J	39	.310x.230x.120	.28	.17	.13	.101
782-2061	10-470J	47	.310x.230x.120	.28	.18	.14	.103
782-2064	10-500J	50	.310x.230x.120	.28	.18	.14	.103
782-2069	10-560J	56	.310x.230x.120	.30	.18	.14	.105
782-2072	10-680J	68	.310x.230x.120	.31	.19	.15	.108
782-2075	10-750J	75	.310x.230x.120	.31	.19	.15	.108
782-2078	10-820J	82	.310x.230x.120	.31	.19	.15	.110
782-2079	10-101J	100	.320x.230x.130	.32	.20	.16	.116
782-2014	10-121J	120	.320x.230x.130	.35	.21	.17	.123
782-2019	10-151J	150	.320x.230x.130	.40	.24	.19	.141
782-2022	10-181J	180	.330x.240x.150	.45	.27	.22	.162
782-2027	10-201J	200	.330x.240x.150	.48	.30	.24	.174
782-2031	10-221J	220	.330x.240x.150	.50	.30	.24	.180
782-2036	10-251J	250	.340x.250x.160	.56	.34	.27	.200
782-2041	10-271J	270	.340x.250x.160	.52	.32	.25	.187
782-2045	10-301J	300*	.340x.250x.160	.58	.35	.28	.207
782-2052	10-331J	330	.340x.250x.160	.55	.33	.26	.195
782-2055	10-361J	360	.340x.250x.160	.58	.35	.28	.207
782-2058	10-391J	390†	.340x.250x.160	.61	.37	.30	.220
782-2135	15-471J	470	.450x.310x.190	.52	.32	.25	.187
782-2137	15-501J	500	.450x.310x.190	.55	.33	.26	.195
782-2140	15-511J	510	.450x.310x.190	.56	.34	.27	.202
782-2147	15-561J	560*	.450x.310x.160	.56	.34	.27	.202
782-2155	15-681J	680*	.450x.310x.160	.66	.40	.32	.239
782-2159	15-751J	750*	.450x.310x.170	.71	.43	.34	.253
782-2164	15-821J	820*	.450x.310x.170	.77	.46	.37	.275
782-2104	15-102J	1000†	.450x.320x.170	.72	.44	.35	.261

ELMENCO TRIMMERS AND PADDERS



TRIMMER

PADDER

Ceramic base, clear India n
Resistant to humidity. Resi
phosphor-bronze adjusting pl
Trimmers rated 350 VDC test
WVDC. Padders 500 VDC
250 WVDC. Three turns for
to tight setting. Wt., 2 oz.

TYPE 30 PADDERS, 7/8x1 5/16"

Stock No.	Mfr's Type	pF Min-Max	EACH 1-24	25-49	50-99	100
789-3703	302	15-130	.56	.49	.45	
789-3704	303	65-340	.57	.50	.46	
789-3705	304	115-550	.63	.55	.50	
789-3706	305	190-760	.70	.61	.54	
789-3707	306	275-970	.77	.67	.61	
789-3708	307	350-1180	.80	.69	.63	
789-3709	308	450-1390	.86	.75	.67	
789-3710	309	550-1600	.88	.77	.69	
789-3711	310	650-1890	1.01	.88	.80	
789-3712	311	780-2110	1.06	.92	.84	
789-3713	312	880-2330	1.06	.92	.84	
789-3716	315	1400-3055	1.31	1.14	1.03	

TYPE 40 MIDGET TRIMMERS 3/8x9/16"

789-3740	400	9-7	.28	.25	.22	
789-3742	402	1.5-20	.28	.25	.22	
789-3743	403	4-40	.32	.28	.26	
789-3744	404	7-60	.40	.34	.31	

TYPE 42 MIDGET TRIMMERS 3/8x3/4"

789-3760	420	1-12	.28	.25	.22	
789-3761	421	2-25	.28	.25	.22	
789-3762	422	4-40	.28	.25	.22	
789-3763	423	7-100	.32	.28	.26	
789-3764	424	16-150	.36	.31	.28	
789-3765	425	24-200	.41	.35	.32	
789-3766	426	37-250	.38	.33	.30	
789-3767	427	55-300	.53	.46	.41	
789-3768	428	70-350	.58	.50	.46	
789-3769	429	90-400	.63	.54	.49	

TYPE 46 STANDARD TRIMMERS, 3/4x3/8"

789-3785	460	1.5-15	.28	.25	.22	
789-3786	461	2.7-40	.28	.25	.22	
789-3787	462	5-80	.28	.25	.22	
789-3788	463	9-180	.28	.25	.22	
789-3789	464	25-280	.37	.32	.29	
789-3790	465	50-380	.42	.36	.33	
789-3791	466	80-480	.46	.40	.35	
789-3792	467	110-580	.53	.46	.41	
789-3793	468	140-680	.57	.49	.45	
789-3794	469	170-780	.62	.53	.48	

CK05 CK06

VITRAMON CAPACITORS

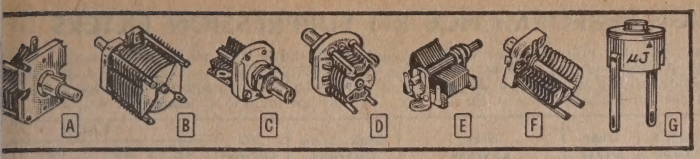
Quality miniature ceramic capacitors coupling, de-coupling and by-passing in s state circuits. Feature precise multi-l construction for high self-resonance. Ti leads suitable for dip soldering. 10 pF 1000 pF WVDC from −55°C to 150°C; t 100,000 pF 100 WVDC. Tolerance, ±10% values; also *±20%. Actual wt. (gr CK05-0.4; CK06-05.

CAPACITANCE RANGE—SPECIFY pF DESIRED

pF	pF	pF	pF	pF	pF	pF	pF	pF	p
10	27	68	180	*470	1200	*3300	8,200	22,000	5
12	33	82	220	560	1500	3900	†10,000	27,000	6
15	39	100	270	680	1800	*4700	12,000	*33,000	8
18	47	120	*330	820	2200	5600	15,000	39,000	*10
22	56	150	390	*1000	2700	6800	18,000	*47,000	

Stock No.	Mfr's Type	pF (Specify Value)	EACH 1-49	50-99	100-249	250-499	500-999	1
979C5705	CK05	10 to 100	.50	.40	.34	.31	.27	
979C5707	CK05	120 to 1000	.58	.46	.39	.35	.32	
979C5709	CK05	1200 to 10,000	.60	.48	.41	.37	.33	
979C5711	CK06	12,000 to 22,000	.75	.70	.62	.58	.54	
979C5713	CK06	27,000 to 47,000	.95	.85	.80	.75	.68	
979C5715	CK06	56,000 to 100,000	1.30	1.18	1.10	1.00	.91	
979C5717	CK05*	120 to 1000	.50	.40	.34	.31	.27	
979C5719	CK05*	1200 to 10,000	.54	.43	.36	.33	.295	
979C5721	CK06*	27,000 to 47,000	.81	.72	.68	.64	.58	
979C5723	CK06*	100,000	1.11	1.00	.94	.85	.77	

Variable Capacitors and Filters



E. F. JOHNSON VARIABLE CAPACITORS

TYPE L VARIABLES

...t shock, vibration. Split-sleeve tension ...ng, silver-plated copper alloy contact ...etter torque, smooth action. Nickel ...s spaced .030". Peak voltage, 1500. ...l space, 1⅜" square behind. Wt., 8 oz.

A SINGLE END PLATE

...ock ...o.	Mfr's Type	pF Max-Min	EACH 1-9	10-49	50-Up
...1160	167-1-1	10-2.2	2.50	2.25	2.00
...1161	167-2-1	25-2.9	2.65	2.40	2.22
...1162	167-3-1	50-4.0	2.90	2.60	2.30
...1163	167-4-1	75-5.2	3.10	2.80	2.47

B BUTTERFLY

...1170	167-21-1	10-2.3	3.00	2.70	2.40
...1172	167-23-1	50-5.9	4.40	3.95	3.50

...YPE M MINIATURE VARIABLES

...ll types for compact equipment. Bridge-...stator terminal. Peak voltage 1250 V, ...pt *850 V. Panel space ¾x⅝", up to ... behind. 3/16" dia. slotted shaft, with ...2 mtg. bushing. Av. wt., 2 oz.

C SINGLE SECTION

...1105	167-102-1	5.0-1.5	.95	.85	.76
...1107	167-104-1	8.7-1.8	1.00	.90	.80
...1110	167-107-1	14.2-2.3	1.10	.99	.88
...1113	167-110-1	19.6-2.7	1.15	1.04	.92
...1118	167-130-1	32.0-3*	1.30	1.17	1.04

D BUTTERFLY

...1130	167-203-1	3.1-1.5	1.30	1.17	1.04
...1132	167-205-1	5.1-1.8	1.40	1.26	1.12
...1135	167-208-1	8.0-2.2	1.55	1.40	1.23
...1138	167-211-1	10.8-2.7	1.70	1.53	1.36

E TYPE R VARIABLES

...a-heavy, rugged construction. Panel or ... mtg. Panel space 1 1/16x1⅝", up to 2⅛" ...nd. 1200 V peak. Av. wt., 1 lb.

...1042	149-3-1	50-5.9	3.45	3.10	2.75
...1045	149-5-1	102-7.1	3.70	3.32	2.95
...1046	149-6-1	140-8.0	4.00	3.60	3.20

F TYPE S VARIABLES

Compact and rugged. 850 V peak rating. Slotted hex-nut shaft. Panel space, 29/32x 25/32", up to 1 1/16" behind. Two 4-40 mtg. holes. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	pF Max-Min	EACH 1-9	10-49	50-Up
828-1005	148-1-1	15-2.3	1.20	1.10	1.00
828-1006	148-2-1	25-2.6	1.25	1.14	1.04
828-1007	148-3-1	35-2.9	1.30	1.18	1.08
828-1008	148-4-1	50-3.2	1.35	1.25	1.14
828-1009	148-5-1	75-3.9	1.45	1.34	1.23
828-1010	148-6-1	100-4.5	1.55	1.46	1.32

G MICRO J CERAMIC DISC TRIMMER

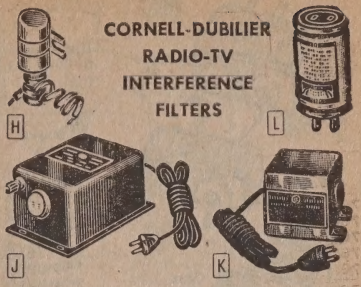
Vertical tuning subminiature trimmer capacitor—less than ¼" D. x ½" L. 200 VDC. High-alumina stator provides lower losses. *Maximum-minimum. Shpg. wt. 1 oz.

Stock	Mfr's Type 274-	pF *	EACH 1-49	50-99	100-499	500-Up
828-1275	9-5	9.0-2.5	3.95	3.50	3.00	2.60
828-1280	20-5	20-3.5	3.95	3.50	3.00	2.60
828-1285	25-5	25-5.0	3.95	3.50	3.00	2.60

TYPE U VARIABLES FOR PRINTED CIRCUIT MOUNTING (Not illus.)

Tiny capacitors that require only ¼" sq. panel space, and up to ¾" behind. High Q, low temperature coefficient. Metal parts silver plated. Steatite ceramic. 5/16" PC terminals. Peak voltage 650 except *500. Av. wt., 4 oz.

Stock No.	Mfr's Type	pF Max-Min	EACH 1-49	50-99	100-Up
828-1204	189-501-5	4.2-1.2	.64	.55	.47
828-1207	189-502-5	6.7-1.3	.66	.56	.48
828-1210	189-503-5	9.2-1.4	.64	.55	.47
828-1213	189-504-5	11.6-1.5	.66	.56	.48
828-1216	189-505-5	14.1-1.7	.68	.59	.51
828-1219	189-506-5	16.7-1.8	.70	.61	.52
828-1229	189-509-5	24.5-2.4*	.76	.65	.56



"Quietone" filters offer a practical solution for the suppression of interference from many types of household, industrial, and heavy-duty electrical equipment or other high frequency disturbance carried through power lines. Designed to give optimum suppression on the equipment for which they are intended and can be relied upon to give excellent service.

H Type IF-24. Industrial filter for permanent installation directly at equipment causing interference. Flex-leads and metal housing, mounting lug. For 110-120 V, AC/DC. Shpg. wt. 6 oz.
755-2115 ..... 1.38

J Type IF-18. All-wave capacitive-inductive filter for severe interference caused by air conditioners, machine tools, etc. Bakelite case, 6x3¾x2½". With line cord, plug. Binding post for ground wire. 5 amps. For 115 V, AC/DC. Shpg. wt. 4 lbs.
755-2110 ..... 9.50

K Type IF-19. Capacitive-inductive for severe interference caused by fans, diathermy machines, neon signs, etc. Mounting holes. Ground terminal. 5 amps. 115 V, AC/DC. 4x2¼x2⅞". Shpg. wt. 3 lbs.
755-2111 ..... 8.50

L Type IF-4. Plug-in, cylindrical type for medium interference produced by fluorescent lights, electric shavers, similar devices. Filter plugs into wall; appliance plugs into filter. 5 amps. 110 V, AC/DC. Size, 1⅜x2". Shpg. wt. 5 oz.
755-2100 ..... 1.44

L Type IF-6. Similar to above, but has ground terminal. Connects between power line and appliance, or power line and receiver. 5 amps. 110 V, AC/DC. Size, 1⅜x2". Shpg. wt. 6 oz.
755-2102 ..... 2.24

CORNELL-DUBILIER TYPE NFR TUBULAR PI RFI FILTERS

150 kHz TO 10 GHz

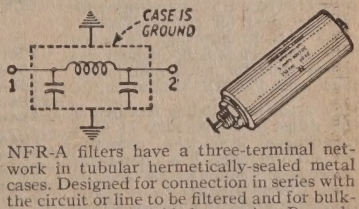
...tock ...No.	Mfr's Type	Amps	Volts AC	DC	Size, L. x Dia.	EACH 1-24	25-49	50-99	100-499	500-Up
...-2702	NFR100-6#	1.0	.....	100	2¾"x1"	12.30	8.20	6.15	5.54	4.92
...-2726	NFR124-1§	1.0	250	600	2⅝"x1"	14.64	9.76	7.32	6.59	5.86
...-2710	NFR101-8#	5.0	.....	100	3½"x1¼"	15.59	10.46	7.85	7.06	6.28
...s2728	NFR126-1§	5.0	250	600	3"x1¼"	18.60	12.40	9.30	8.37	7.44
...-2733	NFR136-1§	10.0	.....	100	3⅛"x1⅜"	20.49	13.66	10.25	9.22	8.20
...-2730	NFR127-1§	10.0	250	600	3¾"x1⅛"	24.93	16.62	12.47	11.22	9.97

14 kHz TO 10 GHz

...tock ...No.	Mfr's Type	Amps	Volts AC	DC	Size, L* x Dia.	EACH 1-24	25-49	50-99	100-499	500-Up
...-2706	NFR100-24‡	1.0	120	300	6"x1⅛"	21.75	14.50	10.88	9.79	8.70
...-2720	NFR110-10‡	5.0	120	300	6⅜"x1½"	29.64	19.76	14.82	13.34	11.86
...-2714	NFR102-19‡	10.0	120	300	7"x1¾"	38.52	25.68	19.26	17.34	15.41

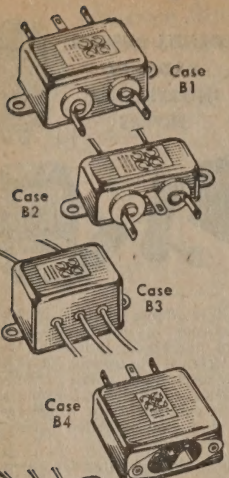
14 kHz to 10 GHz†

...tock ...No.	Mfr's Type	Amps	Volts AC	DC	Size, L* x Dia.	EACH 1-24	25-49	50-99	100-499	500-Up
...-2704	NFR100-8A**	1.0	250	600	2¾"x1"	10.65	7.10	5.33	4.79	4.26
...-2718	NFR110-4A**	3.0	250	600	3½"x1⅛"	16.50	11.00	8.25	7.43	6.60
...-2708	NFR101-4A**	5.0	250	600	3½"x1¼"	17.70	11.80	8.85	7.97	7.08
...-2712	NFR102-6A**	10.0	250	600	3¾"x1½"	21.75	14.50	10.88	9.79	8.70
...-2722	NFR111-2A**	20.0	250	600	4⅞"x1¾"	30.90	20.60	15.45	13.91	12.36
...-2724	NFR112-1A**	30.0	250	600	4"x2¼"	50.55	33.70	25.28	22.75	20.22
...-2716	NFR103-3A**	50.0	250	600	4½"x2¼"	68.40	45.60	34.20	30.78	27.36



NFR-A filters have a three-terminal network in tubular hermetically-sealed metal cases. Designed for connection in series with the circuit or line to be filtered and for bulkhead or chassis-shielded mounting. Properly mounted, mutual coupling is eliminated and the closed path over the filtered line shunts the interference currents to ground. ‡Filter provides greater than 80 dB attenuation over the range of 150 kHz to 10 GHz. Attenuation is 25 dB at 14 kHz. Curve is essentially a straight line from 25 dB at 14 kHz to 80 dB at 150 kHz plotted semi-log with frequency the log scale. §80 dB attenuation from 500 kHz to 10 GHz. 50 dB attenuation at 150 kHz. Curve is essentially a straight line from 50 dB/150 kHz to 80 dB/500 kHz when plotted semi-log with frequency the log scale. #Greater than 80 dB attenuation 150 kHz to 10 GHz. **Greater than 80 dB attenuation 1 MHz to 10 GHz. *Not including terminals. †U.L. Listed for use in electronic data processing equipment.

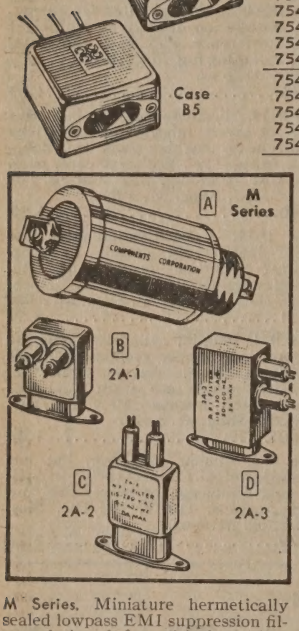
Components Corporation RFI and EMI Filters



HIGH-PERFORMANCE RFI SUPPRESSION FILTERS

Filter powerline and internally-generated RFI in a wide variety of electronic equipment. Feature high RFI rejection at low frequencies. Meet new ASA specifications on leakage current limited to 0.5 mA at 120 VAC 60 Hz. Operate from 115 volts, 50-400 Hz AC. Withstand high pot to 2000 VDC. Dimensions in table for cases B2 B5 do not include 4" leads. Av. wt., 2 oz.

Stock No.	Mfr's Type	Case Style	Size LxWxH	Max. Line Current	DC Ohms	EACH 1-24	25-49	50-99	
754-0206	1B1	B1	2.50x2.12x .625"	1 amp	.15	5.85	4.77	4.24	3
754-0209	1B2	B2	2.50x1.56x .625"	1 amp	.15	5.95	4.85	4.32	3
754-0212	1B3	B3	2.50x .94x .625"	1 amp	.15	6.05	4.95	4.40	3
754-0215	1B4	B4	2.00x2.50x .750"	1 amp	.15	6.70	5.49	4.88	4
754-0218	1B5	B5	2.00x2.06x .750"	1 amp	.15	6.80	5.58	4.96	4
754-0230	2B1	B1	2.50x2.12x .625"	2 amp	.04	5.30	4.32	3.84	3
754-0233	2B2	B2	2.50x1.56x .625"	2 amp	.04	5.35	4.36	3.88	3
754-0236	2B3	B3	2.50x .94x .625"	2 amp	.04	5.40	4.41	3.92	3
754-0239	2B4	B4	2.00x2.50x .750"	2 amp	.04	6.05	4.95	4.40	3
754-0242	2B5	B5	2.00x2.06x .750"	2 amp	.04	6.15	5.04	4.48	3
754-0245	3B1	B1	2.50x2.50x .750"	3 amp	.08	6.05	4.95	4.40	3
754-0248	3B2	B2	2.50x1.94x .750"	3 amp	.08	6.15	5.04	4.48	3
754-0252	3B3	B3	2.50x1.31x .750"	3 amp	.08	6.40	5.22	4.64	4
754-0255	3B4	B4	2.00x2.75x .750"	3 amp	.08	6.95	5.67	5.04	4
754-0258	3B5	B5	2.00x2.32x .750"	3 amp	.08	7.05	5.76	5.12	4
754-0261	5B1	B1	2.50x2.50x .750"	5 amp	.02	5.40	4.41	3.92	3
754-0264	5B2	B2	2.50x1.94x .750"	5 amp	.02	5.55	4.54	4.04	3
754-0267	5B3	B3	2.50x1.31x .750"	5 amp	.02	5.70	4.68	4.16	3
754-0270	5B4	B4	2.00x2.75x .750"	5 amp	.02	6.30	5.13	4.56	3
754-0273	5B5	B5	2.00x2.32x .750"	5 amp	.02	6.40	5.22	4.64	4
754-0276	10B1	B1	2.50x2.50x1.125"	10 amp	.015	5.95	4.85	4.32	3
754-0279	10B2	B2	2.50x1.94x1.125"	10 amp	.015	6.05	4.95	4.40	3
754-0282	10B3	B3	2.50x1.31x1.125"	10 amp	.015	6.15	5.04	4.48	3
754-0285	10B4	B4	2.00x2.75x1.125"	10 amp	.015	6.80	5.58	4.96	4
754-0288	10B5	B5	2.00x2.32x1.125"	10 amp	.015	6.95	5.67	5.04	4



LOW-PASS EMI EQUIPMENT SUPPRESSION FILTERS

M Series. Miniature hermetically sealed lowpass EMI suppression filters designed for critical applications. Feature ultra high frequency attenuation as well as uniquely designed coils for maximum inductance with high DC saturation.

One of the outstanding features of this series is the stability of filter capacitance over the complete temperature range. It is a non-polar device ideally suited for DC and AC lines. Covers 10 kHz to 10 GHz. Highest rejection for size available. Temperature range: −55 to +125° C. ⅜" diameter, length shown in tables. Mounts with ¼-28 stud. Wt. 1 oz.

2A Series. Premium small size RFI filters for critical electronic instrumentation requirements. Operate from 115 to 230 VAC, 50 to 400 Hz. RFI rejection: 30 dB at 1 MHz, 50 dB at 10 MHz and above. 5000 pF capacitance between line and ground.

High pot test, 2000 VDC. Input for standard three-conductor cord. 1½" mounting centers. Type 2A-1 fits in 1½x1½x1¼" space; 2A-2 fits in 2½ x⅝x1¼"; 2A-3 fits in 2x1⅛x⅝". Average shpg. wt. 2 oz.

A 50 WVDC FILTERS FOR 10 kHz to 10 GHz OPERATION

Stock No.	Mfr's Type	Erie Equivalent	Filter Section	DC A	Max. DC Ohms	L., Inches	EACH 1-9	10-49	50-99	100
754-0005	M050-L1	9001-100-0005	L	1.0	.35	.778	19.52	17.56	15.62	13
754-0008	M050-L3	9001-100-0006	L	3.0	.06	.778	18.71	16.84	14.96	13
754-0011	M050-L5	9001-100-0007	L	5.0	.04	.778	19.62	17.66	15.70	13
754-0014	M050-LX	9009-100-0000	L	10.0	.01	.530	13.96	12.56	11.17	9
754-0026	M050-PQ	.....	Pi	.25	1.5	.778	21.70	19.53	17.36	15
754-0017	M050-P1	.....	Pi	1.0	.25	.778	21.47	19.32	17.18	15
754-0020	M050-P3	.....	Pi	3.0	.05	.778	20.58	18.52	16.46	14
754-0023	M050-P5	.....	Pi	5.0	.015	.778	21.58	19.42	17.26	15
754-0029	M050-T2	.....	T	2.0	.2	1.164	24.68	22.21	19.74	17
754-0032	M050-T5	.....	T	5.0	.05	1.330	26.29	23.66	21.03	18

A 100 WVDC FILTERS FOR 10 kHz TO 10 GHz OPERATION

754-0126	M100-LQ	9000-000-0000	L	.25	1.5	1.028	20.76	18.68	16.61	14
754-0120	M100-L1	9000-000-0003	L	1.0	.35	1.028	19 63	17.67	15.70	13
754-0123	M100-L5	9000-000-0007	L	5.0	.04	1.028	19.76	17.78	15.81	13
754-0138	M100-PQ	9001-000-1000	Pi	.25	1.5	1.028	22.40	20.16	17.92	15
754-0129	M100-P1	9001-000-1003	Pi	1.0	.35	1.028	22.38	18.34	16.30	14
754-0132	M100-P3	9001-000-1005	Pi	3.0	.06	1.028	19.47	17.97	15.98	13
754-0135	M100-P5	9001-000-1008	Pi	5.0	.04	1.028	20.38	18.34	16.30	14
754-0141	M100-T2	9004-000-2000	T	2.0	.2	1.464	23.70	21.33	18.96	16
754-0144	M100-T5	9005-000-2000	T	5.0	.05	1.630	26.84	23.93	21.18	18

A 150 WVDC FILTERS FOR 10 kHz TO 10 GHz OPERATION

754-0181	M150-LQ	9000-000-0012	L	.25	1.2	1.028	22.80	20.52	18.24	15
754-0175	M150-L1	9000-000-0015	L	1.0	.25	1.028	20.95	18.85	16.76	14
754-0178	M150-L5	9000-000-0019	L	5.0	.015	1.028	21.23	19.11	16.98	15
754-0193	M150-PQ	9001-000-1010	Pi	.25	1.2	1.028	23.80	21.42	19.04	16
754-0184	M150-P1	9001-000-1013	Pi	1.0	.25	1.028	22.87	20.58	18.30	16
754-0187	M150-P3	9001-000-1015	Pi	3.0	.05	1.028	21.52	19.37	17.22	15
754-0190	M150-P5	9001-000-1017	Pi	5.0	.015	1.028	22.18	19.96	17.74	15
754-0196	M150-T2	9004-000-2001	T	2.0	.1	1.464	25.32	22.79	20.26	17
754-0203	M150-T5	9005-000-2001	T	5.0	.05	1.630	30.92	27.83	24.74	21

A 115 VAC FILTERS FOR 10 kHz TO 10 GHz OPERATION

754-0147	M115-L1	9000-000-0026	L	1.0	.25	1.028	20.47	18.42	16.38	14
754-0151	M115-L3	9000-000-0028	L	3.0	.05	1.028	18.86	16.97	15.09	13
754-0154	M115-L5	9000-000-0030	L	5.0	.015	1.028	19.52	17.57	15.62	13
754-0169	M115-T2	9004-000-2002	T	2.0	.1	1.464	21.09	18.98	16.87	14
754-0172	M115-T5	9005-000-2002	T	5.0	.05	1.630	20.38	18.34	16.30	14
754-0166	M115-PQ	9000-000-1018	Pi	.25	1.2	1.028	19.76	17.78	15.80	13
754-0157	M115-P1	9000-000-1021	Pi	1.0	.25	1.028	20.47	18.42	16.38	14
754-0160	M115-P3	9000-000-1023	Pi	3.0	.05	1.028	24.22	21.80	19.38	16
754-0163	M115-P5	9000-000-1025	Pi	5.0	.015	1.028	27.07	24.36	21.66	18

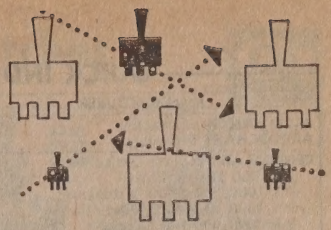
2A SERIES RFI EQUIPMENT FILTERS

Stock No.	Mfr's Type	Fig.	Filter Type	Max. Line Current	EACH 1-9	10-49	50-99	100-U
754-0221	2A-1	B	Dual L Section	2A	11.68	10.51	9.93	9.3
754-0224	2A-2	C	Dual L Section	2A	11.68	10.51	9.93	9.3
754-0227	2A-3	D	Dual L Section	2A	11.68	10.51	9.93	9.3

oggle Switch Cross Reference Index

has a switch for every requirement. the replacement equivalent for your switches from this big selection. Use hart below to find the manufacturer's ement for the switch you've been using, der by the Allied Stock No.

Page references indicate where various manufacturer's switches are described and where prices and specifications are shown in this catalog. Select from Allied's huge stock at OEM prices. Get the fastest, most reliable service in the electronics industry.



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1	905-4527	VD0007	213
1 (JV-1)	905-4567	VLD0012	213
1 (JV-5)	905-4568	VLD0018	213
1 (JV-7)	905-4565	VLD0015	213
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19	905-4521	VD0001	213
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-2R-A2	905-1215	FAD2-1A-1S	213
-2RL-A2	905-1240	FAD2-5L-1S	213
-2RL2-A2	905-1225	FAD2-2M-1S	213
-2RQ1-A2	905-1229	FAD2-1P-1S	213
-2RV-A2	905-1202	FAD2-LV-1S	213
-2RVZ-A2	905-1204	FAD2-LV2-1S	213
-2RB-A2	905-1234	FAD2-40-1S	213
-2R	905-0455	BRD2-1A	213
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BZ-2RD	905-0497	BRD2-70-	213
BZ-2RD-1A	905-0498	BRD2-70-1S	213
BZ-2RQ1	905-0457	BRD2-1P	213
BZ-2RQ1-A2	905-0458	BRD2-1P-1S	213
BZ-2RS	905-0463	BRD2-10	213
BZ-2RS-A2	905-0461	BRD2-10-1S	213
BZ-2RW	905-0372	BRD2-LW8	213
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BZ-2RW22	905-0489	BRD2-LW228	213
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BZE6-2RQ2	905-3829	SBH2-8PQ2	214

MANUFACTURERS CROSS REFERENCE

*Single Pole –Double Pole ††Three Pole **Four Pole §Hesitation Switch

lied k No.	Alco MST Series w/out Color Cap	Pg.	Allied Stock No.	Alco MSTE Series	Pg.	AH &H Type No.	Pg.	Allied Stock No.	Cutler Hammer Type No.	Pg.	Allied Stock No.	Cutler Hammer MIL No.	Pg.	Allied Stock No.	JBT Type No.	Micro Type No.	Pg.
.....	MST-105E	200	700-6021	MSTE-106E	200	TC-3	...	757C3050	7050	193	757C8076	8866K1	194	826-1351	JMT-121	ITW1-1	197
5780*	MST-105D	200	700-6020	MSTE-106D	200	TS-3	...	757C3053	7053	193	757C8079	8866K4	194	826-1353	JMT-123	ITW1-3	197
.....	.....	200	.....	.....	...	TM-3	...	.....	.....	...	.....	.....	...	826-1356	JMT-126	ITW1-8	197
5783*	MST-105G	200	.....	.....	...	TG-3	...	.....	7051	...	757-8077	8866K2	194	826-1357	JMT-127	ITW1-7	197
5784*	MST-105H	200	.....	.....	...	TE-3	...	.....	7052	...	757C8078	8866K3	194	826-1361	JMT-131	ITW1-5	197
5782*	MST-105F	200	.....	.....	...	.....	...	.....	7054	...	757C8083	8866K8	194	826-1364	JMT-134	.....	197
5797†	MST-205P	200	700-6032	MSTE-206P	200	TC-6	...	.....	7060	...	.....	8867K11	194	826-1381	JMT-221	2TW1-1	197
5795†	205N	200	700-6030	MSTE-206N	200	TS-6	...	.....	7063	...	.....	8877K14	194	826-1383	JMT-223	2TW1-3	197
.....	.....	...	.....	.....	...	TM-6	...	.....	.....	...	.....	.....	...	826-1386	JMT-226	2TW1-8	197
5800†	MST-205S	200	.....	.....	...	TG-6	...	.....	7061	...	757C8108	8867K2	194	826-1387	JMT-227	2TW1-7	197
5802†	205T	200	.....	.....	...	TE-6	...	.....	7062	...	757C8109	8867K3	194	826-1391	JMT-231	2TW1-5	197
5798†	205PA	200	700-6033	MSTE-206PA	200	.....	...	.....	.....	...	.....	.....	...	826-1392	JMT-232	.....	197
5803†	205TA	200	.....	MSTE-206TA	...	.....	...	.....	.....	...	.....	.....	...	826-1393	JMT-233	.....	197
5799†	205R	200	.....	.....	...	.....	...	.....	7064	...	757C8114	8867K8	194	826-1394	JMT-234	.....	197
5801†	205SA	200	.....	.....	...	.....	...	.....	.....	...	.....	.....	...	826-1395	JMT-235	.....	197
5821††	MST-305E	200	700-6041	MSTE-306E	200	.....	...	.....	.....	...	.....	.....	...	826-1421	JMT-321	.....	197
5820††	MST-305D	200	700-6040	MSTE-306D	200	.....	...	.....	.....	...	.....	.....	...	826-1423	JMT-323	.....	197
5824††	MST-305H	200	.....	.....	...	.....	...	.....	.....	...	.....	.....	...	826-1431	JMT-331	.....	197
5842**	MST-405P	200	700-6050	MSTE-406P	200	.....	...	.....	.....	...	.....	.....	...	826-1451	JMT-421	.....	197
5840**	MST-405N	200	700-6051	MSTE-406N	200	.....	...	.....	.....	...	.....	.....	...	826-1453	JMT-423	.....	197
6081*	MSTG-106E	200	.....	.....	...	.....	...	.....	.....	...	757C8140	8868K1	194	.....	I5-121	1TW1-1	197
6080*	MSTG-106D	200	.....	.....	...	.....	...	.....	.....	...	757-8143	8868K4	194	.....	I5-123	1TW1-3	197
.....	.....	...	.....	.....	...	.....	...	.....	.....	...	757C8141	8868K2	...	.....	I5-127	1TW1-7	...
.....	.....	...	.....	.....	...	.....	...	.....	.....	...	757C8142	8868K3	...	.....	I5-131	1TW1-5	...
.....	.....	...	.....	.....	...	.....	...	.....	.....	...	757C8147	8868K8	194	.....	I5-134	.....	...
6385†	MSTG-206D	200	.....	.....	...	.....	...	.....	.....	...	757C8170	8869K1	194	.....	I5-221	12TW1-1	...
6384†	MSTG-706N	200	.....	.....	...	.....	...	.....	.....	...	757C8173	8869K4	194	.....	I5-223	12TW1-3	...
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6386†	MSTG-206PA	200	.....	.....	...	.....	...	.....	.....	...	.....	.....	...	.....	I5-232	.....	...
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6102††	MSTG-306E	200	.....	.....	...	.....	...	.....	.....	...	.....	.....	...	.....	I5-321	.....	...
6387††	MSTG-306D	200	.....	.....	...	.....	...	.....	.....	...	.....	.....	...	.....	I5-323	.....	...
6116**	MSTG-406P	200	.....	.....	...	.....	...	.....	.....	...	.....	.....	...	.....	I5-421	.....	...
6115**	MSTG-406N	200	.....	.....	...	.....	...	.....	.....	...	.....	.....	...	.....	I5-423	.....	...
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Precision Switches

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SHALLCROSS ROTARY SWITCHES By CUTLER-HAMMER

MIL-S-6807 ROTARY POWER SWITCHES

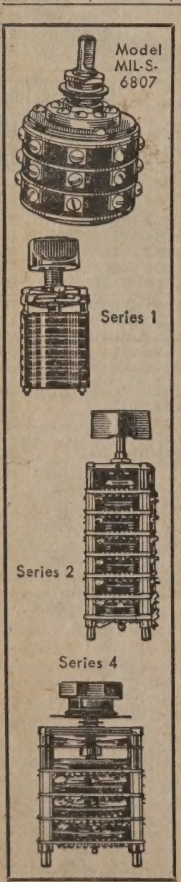
Adjustable index. 5 amps at 28 VDC and 115 VAC. 8 positions non-shorting. Screw terminals. 17/32" shaft, 15/32" bushing. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Gov't MS No.	Deck	EACH 1-24	25-49	50-99	100-Up
757-3441	7261K14	25002-1	1	8.14	6.39	5.33	4.26
757-3454	7262K14	25002-2	2	12.51	9.72	8.10	6.48
757-3471	7264K10	25002-4	4	21.03	16.32	13.60	10.88
757-3481	7265K10	25002-5	5	25.00	19.62	16.35	13.08
757-3491	7266K6	25002-6	6	29.22	22.92	19.10	15.28

SERIES 1, 2 AND 4 SWITCHES

Precision-made switches meet MIL-S-3786 specifications; any fications are readily available on special request. Series 1 is diameter; 2 is 1¾" square; 4 is 2½" square. All switches hav diameter bushing, 1" diameter shafts and fully adjustable Order from tables below. Av. shpg. wt., 2 oz.

Series	Rating at 120 VAC	Life Operations	Rating at 30 VDC	Life Operations	Max. A Contact
1	350 mA	25,000	1000 mA	25,000	.0045 at
2	2 A	10,000	2 A	20,000	.010 at 2
4	2 A	5,000	2 A	20,000	.010 at 2



SERIES 1 PER MIL-S-3786/SR28

SHORTING TYPES Stock No.	Mfr's Type	NON-SHORTING TYPES Stock No.	Mfr's Type	No. of Poles	Pos/ Poles	No. of Decks	EACH 1-9	10-24	25-49	50-99
757-1530	1J04A6-1	757-1570	1J54A6-1	1	2-6	1	6.12	4.40	3.80	3.40
757-1531	1J04A6-2	757-1571	1J54A6-2	2	2-6	2	8.24	5.80	5.10	4.60
757-1532	1J04A6-3	757-1572	1J54A6-3	3	2-6	3	10.25	7.30	6.40	5.70
757-1515	1J02A12-1	757-1560	1J52A12-1	1	2-12	2	7.17	5.10	4.40	4.00
757-1516	1J02A12-2	757-1561	1J52A12-2	2	2-12	4	10.70	7.60	6.60	6.00
757-1517	1J02A12-3	757-1562	1J52A12-3	3	2-12	6	14.23	10.10	8.80	7.90
757-1501	1J00A12-1	757-1550	1J50A12-1	1	2-12	2	7.17	5.10	4.40	4.00
757-1502	1J00A12-2	757-1551	1J50A12-2	2	2-12	4	10.70	7.60	6.60	6.00
757-1503	1J00A12-3	757-1552	1J50A12-3	3	2-12	6	14.23	10.10	8.80	7.90

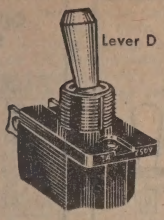
SERIES 2 PER MIL-S-3786/SR14

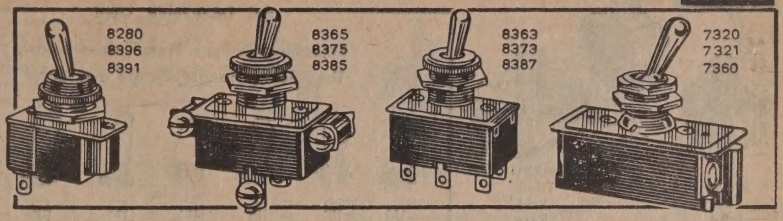
SHORTING TYPES Stock No.	Mfr's Type	Max. Pos.	NON-SHORTING TYPES Stock No.	Mfr's Type	Max. Pos.	Poles/ Deck	No. of Decks	EACH 1-9	10-24	25-49	50-99
757-1670	2E00A24-1	24	757-1775	2J50A12-1	12	1	1	14.95	10.80	9.40	8.40
757-1671	2E00A24-2	24	757-1776	2J50A12-2	12	1	2	22.00	16.00	13.90	12.40
757-1672	2E00A24-3	24	757-1777	2J50A12-3	12	1	3	29.19	21.20	18.40	16.40
757-1680	2E06A11-1	11	757-1785	2J56A6-1	6	2	1	15.30	11.10	9.60	8.60
757-1681	2E06A11-2	11	757-1786	2J56A6-2	6	2	2	22.35	16.20	14.10	12.60
757-1682	2E06A11-3	11	757-1787	2J56A6-3	6	2	3	29.50	21.40	18.60	16.60
757-1720	2E18A5-1	5	757-1795	2J68A3-1	3	4	1	16.00	11.60	10.10	9.00
.....	.....	.....	757-1796	2J68A3-2	3	4	2	25.30	18.40	15.90	14.20
757-1722	2E18A5-3	5	757-1797	2J68A3-3	3	4	3	34.60	25.10	21.80	19.40
757-1625	2C00A32-1	32	757-1735	2H50A16-1	16	1	1	14.95	10.80	9.40	8.40
757-1626	2C00A32-2	32	757-1736	2H50A16-2	16	1	2	22.00	16.00	14.10	12.60
757-1627	2C00A32-3	32	757-1737	2H50A16-3	16	1	3	29.19	21.20	18.40	16.40
757-1640	2C06A15-1	15	757-1750	2H56A8-1	8	2	1	15.30	11.10	9.60	8.60
757-1641	2C06A15-2	15	757-1751	2H56A8-2	8	2	2	22.35	16.20	14.10	12.60
757-1642	2C06A15-3	15	757-1752	2H56A8-3	8	2	3	29.50	21.40	18.60	16.60
757-1655	2C18A7-1	7	757-1765	2H68A4-1	4	4	1	16.00	11.60	10.10	9.00
.....	.....	.....	757-1766	2H68A4-2	4	4	2	25.30	18.40	15.90	14.20
757-1657	2C18A7-3	7	757-1767	2H68A4-3	4	4	3	34.60	25.10	21.80	19.40

SERIES 4 PER MIL-S-3786/SR15

757-1901	4A00A48-1	48	757-1965	4E50A24-1	24	1	1	22.95	16.60	14.40	12.90
.....	.....	.....	757-1966	4E50A24-2	24	1	2	32.80	23.80	20.70	18.40
757-1903	4A00A48-3	48	757-1967	4E50A24-3	24	1	3	42.60	31.00	26.90	23.90
757-1915	4A06A23-1	23	757-1975	4E56A12-1	12	2	1	23.30	16.90	14.70	13.10
757-1916	4A06A23-2	23	757-1976	4E56A12-2	12	2	2	33.65	24.50	21.20	18.90
757-1917	4A06A23-3	23	757-1977	4E56A12-3	12	2	3	43.89	31.90	27.70	24.70
757-1930	4A18A11-1	11	757-1985	4E68A6-1	6	4	1	24.00	17.40	15.10	13.50
757-1931	4A18A11-2	11	757-1986	4E68A6-2	6	4	2	36.83	26.70	23.20	20.70
757-1932	4A18A11-3	11	757-1987	4E68A6-3	6	4	3	49.75	36.10	31.30	27.90

Cutler-Hammer AC-DC Toggle Switches





AC-DC "DESIGNER LINE" SWITCHES

on made to assure long life and reliable operation under usage. Brilliant new design concept adds "class" to any ent. Two handle styles are available in red, white, yellow, nd green. All switches have high arc-resistant and "tease it" quick-make, quick-break contact mechanism enclosed in ly phenolic case. Switches have 1⁵⁄₃₂″ diameter, 1¹⁄₃₂″ long All switches have solder lug terminals. ■U.L. Recognized. Listed. Average shpg. wt., 2 oz.

PST (3 AMPS AT 250 VOLTS, 6 AMPS AT 125 VOLTS)

k	Mfr's Type	Lever Color	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
050	8381K21C	White	1.05	.79	.73	.61	.55	.48
051	8381K21D	White	1.05	.79	.73	.61	.55	.48
052	8381K22C	Red	1.05	.79	.73	.61	.55	.48
058	8381K22D	Red	1.05	.79	.73	.61	.55	.48
062	8381K25C	Yellow	1.05	.79	.73	.61	.55	.48
063	8381K25D	Yellow	1.05	.79	.73	.61	.55	.48
070	8381K27C	Black	1.05	.79	.73	.61	.55	.48
071	8381K27D	Black	1.05	.79	.73	.61	.55	.48
060	8381K24C	Green	1.05	.79	.73	.61	.55	.48
061	8381K24D	Green	1.05	.79	.73	.61	.55	.48

PDT (1 AMP AT 250 VOLTS, 3 AMPS AT 125 VOLTS)

501	8282K21C	White	1.16	.87	.80	.67	.60	.53
502	8282K21D	White	1.16	.87	.80	.67	.60	.53
503	8282K22C	Red	1.16	.87	.80	.67	.60	.53
504	8282K22D	Red	1.16	.87	.80	.67	.60	.53
512	8282K25C	Yellow	1.16	.87	.80	.67	.60	.53
513	8282K25D	Yellow	1.16	.87	.80	.67	.60	.53
520	8282K27C	Black	1.16	.87	.80	.67	.60	.53
521	8282K27D	Black	1.16	.87	.80	.67	.60	.53
510	8282K24C	Green	1.16	.87	.80	.67	.60	.53
511	8282K24D	Green	1.16	.87	.80	.67	.60	.53

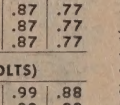
PST (3 AMPS AT 250 VOLTS, 6 AMPS AT 125 VOLTS)

360	8370K21C	White	1.68	1.26	1.16	.97	.87	.77
361	8370K21D	White	1.68	1.26	1.16	.97	.87	.77
362	8370K22C	Red	1.68	1.26	1.16	.97	.87	.77
363	8370K22D	Red	1.68	1.26	1.16	.97	.87	.77
372	8370K25C	Yellow	1.68	1.26	1.16	.97	.87	.77
373	8370K25D	Yellow	1.68	1.26	1.16	.97	.87	.77
380	8370K27C	Black	1.68	1.26	1.16	.97	.87	.77
381	8370K27D	Black	1.68	1.26	1.16	.97	.87	.77
370	8370K24C	Green	1.68	1.26	1.16	.97	.87	.77
371	8370K24D	Green	1.68	1.26	1.16	.97	.87	.77

DT (3 AMPS AT 250 VOLTS, 6 AMPS AT 125 VOLTS)

920	8373K21C	White	1.91	1.43	1.32	1.10	.99	.88
921	8373K21D	White	1.91	1.43	1.32	1.10	.99	.88
922	8373K22C	Red	1.91	1.43	1.32	1.10	.99	.88
923	8373K22D	Red	1.91	1.43	1.32	1.10	.99	.88
932	8373K25C	Yellow	1.91	1.43	1.32	1.10	.99	.88
933	8373K25D	Yellow	1.91	1.43	1.32	1.10	.99	.88
940	8373K27C	Black	1.91	1.43	1.32	1.10	.99	.88
941	8373K27D	Black	1.91	1.43	1.32	1.10	.99	.88
930	8373K24C	Green	1.91	1.43	1.32	1.10	.99	.88
931	8373K24D	Green	1.91	1.43	1.32	1.10	.99	.88

DRY-CIRCUIT AC-DC SWITCHES



dry-circuit switches for a variety of industrial They have C-H quick-make, quick-break self- contacts to assure long and dependable service. istance contacts are *silver or †gold. Quick con- terminals are .110″. Switches are rated 5 amps volts or 3 amps at 250 volts. All switches have ameter bushings. Av. shpg. wt., 2 oz.

k	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
020	*8376K1	DPST	2.18	1.63	1.51	1.26	1.13	1.00
021	*8376K2	DPDT	2.50	1.87	1.73	1.44	1.30	1.15
030	†8377K1	DPST	2.93	2.20	2.03	1.70	1.53	1.36
031	†8377K2	DPDT	3.25	2.44	2.26	1.88	1.69	1.50

AC-DC UTILITY AND HEAVY-DUTY SWITCHES

High-performance utility heavy-duty switches are ideal for tools, appliances and a variety of other industrial uses. Precision made to assure long life and reliable operation. They have arc resistant and "tease resistant" quick-make, quick-break contact mechanism enclosed in a durable phenolic case. Self-cleaning contacts assure circuit continuity every time switches are thrown. Supplied with all necessary hardware for one hole mounting. ‡SP-2 circuit. 1⁵⁄₃₂″ dia. stem. ■U.L. Recognized. C.S.A. Listed. Av. shpg. wt., 2 oz.

SPST

Stock No.	Mfr's Type	A @ 125 V	A @ 250 V	Bushing L	Terminal	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757C6301	8280K14	3	3	¼″	Solder	.93	.70	.64	.54	.48	.43
757C6302	8280K15	3	3	1¹⁄₃₂″	Solder	.93	.70	.64	.54	.48	.43
757C6303	8280K16	3	3	1⁵⁄₃₂″	Solder	.93	.70	.64	.54	.48	.43
757C6550	8290K15	3	3	1¹⁄₃₂″	Wire	1.12	.84	.77	.65	.58	.52
757C6551	8290K16	3	3	1⁵⁄₃₂″	Wire	1.12	.84	.77	.65	.58	.52
757C6555	8295K7	3	3	1¹⁄₃₂″	Screw	1.12	.84	.77	.65	.58	.52
757C6566	8295K8	3	3	1⁵⁄₃₂″	Screw	1.12	.84	.77	.65	.58	.52
757C7040	8381K7	6	3	1¹⁄₃₂″	Solder	1.07	.80	.74	.62	.55	.49
757C7041	8381K8	6	3	1⁵⁄₃₂″	Solder	1.07	.80	.74	.62	.55	.49
757C7085	8391K7	6	3	1¹⁄₃₂″	Wire	1.25	.94	.87	.73	.65	.58
757C7086	8391K8	6	3	1⁵⁄₃₂″	Wire	1.25	.94	.87	.73	.65	.58
757C7096	8396K7	6	3	1¹⁄₃₂″	Screw	1.25	.94	.87	.73	.65	.58
757C7097	8396K8	6	3	1⁵⁄₃₂″	Screw	1.25	.94	.87	.73	.65	.58
757C3750	7321K2	16	8	1¹⁄₃₂″	Screw	2.00	1.50	1.39	1.16	1.04	.92
757C3751	7321K3	16	8	1⁵⁄₃₂″	Screw	2.00	1.50	1.39	1.16	1.04	.92
757C3770	7361K5	20	10	1⁵⁄₃₂″	Screw	3.36	2.52	2.33	1.94	1.75	1.55
757C3810	7403K2	20	20	1⁵⁄₃₂″	Screw	4.46	3.35	3.09	2.58	2.32	2.06

SPDT

Stock No.	Mfr's Type	A @ 125 V	A @ 250 V	Bushing L	Terminal	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757C6379	8282K12	3	1	¼″	Solder	1.17	.88	.81	.68	.61	.54
757C6380	8282K13	3	1	1¹⁄₃₂″	Solder	1.17	.88	.81	.68	.61	.54
757C6381	8282K14	3	1	1⁵⁄₃₂″	Solder	1.17	.88	.81	.68	.61	.54
757C6530	‡8284K14	3	1	1⁵⁄₃₂″	Solder	1.23	.92	.85	.71	.64	.57

DPST

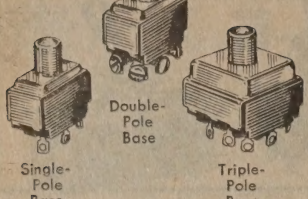
Stock No.	Mfr's Type	A @ 125 V	A @ 250 V	Bushing L	Terminal	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757C6656	8360K6	3	3	¼″	Solder	1.67	1.25	1.16	.97	.87	.77
757C6658	8360K8	3	3	1¹⁄₃₂″	Solder	1.67	1.25	1.16	.97	.87	.77
757C6657	8360K7	3	3	1⁵⁄₃₂″	Solder	1.67	1.25	1.16	.97	.87	.77
757C6841	8370K8	6	3	1¹⁄₃₂″	Solder	1.80	1.35	1.24	1.04	.93	.83
757C6840	8370K7	6	3	1⁵⁄₃₂″	Solder	1.80	1.35	1.24	1.04	.93	.83
757C6895	8372K7	6	3	1⁵⁄₃₂″	Screw	2.18	1.64	1.52	1.27	1.14	1.01
757C3720	7320K2	16	8	1¹⁄₃₂″	Screw	1.87	1.40	1.29	1.08	.97	.86
757C3721	7320K3	16	8	1⁵⁄₃₂″	Screw	1.87	1.40	1.29	1.08	.97	.86
757C3760	7360K7	20	10	1¹⁄₃₂″	Screw	3.20	2.41	2.23	1.86	1.67	1.48
757C3761	7360K8	20	10	1⁵⁄₃₂″	Screw	3.20	2.41	2.23	1.86	1.67	1.48
757C3802	7402K3	20	20	1¹⁄₃₂″	Screw	4.32	3.24	2.99	2.50	2.25	2.00
757C3803	7402K4	20	20	1⁵⁄₃₂″	Screw	4.32	3.24	2.99	2.50	2.25	2.00

DPDT

Stock No.	Mfr's Type	A @ 125 V	A @ 250 V	Bushing L	Terminal	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757C6806	8363K6	3	3	¼″	Solder	1.92	1.44	1.33	1.11	1.00	.89
757C6808	8363K8	3	3	1¹⁄₃₂″	Solder	1.92	1.44	1.33	1.11	1.00	.89
757C6807	8363K7	3	3	1⁵⁄₃₂″	Solder	1.92	1.44	1.33	1.11	1.00	.89
757C6825	8365K7	3	3	1⁵⁄₃₂″	Screw	2.53	1.90	1.75	1.46	1.31	1.17
757C6911	8373K8	6	3	1¹⁄₃₂″	Solder	2.06	1.55	1.43	1.19	1.07	.95
757C6910	8373K7	6	3	1⁵⁄₃₂″	Solder	2.06	1.55	1.43	1.19	1.07	.95
757C7005	8375K7	6	3	1⁵⁄₃₂″	Screw	2.66	1.99	1.84	1.53	1.38	1.22
757C7608	8680K1	5	5	1¹⁄₃₂″	Screw	5.55	4.17	3.85	3.21	2.89	2.57
757C7609	8680K2	5	5	1⁵⁄₃₂″	Screw	5.55	4.17	3.85	3.21	2.89	2.57
757C7629	8690K1	15	10	1¹⁄₃₂″	Screw	6.73	5.05	4.66	3.89	3.50	3.11
757C7630	8690K2	15	10	1⁵⁄₃₂″	Screw	6.73	5.05	4.66	3.89	3.50	3.11

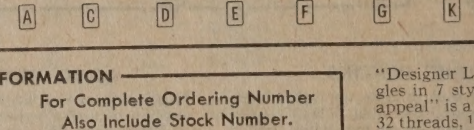
gnized Under the Component Program of Underwriter's Laboratories, Inc.

Cutler-Hammer "Designer Line" Switche



AC DESIGNER LINE

Select Switch Type From Tables Below, Then Select Handle, Shape and Color



Color Suffix No. Select One

Suffix	Color
21	White
22	Red
23	Gray
24	Green
25	Yellow
26	Blue
27	Black

ORDERING INFORMATION

7590K73 (BASIC SWITCH) — A (LEVER STYLE) — 21 (COLOR)

For Complete Ordering Number Also Include Stock Number.
EXAMPLE:

Stock No.	Complete Type No.
757 AC 4960	7590K73A21

"Designer Line" AC switches utilize nylo gles in 7 styles and colors for use where appeal" is a design factor. Switches have 32 threads, 15/32" bushing. Types with suffix K73 in tables below have screw term Suffixes K54 and K74 have solder lug term To order, select switch type below, then add made up of lever shape (above, left) and (above, right). Av. shpg. wt., 2 oz.

SINGLE-POLE SCREW TERMINALS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757AC4960	7590K73	6	3	I	1.48	1.11	1.03	.86	.77	.68
757AC4990	7591K73	6	3	II	1.73	1.30	1.20	1.00	.90	.80
757AC5030	7592K73	6	3	III	1.73	1.30	1.20	1.00	.90	.80
757AC5055	7597K73	6	3	IV	2.23	1.67	1.54	1.29	1.16	1.03
757AC4552	7560K73	15	10	I	1.73	1.30	1.20	1.00	.90	.80
757AC4702	7562K73	15	10	II	2.11	1.58	1.46	1.22	1.09	.97
757AC4787	7564K73	15	10	III	2.11	1.58	1.46	1.22	1.09	.97

SINGLE-POLE SOLDER LUGS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499
757AC4961	7590K74	6	3	I	1.23	.92	.85	.71	.64
757AC4991	7591K74	6	3	II	1.36	1.02	.94	.79	.69
757AC5031	7592K74	6	3	III	1.36	1.02	.94	.79	.69
757AC5056	7597K74	6	3	IV	1.92	1.44	1.33	1.11	1.00
757AC4582	7561K74	15	10	I	1.48	1.11	1.03	.86	.77
757AC4742	7563K74	15	10	II	1.73	1.30	1.20	1.00	.90
757AC4832	7565K74	15	10	III	1.73	1.30	1.20	1.00	.90

DOUBLE-POLE SCREW TERMINALS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757AC4953	7590K53	6	3	I	1.79	1.34	1.24	1.03	.93	.82
757AC4985	7591K53	6	3	II	2.04	1.53	1.41	1.18	1.06	.94
757AC5020	7592K53	6	3	III	2.04	1.53	1.41	1.18	1.06	.94
757AC4873	7569K53	15	10	IV	3.01	2.26	2.08	1.74	1.56	1.39
757AC4550	7560K53	15	10	I	2.04	1.53	1.41	1.18	1.06	.94
757AC4700	7562K53	15	10	II	2.42	1.81	1.67	1.39	1.25	1.11
757AC4785	7564K53	15	10	III	2.42	1.81	1.67	1.39	1.25	1.11

DOUBLE-POLE SOLDER LUGS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499
757AC4954	7590K54	6	3	I	1.53	1.15	1.06	.89	.80
757AC4986	7591K54	6	3	II	1.67	1.25	1.15	.96	.86
757AC5021	7592K54	6	3	III	1.67	1.25	1.15	.96	.86
757AC4874	7569K54	15	10	IV	2.61	1.96	1.81	1.51	1.36
757AC4580	7561K54	15	10	I	1.79	1.34	1.24	1.03	.92
757AC4740	7563K54	15	10	II	2.04	1.53	1.41	1.17	1.06
757AC4830	7565K54	15	10	III	2.04	1.53	1.41	1.17	1.06

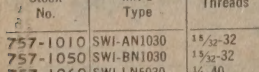
THREE-POLE SCREW TERMINALS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757AC5173	7690K73	15	10	I	4.89	3.67	3.39	2.83	2.34	2.26
757AC5187	7692K73	15	10	II	5.30	3.97	3.66	3.05	2.75	2.44
757AC5198	7694K73	15	10	III	5.38	4.03	3.72	3.10	2.79	2.48

FOUR-POLE SCREW TERMINALS

Stock No.	Basic Switch Type	Amperes 125V	Amperes 250V	Code	EACH 1-9	10-24	25-49	50-99	100-499
757AC5185	7692K53	10	15	II	6.37	4.78	4.41	3.68	3.3

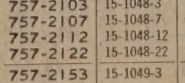
SWITCH AND PANEL SEALS



Military types perform three functions: vibration resistant mounting nut; seal mounting hole; seal switch lever to 15 psi. RFI types conform to MIL-B-5423. Commercial types are made of black neoprene, have removable round nuts. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Threads	MIL-B-5423/	Type and Style	EACH 1-24	25-99	100-499	500-999	1000-Up
757-1010	SWI-AN1030	15/32-32	1	A1	1.00	.75	.58	.52	.47
757-1050	SWI-BN1030	15/32-32	2	A3	1.00	.75	.58	.52	.47
757-1060	SWI-LN5030	1/4-40	5	A71	1.40	1.05	.81	.75	.68
757-1055	SWI-BN5032	1/4-40	11	A3	1.40	1.05	.81	.75	.68
757-1028	SWI-AN3030	15/32-32-5/16	7	B21	.86	.65	.51	.47	.43
757-1063	SWI-NC3030	15/32-32-7/16	7	B22	.86	.65	.51	.51	.43
757-1045	SWI-AN9060-14	15/32-32	9	C6	1.60	1.20	.96	.84	.74
757-1035	SWI-AN9030-14	3/8-32	9	C2	.81	.61	.48	.44	.40
757-1040	SWI-AN9040-18	1/4-32	9	C4	.86	.65	.51	.47	.43
757-1071	SWI-RN1030-2	15/32-32	RFI		3.72	2.79	2.57	2.32	2.02
757-1067	SWI-RC3030-1	15/32-32	RFI		2.65	1.99	1.81	1.57	1.36
757-1075	SWI-RN9030-14	3/8-32	RFI		1.72	1.29	1.15	1.00	.87
757-1014	SWI-AN1111-14	15/32-32	Commercial		.61	.46	.20	.20	.18
757-1020	SWI-AN1211-5	3/8-32	Commercial		.61	.46	.20	.20	.18
757-1025	SWI-AN1312-7	3/8-32	Commercial		.61	.46	.20	.20	.18

"DESIGNER LINE" FACENUT



Designed to further enhance equ appearance. Made of anodized alur have knurled edge (1048) or beveled fit switches above. 15/32"-32 threads.

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-49	50-99	100 49
757-2103	15-1048-3	Black	.17	.13	.12	.10	.0
757-2107	15-1048-7	Clear Aluminum	.17	.13	.12	.10	.0
757-2112	15-1048-12	Bronze	.17	.13	.12	.10	.0
757-2122	15-1048-22	Avocado	.17	.13	.12	.10	.0
757-2153	15-1049-3	Black	.17	.13	.12	.10	.0
757-2157	15-1049-7	Clear Aluminum	.17	.13	.12	.10	.0
757-2162	15-1049-12	Bronze	.17	.13	.12	.10	.0
757-2172	15-1049-22	Avocado	.17	.13	.12	.10	.0

FULL-RANGE SPEED CONTROL

For stepless control of fractional hp motors. R amps at 125 VAC. Black lead connects to line, and-yellow connects to load and 250K variable red connects to same variable resistor. Shpg. w

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-249
757-6649	8349K2	6.93	5.19	4.79	3.99	3.59

All Items on This Page are U.L. Component Program Recog

Cutler-Hammer AC Switches

COMMERCIAL ONE-HOLE-MOUNTING SWITCHES

se in appliances, heater units, radios, many other commercial cations. Feature a special slow make and slow break type r mechanism. Reduced arcing in AC circuits eliminates the for complicated DC mechanisms, thereby reducing costs. In below indicates sealed lever; *reversing circuit. See lever- chart at bottom of right-hand column for explanation of code ers. Av. shpg. wt., 2 oz.

Single

Double

Triple

Four

SINGLE-POLE SINGLE-THROW

ck No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
4886	7580K5	6	3	I	11/32	Screw	.97	.73	.68	.57	.51
4885	7580K4	6	3	I	15/32	Screw	.97	.73	.68	.57	.51
4888	7580K7	6	3	I	11/32	Solder	.84	.63	.58	.49	.44
4887	7580K6	6	3	I	15/32	Solder	.84	.63	.58	.49	.44
4889	7580K8	6	3	I	15/32	Spade	.84	.63	.58	.49	.44
4254	7506K4	10	....	VII	15/32	Screw	1.47	1.10	1.01	.85	.76
4253	7506K3	10	....	VII	15/32	Solder	1.32	.99	.92	.77	.69
4000	7500K13	15	10	I	11/32	Screw	1.12	.84	.77	.65	.58
4001	7500K14	15	10	I	15/32	Screw	1.12	.84	.77	.65	.58
4020	7501K12	15	10	I	15/32	Solder	.97	.73	.68	.57	.51
4021	7501K13	15	10	I	15/32	Solder	.97	.73	.68	.57	.51
4022	7501K15	15	10	I	15/32	Spade	.97	.73	.68	.57	.51
4007	7500K20	15	10	II	15/32	Screw	1.33	1.00	.92	.77	.69

SINGLE-THROW DOUBLE-THROW

4904	7581K4	6	3	II	15/32	Screw	1.16	.84	.77	.65	.58
4907	7581K7	6	3	II	11/32	Solder	.91	.68	.63	.53	.47
4906	7581K6	6	3	II	15/32	Solder	.91	.68	.63	.53	.47
4924	7582K4	6	3	III	15/32	Screw	1.16	.84	.77	.65	.58
4926	7582K6	6	3	III	15/32	Solder	.91	.68	.63	.53	.47
4270	7509K5	....	10	IV	15/32	Screw	1.71	1.28	1.18	.99	.89
4069	7502K12	15	10	II	11/32	Screw	1.32	.99	.91	.76	.68
4070	7502K13	15	10	II	15/32	Screw	1.32	.99	.91	.76	.68
4090	7503K12	15	10	II	11/32	Solder	1.16	.84	.77	.65	.58
4091	7503K13	15	10	II	15/32	Solder	1.16	.84	.77	.65	.58
4092	7503K14	15	10	II	11/32	Spade	1.16	.84	.77	.65	.58
4200	7504K3	15	10	III	11/32	Screw	1.32	.99	.91	.76	.68
4201	7504K4	15	10	III	15/32	Screw	1.32	.99	.91	.76	.68
4230	7505K3	15	10	III	11/32	Solder	1.16	.84	.77	.65	.58
4231	7505K4	15	10	III	15/32	Solder	1.16	.84	.77	.65	.58
4233	7505K6	15	10	III	15/32	Spade	2.46	1.84	1.70	1.42	1.27
4295	7555K11	15	10	VIII	15/32	Screw	2.46	1.84	1.70	1.42	1.27

DOUBLE-POLE SINGLE-THROW

4940	7590K4	6	3	I	15/32	Screw	1.39	1.04	.96	.80	.72
4943	7590K7	6	3	I	11/32	Solder	1.21	.91	.84	.70	.63
4942	7590K6	6	3	I	15/32	Solder	1.21	.91	.84	.70	.63
4945	7590K9	6	3	I	11/32	Spade	1.21	.91	.84	.70	.63
4501	7560K6	15	10	I	11/32	Screw	1.77	1.33	1.22	1.02	.92
4561	7561K5	15	10	I	11/32	Solder	1.47	1.12	1.03	.86	.77
4500	7560K5	15	10	I	15/32	Screw	1.77	1.33	1.22	1.02	.92
4560	7561K4	15	10	I	15/32	Solder	1.49	1.12	1.03	.86	.77
4562	7561K6	15	10	I	15/32	Spade	1.49	1.12	1.03	.86	.77

DOUBLE-POLE DOUBLE-THROW

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	Code	Bush. Lgth. (In.)	Terms	EACH 1-9	10-24	25-49	50-99	100-Up
757C4970	7591K4	6	3	II	11/32	Screw	1.78	1.33	1.22	1.02	.92
757C4973	7591K7	6	3	II	11/32	Solder	1.36	1.02	.94	.79	.71
757C4972	7591K6	6	3	II	15/32	Solder	1.36	1.02	.94	.79	.71
757C5004	7592K4	6	3	III	15/32	Screw	1.78	1.33	1.22	1.02	.92
757C5007	7592K7	6	3	III	11/32	Solder	1.36	1.02	.94	.79	.71
757C5006	7592K6	6	3	III	15/32	Solder	1.36	1.02	.94	.79	.71
757C5008	7592K8	6	3	III	15/32	Spade	1.36	1.02	.94	.79	.71
757C4591	7562K5	15	10	II	11/32	Screw	2.18	1.63	1.51	1.26	1.13
757C4590	7562K4	15	10	II	15/32	Screw	2.18	1.63	1.51	1.26	1.13
757C4598	7562K23	15	10	*II	15/32	Screw	2.33	1.75	1.61	1.35	1.21
757C4721	7563K5	15	10	II	11/32	Spade	1.78	1.33	1.22	1.02	.92
757C4720	7563K4	15	10	II	15/32	Solder	1.78	1.33	1.22	1.02	.92
757C4722	7563K6	15	10	II	15/32	Spade	1.78	1.33	1.22	1.02	.92
757C4761	7564K7	15	10	III	11/32	Screw	2.18	1.63	1.51	1.26	1.13
757C4760	7564K6	15	10	III	15/32	Screw	2.18	1.63	1.51	1.26	1.13
757C4770	7564K23	15	10	*III	15/32	Screw	2.33	1.75	1.61	1.35	1.21
757C4806	7565K6	15	10	III	11/32	Solder	1.78	1.33	1.22	1.02	.92
757C4805	7565K5	15	10	III	15/32	Solder	1.78	1.33	1.22	1.02	.92
757C4807	7565K7	15	10	III	15/32	Spade	1.78	1.33	1.22	1.02	.92
757C4860	7569K1	....	10	IV	15/32	Solder	2.42	1.81	1.67	1.39	1.25

THREE-POLE SINGLE-THROW

757C5060	7600K3	15	10	I	Flush	Screw	3.38	2.54	2.35	1.96	1.76
757C5070	7610K2	15	10	I	15/32	Screw	3.38	2.54	2.35	1.96	1.76
757C5071	7611K2	15	10	I	15/32	Solder	2.90	2.18	2.01	1.68	1.51
757C5074	7611K4	15	10	I	15/32	Spade	2.90	2.18	2.01	1.68	1.51
757C6620	8320K1	....	20	I	15/32	Screw	6.19	4.64	4.28	3.57	3.21

THREE-POLE DOUBLE-THROW

757C5062	7602K2	15	10	II	Flush	Screw	4.29	3.22	2.97	2.48	2.23
757C5080	7612K2	15	10	II	15/32	Screw	4.29	3.22	2.97	2.48	2.23
757C5085	7613K2	15	10	II	15/32	Solder	3.57	2.68	2.48	2.07	1.86
757C5087	7613K4	15	10	II	15/32	Spade	3.57	2.68	2.48	2.07	1.86
757C5090	7614K2	15	10	III	15/32	Screw	4.29	3.22	2.97	2.48	2.23
757C5095	7615K2	15	10	III	15/32	Solder	3.57	2.68	2.48	2.07	1.86
757C5097	7615K4	15	10	III	15/32	Spade	3.57	2.68	2.48	2.07	1.86

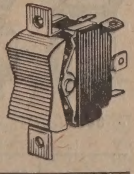
FOUR-POLE SINGLE-THROW

757C5170	7690K8	15	10	I	15/32	Screw	4.86	3.65	3.37	2.81	2.53
757C5180	7691K14	15	10	I	15/32	Spade	4.38	3.29	3.04	2.53	2.28

FOUR-POLE SINGLE-THROW

757C5182	7692K13	15	10	II	15/32	Screw	6.05	4.54	4.19	3.50	3.15
757C5190	7693K2	15	10	II	15/32	Spade	5.35	4.01	3.70	3.09	2.78
757C5194	7694K4	15	10	III	15/32	Screw	6.05	4.54	4.19	3.50	3.15
757C5205	7695K5	15	10	III	15/32	Spade	5.35	4.01	3.70	3.09	2.78

"ROCKETTE" AC SWITCHES



ise where modern design and dependable ation are important. Feature white nylon r (other colors available on special request). spade terminals, except *screw terminals. d at 15 amps, 125 VAC; 10 amps, 250 VAC. ever-travel chart at right for explanation of Column in Table. Av. shpg. wt., 2 oz.

SINGLE-POLE

ock o.	Mfr's Type	Code	Style Frame	Style Rocker	No. of Rockers	EACH 1-9	10-24	25-49	50-99	100-Up
6176	8144K21A1M50*	I	A	1	1	1.04	.78	.75	.63	.56
6178	8144K21A1M52	I	A	1	1	.99	.74	.68	.57	.51
6175	8144K20A1M52	II	A	1	1	1.11	.83	.76	.64	.57
6179	8144K22A1M52	III	A	1	1	1.11	.83	.76	.64	.57
6190	8146K20A1M52	IV	A	1	1	1.31	.98	.83	.75	.68

DOUBLE-POLE

6153	8142K21E6M50*	I	E	6	1	1.72	1.29	1.19	.99	.89
6154	8142K21E6M52	I	E	6	1	1.51	1.13	1.04	.87	.78
6152	8142K20E6M52	II	E	6	1	1.84	1.38	1.27	1.06	.95
6155	8142K22E6M52	III	E	6	1	1.84	1.38	1.27	1.06	.95
6198	8148K20E6M52	IV	E	6	1	2.15	1.61	1.48	1.24	1.11

FOUR-POLE

6141	8140K21H14M52	I	H	14	2	2.81	2.11	1.95	1.63	1.46
6151	8141K21H16M52	I	H	16	3	3.02	2.27	2.09	1.75	1.57
6140	8140K20H14M52	II	H	14	2	3.28	2.47	2.28	1.90	1.71
6150	8141K20H16M52	II	H	16	3	3.48	2.61	2.41	2.01	1.80

MINIATURE COMMERCIAL TOGGLES

Commercial toggle switches for a variety of uses where compact size is an important design factor. Features massive current carrying parts to provide up to 50% longer life. Rated 5A at 125 VAC and 28 VDC. Overall size: SPST and SPDT types, 13/16x1/4x1/2". DPST and DPDT types, 13/16x15/32x1/2". Stem length, 1/4". *in table below indicates center off. Av. wt., 2 oz.

7050

7060

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757C3055	7055K20	SPST	4.62	3.46	3.19	2.66	2.40	2.13
757C3050	7050K20	SPDT*	4.91	3.68	3.40	2.83	2.54	2.26
757C3053	7053K20	SPDT	4.91	3.68	3.40	2.83	2.54	2.26
757C3065	7065K20	DPST	5.70	4.28	3.94	3.29	2.96	2.63
757C3060	7060K20	DPDT*	6.27	4.70	4.35	3.62	3.26	2.90
757C3063	7063K20	DPDT	6.27	4.70	4.35	3.62	3.26	2.90

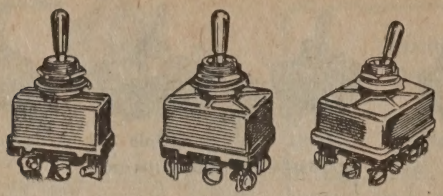
LEVER-TRAVEL CHART

Explanation of Roman Numeral code numbers appearing in tables on this page. Keyway in down position. *Momentary contact.

Code No.	Lever Travel Up	Center	Down	Code No.	Lever Travel Up	Center	Down
I	On	None	Off	V	On	Off	On*
II	On	Off	On	VI	On*	Off	On
III	On	None	On	VII	Off	None	On*
IV	On*	Off	On*	VIII	On	On	On

Cutler-Hammer Military Switches

MIL-S-8834-B POSITIVE ACTION SWITCHES



8836 8837 8838

Positive action environment sealed switches feature "tease proof" action with toggle lined directly to the movable contact member to insure positive make and break. Contact wiping action keeps contacts clean and smooth, insures satisfactory operation with high current capability. Rated at 25A @ 28 VDC and 20A @ 115 VAC resistive load. Code explanation on Page 193. Av. wt. 4 oz.

SINGLE POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	EACH 1-9	10-24	25-49	50-99	100-Up
757C7920	8836K1	25306-212	II	11.27	8.45	7.80	6.50	5.20
757C7928	8836K9	25306-222	I	10.82	8.12	7.50	6.25	5.00
757C7923	8836K4	25306-232	III	11.27	8.45	7.80	6.50	5.20
757C7925	8836K6	25306-242	IV	11.27	8.45	7.80	6.50	5.20
757C7921	8836K2	25306-272	V	12.13	9.10	8.40	7.00	5.60
757C7930	8836K11	25306-302	IX	12.13	9.10	8.40	7.00	5.60

DOUBLE POLE

757C7950	8837K1	25307-212	II	16.47	12.35	11.40	9.50	7.60
757C7958	8837K9	25307-222	I	15.38	11.54	10.65	8.87	7.10
757C7953	8837K4	25307-232	III	16.47	12.35	11.40	9.50	7.60
757C7955	8837K6	25307-242	IV	15.90	11.93	11.01	9.17	7.34
757C7954	8837K5	25307-262	VIII	17.76	13.32	12.30	10.25	8.20
757C7951	8837K2	25307-272	V	17.76	13.32	12.30	10.25	8.20
757C7952	8837K3	25307-312	VI	17.76	13.32	12.30	10.25	8.20
757C7990	8844K6	24613-E232	XIV	24.27	18.20	16.80	14.00	11.20

FOUR POLE

757C7970	8838K1	25308-212	II	33.67	25.25	23.31	19.43	15.54
757C7978	8838K9	25308-222	I	31.50	23.63	21.81	18.18	14.54
757C7973	8838K4	25308-232	III	33.67	25.25	23.31	19.43	15.54
757C7974	8838K5	25308-262	VIII	35.53	26.65	24.60	20.50	16.40
757C7995	8845K6	24614-E232	XIV	45.07	33.80	31.20	26.00	20.80

MIL-S-8834-B MINIATURE SMALL LEVER

8866 8867

Miniature base switches have ¼-40 threaded bushing and .440" long toggle lever. Single-pole base, .749x.562x.354"; double-pole base, .706x.562x.546". Direct-linked toggle for positive operation. Gold-plated contacts with wiping action. Positive detent action provides excellent operator feel. Switches come with "O" ring panel seal furnished. Rated 3 amps at 117 VAC; 4 amps at 28 VDC resistive. Minimum rating, 25 μA at 5 mV or less. See Lever Travel Chart on Page 193 for codes. 6 oz.

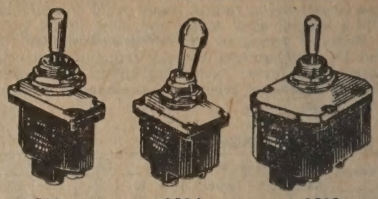
SINGLE POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	EACH 1-9	10-24	25-49	50-99	100-Up
757C8076	8866K1	24655-211	II	6.72	5.04	4.65	3.88	3.10
757C8082	8866K7	24655-221	I	6.72	5.04	4.65	3.88	3.10
757C8079	8866K4	24655-231	III	6.72	5.04	4.65	3.88	3.10
757C8080	8866K5	24655-241	IV	7.58	5.69	5.25	4.38	3.50
757C8077	8866K2	24655-271	V	7.58	5.69	5.25	4.38	3.50
757C8081	8866K6	24655-281	XII	7.58	5.69	5.25	4.38	3.50
757C8078	8866K3	24655-311	VI	7.58	5.69	5.25	4.38	3.50
757C8083	8866K8	None	XI	8.00	6.01	5.55	4.63	3.70

DOUBLE POLE

757C8107	8867K1	24656-211	II	8.41	6.31	5.82	4.85	3.88
757C8113	8867K7	24656-221	I	8.41	6.31	5.82	4.85	3.88
757C8110	8867K4	24656-231	III	8.41	6.31	5.82	4.85	3.88
757C8111	8867K5	24656-241	IV	9.80	7.35	6.78	5.65	4.52
757C8108	8867K2	24656-271	V	9.80	7.35	6.78	5.65	4.52
757C8112	8867K6	24656-281	XII	9.80	7.35	6.78	5.65	4.52
757C8109	8867K3	24656-311	VI	9.80	7.35	6.78	5.65	4.52
757C8114	8867K8	None	XI	10.23	7.67	7.08	5.90	4.72

MIL-S-3950-C ENVIRONMENTALLY SEALED SWITCHES



8500 8504 8502

Environmen Sealed With All Mounting Hardware

Environmentally sealed switches meet or exceed MIL-S-3950-C tures a patented sealing process for protection against env mental conditions. Offers greater safety, positive detent improved dielectric capability, simplified wiring. Rated at 20 28 VDC; 15A @ 117 VAC resistive load. Code explanatio Page 193. Av. shpg. wt. 6 oz.

SINGLE POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	EACH 1-4	5-19	20-49
757C7400	8500K1	24523-21	II	4.40	3.61	3.21
757C7408	8500K9	24523-22	I	4.40	3.61	3.21
757C7404	8500K4	24523-23	III	4.40	3.61	3.21
757C7407	8500K7	24523-28	XI	5.10	4.18	3.72
757C7402	8500K2	24523-27	V	4.40	3.61	3.21
757C7411	8500K11	24523-30	IX	4.40	3.61	3.21

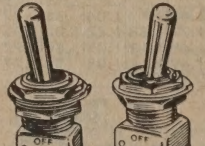
DOUBLE POLE

757C7441	8501K1	24524-21	II	7.20	5.90	5.26
757C7449	8501K9	24524-22	I	7.20	5.90	5.26
757C7444	8501K4	24524-23	III	7.20	5.90	5.26
757C7451	8501K11	24524-30	IX	7.20	5.90	5.26
757C7445	8501K5	24524-26	VIII	7.20	5.90	5.26
757C7442	8501K2	24524-27	V	7.20	5.90	5.26
757C7443	8501K3	24524-31	VI	7.20	5.90	5.26
757C7490	8504K6	24659-23D	XIV	11.20	9.18	8.18

FOUR POLE

757C7471	8502K1	24525-21	II	11.45	9.39	8.36
757C7479	8502K9	24525-22	I	11.45	9.39	8.36
757C7474	8502K4	24525-23	III	11.45	9.39	8.36
757C7475	8502K5	24525-26	VIII	11.45	9.39	8.36
757C7472	8502K2	24525-27	V	11.45	9.39	8.36
757C7473	8502K3	24525-31	VI	15.40	12.63	11.24
757C7495	8505K6	24660-23D	XIV	15.40	12.63	11.24

MIL-S-8834-B MINIATURE LARGE LEVER AND BUSHI



8868 8869

Positive action switches featuring ature base with standard 1⁵⁄₁₆-32 th ed bushings and large lever. Silicon ber lever protects switch agains vironmental conditions. Toggle is l directly to the movable contac positive make and break. Gold-p contacts open and close with a w action for good contact on dry cir Rated 3 amps at 117 VAC; 4 am 28 VDC resistive. Minimum r 25 μA at 5 mV or less. Code explan on Page 193. Av. shpg. wt. 2 oz.

SINGLE POLE

Stock No.	Mfr's Type	Gov't MS No.	Code	EACH 1-9	10-24	25-49	50-99
757C8140	8868K1	90310-211	II	6.85	5.14	4.74	3.95
757C8146	8868K7	90310-221	I	6.85	5.14	4.74	3.95
757C8143	8868K4	90310-231	III	6.85	5.14	4.74	3.95
757C8144	8868K5	90310-241	IV	7.70	5.79	5.34	4.45
757C8141	8868K2	90310-271	V	7.70	5.79	5.34	4.45
757C8145	8868K6	90310-281	XII	7.70	5.79	5.34	4.45
757C8142	8868K3	90310-311	VI	7.70	5.79	5.34	4.45
757C8147	8868K8	90310-321	XI	8.15	6.11	5.64	4.70

DOUBLE POLE

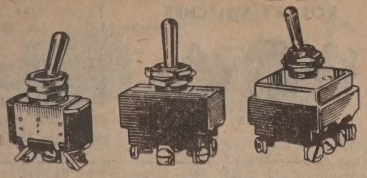
757C8170	8869K1	90311-211	II	8.53	6.40	5.91	4.93
757C8176	8869K7	90311-221	I	8.53	6.40	5.91	4.93
757C8173	8869K4	90311-231	III	8.53	6.40	5.91	4.93
757C8174	8869K5	90311-241	IV	9.95	7.45	6.88	5.73
757C8171	8869K2	90311-271	V	9.95	7.45	6.88	5.73
757C8175	8869K6	90311-281	XII	9.95	7.45	6.88	5.73
757C8172	8869K3	90311-311	VI	9.95	7.45	6.88	5.73
757C8177	8869K8	90311-321	XI	10.37	7.77	7.17	5.98

All Switches on This Page U.L. Component Program-Recogn

Cutler-Hammer Military Switches

MIL-S-3950-C SEALED-LEVER TOGGLE SWITCH

ole mounting
es with rocker-
contact mecha-
Sealed levers
t against sand,
water. Screw
als are hot-tin
d to facilitate
ring. *Locking
Code explana-
elow. Av. shpg.
oz.



Single Double Four

SINGLE POLE

ck o.	Mfr's Type	Gov't MS No.	Code	EACH 1-9	10-24	25-49	50-99	100-Up
7680	8800K16	35058-21	II	2.46	1.85	1.71	1.43	1.14
7701	8801K22	35058-22	I	2.08	1.56	1.44	1.20	.96
7750	8810K15	35058-23	III	2.46	1.85	1.71	1.43	1.14
7702	8801K23	35058-24	IV	2.08	1.56	1.44	1.20	.96
7770	8812K14	35058-27	V	2.69	2.02	1.86	1.55	1.24
7760	8811K17	35058-30	IX	2.26	1.69	1.56	1.30	1.04
3009	8857K39*	25125-A1	XIII	5.85	4.39	4.05	3.38	2.70
3014	8857K44*	25125-E3	XIV	5.85	4.39	4.05	3.38	2.70

DOUBLE POLE

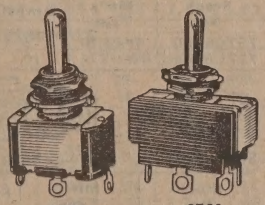
7845	8820K16	35059-21	II	3.16	2.37	2.19	1.83	1.46
7855	8822K20	35059-22	I	2.70	2.02	1.86	1.55	1.26
7869	8824K14	35059-23	III	3.16	2.37	2.19	1.83	1.46
7856	8822K21	35059-24	IV	2.78	2.08	1.92	1.60	1.28
7885	8830K13	35059-26	VIII	3.90	2.93	2.70	2.25	1.80
7904	8834K5	35059-27	V	3.72	2.80	2.58	2.15	1.72
7883	8828K13	35059-29	X	3.64	2.73	2.52	2.10	1.68
7893	8832K6	35059-31	VI	3.72	2.80	2.58	2.15	1.72
3039	8858K39*	25126-A1	XIII	6.72	5.04	4.65	3.88	3.10
3044	8858K44*	25126-E3	XIV	6.72	5.04	4.65	3.88	3.10

FOUR POLE

5127	7662K7	25068-21	II	7.22	5.42	5.00	4.17	3.34
5134	7664K5	25068-23	III	7.22	5.42	5.00	4.17	3.34
5120	7660K13	25068-24	IV	5.80	4.36	4.02	3.35	2.68
5160	7674K5	25068-26	VIII	9.10	6.83	6.30	5.25	4.20
5150	7672K5	25068-27	V	9.10	6.83	6.30	5.25	4.20
3064	8859K44	25127-E3	XIV	10.92	8.19	7.56	6.30	5.04

JAN-S-23 SWITCHES

is an original switch speci-
n. Latest specification is
3950C which should be
when possible, as shown in
Ref. to MS-3950C column.
hes have solder lug termi-
15/32" bushing length. Rated
ps at 117 VAC; 20 amps at
C. *Lever seal. Av. wt., 2 oz.



ST42 ST52

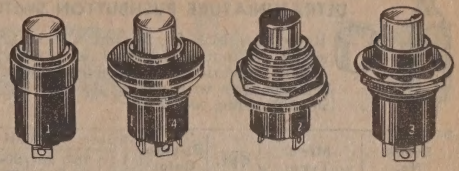
ck o.	Mfr's Type	Former JAN Type Desig-nation	Code	Cross Ref. to MS 3950C	EACH 1-9	10-24	25-49	50-99	100-Up
7730	8803K6	ST42A	I	35058-22	1.87	1.40	1.29	1.08	.86
7734	8803K10*	ST42A	I	35058-22	1.95	1.46	1.35	1.13	.90
7840	8819K5	ST42B	X	35058-29	1.91	1.43	1.32	1.10	.88
7790	8816K5	ST42D	III	35058-23	1.91	1.43	1.32	1.10	.88
7720	8802K6	ST42E	II	35058-21	1.91	1.43	1.32	1.10	.88
7740	8805K9*	ST42F	VIII	35058-26	2.52	1.89	1.74	1.45	1.16
7820	8818K5	ST42G	V	35058-27	2.08	1.56	1.44	1.20	.96
7824	8818K9*	ST42G	V	35058-27	2.46	1.85	1.71	1.43	1.14
7780	8815K6	ST42H	VI	35058-31	2.08	1.56	1.44	1.20	.96

DOUBLE POLE

ck o.	Mfr's Type	Former JAN Type Desig	Code	Cross Ref. to MS3950C	EACH 1-9	10-24	25-49	50-99	100-Up
7863	8823K5	ST52K	I	35059-22	2.17	1.63	1.50	1.25	1.00
7864	8823K6*	ST52K	I	35059-22	2.52	1.89	1.74	1.45	1.16
7875	8825K5	ST52N	III	35059-23	2.38	1.79	1.65	1.38	1.10
7876	8825K6*	ST52N	III	35059-23	2.86	2.15	1.98	1.65	1.32
7851	8821K5	ST52P	II	35059-21	2.38	1.79	1.65	1.38	1.10
7852	8821K6*	ST52P	II	35059-21	2.86	2.15	1.98	1.65	1.32
7890	8831K5	ST52R	VIII	35059-26	2.98	2.24	2.07	1.73	1.38
7910	8835K3	ST52S	V	35059-27	2.98	2.24	2.07	1.73	1.38
7911	8835K4*	ST52T	V	35059-27	3.50	2.63	2.43	2.03	1.62
7897	8833K3	ST52T	VI	35059-31	2.98	2.24	2.07	1.73	1.38

MIL-S-8805/3B PUSHBUTTON SWITCHES

Snap-Action Type Switches

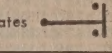


Suffix C Suffix A Suffix F Suffix G

Momentary pushbutton snap-action switches have wiping contacts with .012" overtravel. Mechanical life, 250,000 operations. Rated at 10 amps at 125 VAC; 10 amps at 28 VDC resistive. Temperature range, −55°C to +85°C. 4 lbs. operating force. Dust-tight case. "B" at end of mfr's type no. indicates black button; "R" indicates red button. See table below for explanation of circuit configuration codes. Average shpg. wt., 3 oz.

Stock No.	Mfr's Type No.	MS-25089-	Code	EACH 1-9	10-24	25-49	50-99	100-Up
757C0401	SA401CB2	1C	SPNO	7.24	5.43	4.88	4.34	3.80
757C0405	SA401CR2	1CR	SPNO	7.24	5.43	4.88	4.34	3.80
757C0430	SA403CB2	3C	2 CKT	7.27	5.45	4.91	4.36	3.82
757C0435	SA403CR2	3CR	2 CKT	7.27	5.45	4.91	4.36	3.82
757C0440	SA403FB2	3F	2 CKT	7.27	5.45	4.91	4.36	3.82
757C0445	SA403FR2	3FR	2 CKT	7.27	5.45	4.91	4.36	3.82
757C0450	SA403GB2	3G	2 CKT	7.27	5.45	4.91	4.36	3.82
757C0455	SA403GR2	3GR	2 CKT	7.27	5.45	4.91	4.36	3.82
757C0460	SA404AB2	4A	SPNO3	7.27	5.45	4.91	4.36	3.82
757C0465	SA404CB2	4C	SPNO3	7.27	5.45	4.91	4.36	3.82
757C0470	SA404CR2	4CR	SPNO3	7.27	5.45	4.91	4.36	3.82
757C0475	SA404FB2	4F	SPNO3	7.27	5.45	4.91	4.36	3.82
757C0480	SA404FR2	4FR	SPNO3	7.27	5.45	4.91	4.36	3.82
757C0482	SA404GB2	4G	SPNO3	7.27	5.45	4.91	4.36	3.82
757C0484	SA404GR2	4GR	SPNO3	7.27	5.45	4.91	4.36	3.82
757C0487	SA405CB2	5C	SPNC3	7.27	5.45	4.91	4.36	3.82
757C0490	SA405GB2	5G	SPNC3	7.27	5.45	4.91	4.36	3.82
757C0493	SA405GR2	5VR	SPNC3	7.27	5.45	4.91	4.36	3.82

CODE

2 CKT Indicates SPNO3 Indicates 

AIRCRAFT SWITCH GUARDS

Type 8492K1 for one hole mounting switches utilizes a locking pin through the two holes off center in the guard to lock single-throw switches in position; double-throw switches can be moved from the first position to center, but not to the extreme position. Type 8497K1 for single-throw switches allows operation only when the guard is up. In the down position the lever is forced to the off position. Av. shpg. wt., 2 oz.

8497 8492

Stock No.	Mfr's TypeNo.	Gov't MS No.	EACH 1-9	10-24	25-49	50-99	100-Up
757C7182	8492K1	MS 24417-1	1.43	1.07	.99	.83	.66
757C7187	8497K1	MS 25224-1	2.40	1.79	1.65	1.38	1.10

LEVER TRAVEL CHART

Explanation of Roman Numeral code numbers used in tables on these pages, to determine lever travel. *Indicates momentary contact. Arrow (→) indicates direction in which lever is locked.

Code No.	Lever Travel Up Position	Center Position	Down (Keyway) Position
I	On	None	Off
II	On	Off	On
III	On	None	On
IV	On	Off	None
V	On*	Off	On*
VI	On	Off	On*
VII	On*	Off	On
VIII	On	None	On*
IX	Off	None	On*
X	On	None	Off*
XI	None	On	On*
XII	None	Off	On*
XIII	On→	←Off→	←On
XIV	On→	None	←On

Cutler-Hammer Switches

ULTRAMINIATURE PUSHBUTTON SWITCHES

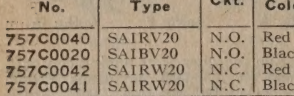
Rated ½-amp N.O.; ¼-amp N.C. at 125 VAC resistive. Actuating force, 8 oz. Life expectancy, 50,000 operations. Gold-plated solder terminals and contacts with wiping action. 1⅛4" mounting hole. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Ckt.	Button Color	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757C0040	SAIRV20	N.O.	Red	1.25	.94	.87	.73	.65	.58
757C0020	SAIBV20	N.O.	Black	1.25	.94	.87	.73	.65	.58
757C0042	SAIRW20	N.C.	Red	1.25	.94	.87	.73	.65	.58
757C0041	SAIRW20	N.C.	Black	1.25	.94	.87	.73	.65	.58

ACCESSORY BUTTON CAPS

757C1101	SW53AA1	.....	Red	.17	.13	.12	.10	.09	.08
757C1102	SW53AA2	.....	Black	.17	.13	.12	.10	.09	.08
757C1103	SW53AA3	.....	Blue	.17	.13	.12	.10	.09	.08
757C1105	SW53AA5	.....	Green	.17	.13	.12	.10	.09	.08
757C1109	SW53AA9	.....	White	.17	.13	.12	.10	.09	.08
757C1110	SW53AA10	.....	Yellow	.17	.13	.12	.10	.09	.08

PUSHBUTTON SWITCHES



7196 8442 8440 8448

Momentary contact, except ##push-push. SPST; §DPDT, #SPDT, **DPST. Norm. open; †norm. closed, ‡N.O.-N.C. Screw terminals; *solder lugs. †Solder-spade. Av. wt. 2 oz.

AC-DC PUSHBUTTON

Stock No.	Mfr's Type	Rated A 125 V	Rated A 250 V	Bush. Lgth.	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757C7107	8411K7†	¾	¼	1 5/32"	.53	.40	.37	.31	.27	.24
757C7108	8411K8†*	¾	¼	1 5/32"	.45	.34	.32	.27	.24	.21
757C7112	8411K12	¾	¼	1 5/32"	.71	.53	.49	.41	.37	.33
757C7111	8411K11†	¾	¼	1 5/32"	.63	.47	.44	.37	.33	.29
757C7113	8411K13†	¾	¼	¼"	.63	.47	.44	.37	.33	.29
757C7329	7196K1	6	3	½"-	2.06	1.55	1.43	1.20	1.08	.96
757C3290	7190K1*	6	3	½"	1.87	1.40	1.30	1.08	.97	.86
757C3408	7208K4##	6	3	1 1/16"	1.60	1.20	1.10	.92	.83	.74
757C3299	7199K2‡§*	6	3	½"	3.36	2.52	2.33	1.94	1.75	1.55

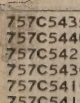
AC PUSHBUTTON

757C7136	8440K3	3	.....	1 5/32"	1.48	1.11	1.03	.86	.77	.68
757C7135	8440K2*	3	.....	1 5/32"	1.28	.96	.89	.74	.67	.59
757C7150	8442K4	6	3	1 1/32"	1.41	1.06	.98	.82	.73	.65
757C7154	8444K3	15	10	1 1/16"	1.52	1.14	1.05	.88	.79	.70
757C7155	8444K4	15	10	1 1/32"	1.52	1.14	1.05	.88	.79	.70
757C7160	8446K2‡#	15/10	10/5	1 1/16"	1.73	1.30	1.20	1.00	.90	.80
757C7168	8448K2**	15	10	1 1/32"	2.18	1.63	1.51	1.26	1.13	1.00
757C7123	8433K4#(##)	15	10	1 1/16"	2.16	1.62	1.49	1.25	.97	.65

HESITATION SWITCHES

Positive-stop switch restricts operation from one "on" position to the other "on" position with a pause in the center "off" or "stop" position. Those indicated match Arrow-Hart & Hegeman switches. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Relace AH&H Type	Action	Bush. Dia.	EACH 1-9	10-24	25-49	50-99	100-Up
757C5435	7992K10	.....	DPDT	1 5/32"	8.68	6.51	6.01	5.01	4.51
757C5440	7992K20	80638-D	DPDT	¼"	8.68	6.51	6.01	5.01	4.51
757C5425	7991K10	.....	3PDT	1 5/32"	10.84	8.13	7.51	6.26	5.63
757C5430	7991K20	80983	3PDT	¼"	10.84	8.13	7.51	6.26	5.63
757C5410	7990K10	.....	4PDT	1 5/32"	12.15	9.11	8.41	7.01	6.31
757C5415	7990K20	80985	4PDT	¼"	12.15	9.11	8.41	7.01	6.31



DIAMIN SWITCH MODULES

Perform switching function for illuminated pushbutton assemblies. Pushbutton housing and Diamin Module replace complete assembly. Tinnerman mount. Shpg. wt. 0 oz.

Stock No.	Mfr. No.	Replace Micro	Poles/ Throw	Opr.	125 VAC	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
757C3258	7158K3	2D1	DPDT	Mom.	1A	5.75	4.28	3.95	3.30	2.97	2.64
757C3259	7159K3	2D25	DPDT	P-P	1A	5.80	4.35	4.01	3.35	3.01	2.67
757C3850	7450K3	2D100	SP N.O.	Mom.	3A	3.94	2.96	2.73	2.28	2.05	1.82
757C3852	7452K3	2D118	SPST	P-P	3A	4.02	3.02	2.79	2.33	2.09	1.86
757C3858	7458K3	2D2	DPDT	Mom.	3A	4.86	3.65	3.37	2.81	2.53	2.25
757C3859	7459K3	2D26	DPDT	P-P	3A	4.96	3.72	3.43	2.86	2.57	2.29

ROTARY SWITCHES

7011 7012 7241 8122 8123

Types 7011 and 7012 rated 125 V, 2A @ 250 V AC-DC; terminals.

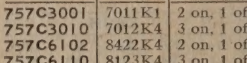
Types 8122 and 8123 rated 125 VAC; screw terminals.

Type 7241 rated 15A @ 250 V hp; spade terminals.

All have ⅜" bushing. Av. wt.

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-499
757C3001	7011K1	2 on, 1 off	2.18	1.63	1.50	1.25	1.13
757C3010	7012K4	3 on, 1 off	2.23	1.67	1.54	1.29	1.16
757C6102	8422K4	2 on, 1 off	.79	.59	.55	.46	.41
757C6110	8123K4	3 on, 1 off	.85	.64	.59	.49	.44
757C3421	7241K2	DPDT	2.31	1.73	1.60	1.34	1.20

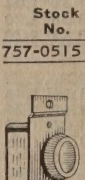
POWEREED SWITCH



Meets MIL-S-55433. 15 A make rush, break 3A @ 125 VAC; 10 max. inrush, break 2A @ 250 VAC N.O.

Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-499
757-0515	SH400AA3	3.30	2.50	2.37	2.30

INCANDESCENT DIMMERS AND BLOWER CONT



Interchangeable with standard household light s
es. Dimmers control light level from low to full
by rotary operation. 600 watt types push On-O
single box receptacle. 1000 watt types rotary O
fit double box. 1000 watt complete with face
U.L. Listed. 110-120 VAC. Shpg. wt. 2 oz.

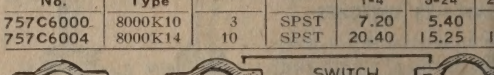
Blower control adjusts speed from very slow t
capability. Single-box. U.L. Listed. 117 VAC. 2 o

INCANDESCENT DIMMERS

Stock No.	Mfr's Type	Watts @ 120 VAC	Action	EACH 1-4	5-24
757C6030	8011K4	600	SPST	7.80	4.72
757C6035	8012K2	600	3-way	9.17	5.90
757C6040	8013K4	1000	SPST	29.00	19.97

FAN BLOWER CONTROLS

Stock No.	Mfr's Type	Amps	Action	EACH 1-4	5-24
757C6000	8000K10	3	SPST	7.20	5.40
757C6004	8000K14	10	SPST	20.40	15.25

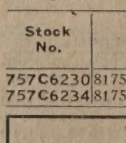


Switch plates. ½" hole dia. Shpg. wt. per 100, 8 oz.

Stock No.	Mfr's Type	Fig.	PKG. OF 10 1-4	5-9	10-49
757C2813	30-5632-4	A	.93	.60	.50
757C2816	30-5632-13	B	.93	.60	.50
757C2803	30-5632-16	C	.93	.60	.50

757-2229. Type 29-761-3 Locking Rings. Pkg. of 100. 8 oz.
1-4 pkgs.....Per Pkg. 2.40 5-10 pkgs.....Per Pkg

757-2216. Type 16-886 Lockwashers. Pkg. of 100, 8 oz.
1-4 pkgs.....Per Pkg. 1.80 5-10 pkgs.....Per Pkg



LIGHTED ROCKETTE SWITCHES

Construction identical to standard "Rock switch with addition of integral light unit h rocker mechanism that illuminates at 'On tion. White nylon rocker. On-None-Off travel. Wt. 2 oz.

Stock No.	Mfr's Type	Bulb	EACH 1-9	10-24	25-49	50-99	100 499
757C6230	8175K11 E 121 T52	120 VAC	2.58	1.93	1.78	1 49	1.3
757C6234	8175K11 E 321 T52	14 VDC	2.58	1.93	1.78	1.49	1.3

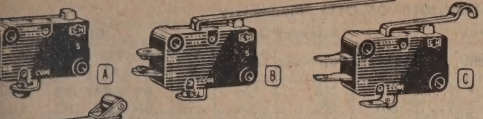
VAST SELECTION AND FAST SERVICE

Depend on Allied Electronics for prompt service on yo order. Allied Electronics makes available to you the worl most complete and comprehensive inventory of electroni parts at factory OEM prices. Save time and reduce yo costs—a single order to Allied Electronics takes care of a your electronic needs.

Call, Write or Wire for Quantity Pricing on All C-H Swit

Cutler-Hammer, J-B-T Switches

CUTLER-HAMMER MINIATURE SNAP SWITCHES



Feature highly stable, low-wear operating mechanism. 1.094″x.625″x.400″. All are SPDT, 15 amp at 125-250 V AC, 10 amp at 28 V. Temp. range: −100° to +1850°F. O.P., .578″, ±0.15″; F.P., .640″ maximum. Quick connect terminals, .188″. O.F., 6-14 R.F., 4 oz. min. *Will mech. & elect. function. S.L.: straight lever, roll. lever, SRL: simulated roll. lever. ■U.L. Recog.

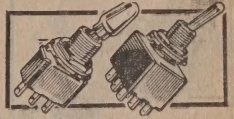
ock o.	Mfr's Type	Micro Equiv.*	Fig.	Description	EACH 1-24	25-49	50-99	100-Up
0660	SS12ET10	V3-1	A	Screw Term.	1.53	1.15	.84	.72
0663	SS12ET20	V3-19	A	Solder term.	1.33	1.00	.73	.63
0666	SS12ET30	V3-1-D8	A	Quick conn.	1.13	.85	.62	.54
0669	SS12ET302L1	V3L-1-D8	B	S.L. (.840″)	1.33	1.00	.73	.63
0672	SS12ET302L2	V3L-2-D8	B	S.L. (1.40″)	1.33	1.00	.73	.63
0675	SS12ET302L6	V3L-6-D8	B	S.L. (2.34″)	1.33	1.00	.73	.63
0677	SS12ET302L24	V3L-14-D8	B	S.L. (2.75″)	1.33	1.00	.73	.63
0690	SS12ET3012L5	V3L-5-D8	C	S.R.L. (1.285″)	1.40	1.05	.77	.66
0691	SS12ET30102L3	V3L-3-D8	D	R.L. (.81″)	1.60	1.20	.88	.76
0692	SS12ET30102L4	V3L-4-D8	D	R.L. (1.34″)	1.60	1.20	.88	.76

CUTLER-HAMMER SUB-MINIATURE SNAP SWITCH

Rated for 50,000 operations at rated load; handles up to 7 amperes normal capacity, and 25 amperes in rush. .500″x.380″x.210″. All are SPDT single turret terminals; temperature range: −65°F to +265°F. Standard: O.F., 5 oz. maximum; R.F. 1 oz. minimum; P.T., .020″ maximum. D.T., .005″ maximum .010″ minimum; O.P., .320″ ±.015. Other terminals: double turret, .055″ pin, and .058″ quick connect. *Will mech. and elect. function satisfactorily. Note: All devices are ■U.L. Recog.

Stock No.	Mfr's Type	Micro Equiv.*	Fig.	Description	EACH 1-9	10-19	20-49	50-Up
757-0610	SS10AT40	1SX1-T	E	Standard	3.00	2.03	1.80	1.58
757-0612	SS10FT40	2SX1-T	E	Low force	3.73	2.52	2.24	1.96
757-0613	SS10DT40	1SX12-T	E	Low dif.	4.20	2.84	2.52	2.21
757-0616	SS10KT40	3SX1-T	E	Gold contacts	4.33	2.93	2.60	2.28
757-1201	SW54SA8380-1	JX40	F	Leaf	.37	.25	.22	.20
757-1202	SW54SA8380-2	JX41	F	Reverse leaf	.37	.25	.22	.20
757-1203	SW54SA8380-3	JX45	G	Roller leaf	1.04	.70	.62	.55
757-1204	SW54SA8380-4	JX51	G	Rev. roll leaf	1.07	.72	.64	.56
757-1205	SW54SA8380-5	JX20	H	Lever	1.13	.77	.68	.60
757-1206	SW54SA8380-6	JX25	H	Rev. lever	2.20	1.49	1.32	1.16

J-B-T JMT SERIES SUBMINIATURE SWITCHES



manual control, solid-state devices and mini- circuits. Single pole type are ¼″ thin, double less than ½″-sq., 3-4 pole also small. Single mtg. ¼″ threaded bushing. Nom. rating 5A, 125 VAC; 24 VDC; initial cont. res., 5 milliohms; insulation res, 10,000 meg. Life under load 100,000 make/break cycles. Bat handles, 30° throw, Silver contacts. Mtg. hdwe. *Momentary pos. Wt., 1 oz.

SPDT—3 TERMINALS

ock o.	Mfr's Type	Action	EACH 1-24	25-99	100-499	500-Up
1351	JMT-121	On-Off-On	1.95	1.30	1.17	1.09
1353	JMT-123	On-None-On	1.65	1.10	.99	.93
1356	JMT-126	On-None-On*	1.95	1.30	1.17	1.09
1357	JMT-127	On*-Off-On*	2.10	1.40	1.26	1.18
1361	JMT-131	On-Off-On*	2.10	1.40	1.26	1.18
1364	JMT-134	None-On-On*	1.95	1.30	1.17	1.09

DPDT—6 TERMINALS

ock o.	Mfr's Type	Action	EACH 1-24	25-99	100-499	500-Up
1381	JMT-221	On-Off-On	2.55	1.70	1.53	1.43
1383	JMT-223	On-None-On	2.15	1.43	1.28	1.20
1386	JMT-226	On-None-On*	2.55	1.70	1.53	1.43
1387	JMT-227	On*-Off-On*	2.70	1.80	1.62	1.51
1391	JMT-231	On-Off-On*	2.70	1.80	1.62	1.51
1392	JMT-232	On-On-On	2.85	1.90	1.71	1.60
1393	JMT-233	On-On-On*	3.15	2.10	1.89	1.76
1394	JMT-234	None-On-On*	2.55	1.70	1.53	1.43
1395	JMT-235	On*-On-On*	3.10	2.05	1.87	1.74

3-POLE DT—9 TERMINALS

Stock No.	Type No.	Action	EACH 1-24	25-99	100-499	500-Up
826-1421	JMT-321	On-Off-On	4.25	2.84	2.54	2.37
826-1423	JMT-323	On-None-On	3.85	2.57	2.32	2.16
826-1427	JMT-327	On*-Off-On*	4.40	2.93	2.63	2.46
826-1431	JMT-331	On-Off-On*	4.40	2.93	2.63	2.46
826-1434	JMT-334	None-On-On*	4.50	3.00	2.70	2.62

4-POLE DT—12 TERMINALS

826-1451	JMT-421	On-Off-On	5.45	3.64	3.26	3.05
826-1453	JMT-423	On-None-On	4.85	3.24	2.90	2.71
826-1457	JMT-427	On*-Off-On*	5.60	3.74	3.35	3.13
826-1461	JMT-431	On-Off-On*	5.60	3.74	3.35	3.13
826-1462	JMT-432	On-On-On	6.00	4.00	3.60	3.36
826-1463	JMT-433	On-On-On*	6.25	4.15	3.76	3.51
826-1464	JMT-434	None-On-On*	5.90	3.93	3.53	3.30
826-1465	JMT-435	On*-On-On*	6.40	4.28	3.83	3.57

COLOR CODED CAPS FOR JMT SERIES

White, blue, red, black, brown, orange, yellow, green, violet or gray—specify color when ordering.
826 C 1350. Pkg. of 10 per color. 1-3 Pkgs.....Each .28
4-19 Pkgs.....Each .25 20-39 Pkgs.....Each .22

J-B-T TOGGLE SWITCHES—SINGLE AND DOUBLE POLE

eed MIL-MS35059 Requirements
All Communications Circuits

rior molded body toggle switches. ure high arc resistance and low kage. Exceed the most rigorous rical endurance requirements. Em- generous proportions of selected alloys in integral construction for act surface areas to add overload ection, dissipate heat, and keep act resistance under .005 ohms.

y-duty types have silicone rubber ing seals and solderable 6-32 screw inals. Measure $1^{11}/_{32}$x$1^{9}/_{16}$x$1^{9}/_{32}$″.

ium-duty types are widely used for military and non-military applica- . Give faster break, wider gap, increased insulation values, result- n longer life. All MS25098 types cause-to-terminal seals and silicone er bushing seal to meet sand, dust, toggle requirements. Number after ription indicates number of termi- *SPST, †DPST, ‡SPDT, §DPDT.

4-POLE HEAVY DUTY-LEVER SEAL

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-99	100-Up
826-2524	MS25068-24	On-Off-X-8	4.50	3.54	2.98	2.47
826-2525	MS25068-25	On-Off-X-8	5.30	4.18	3.51	2.92
826-2528	MS25068-28	X-Off-On-8	5.30	4.18	3.51	2.92
826-2521	MS25068-21	On-Off-On-12	5.22	4.11	3.46	2.87
826-2523	MS25068-23	On-X-On-12	5.30	4.18	3.51	2.92
826-2526	MS25068-26	On-X-On-12	5.63	4.44	3.73	3.10
826-2527	MS25068-27	On-Off-On-12	5.63	4.44	3.73	3.10
826-2531	MS25068-31	On-Off-On-12	5.63	4.44	3.73	3.10

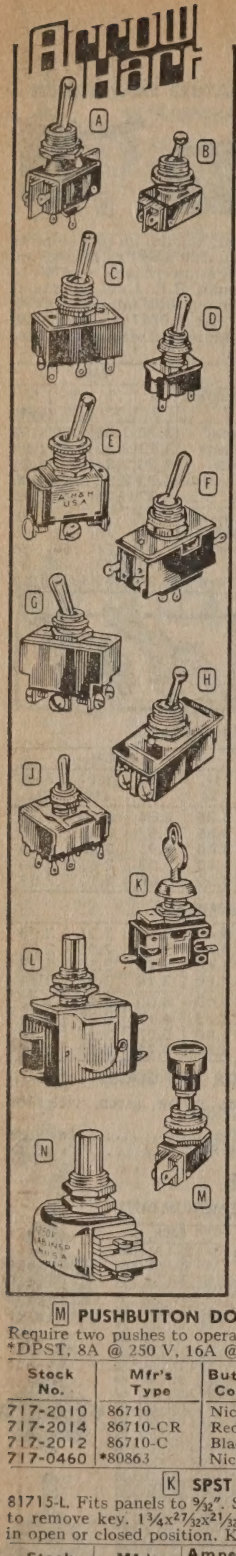
SINGLE AND DOUBLE POLE MEDIUM DUTY WITH LEVER SEAL

826-2622	MS25098-22	On-X-Off-2*	1.61	1.29	1.20	1.11
826-2629	MS25098-29	On-X-Off-2*	2.17	1.73	1.62	1.49
826-2630	MS25098-30	Off-X-On-2*	2.17	1.73	1.62	1.49
862-2623	MS25098-23	On-X-On-3‡	1.84	1.47	1.37	1.26
826-2722	MS25100-22	On-X-Off-4†	2.32	1.85	1.73	1.59
826-2729	MS25100-29	On-X-Off-4†	2.88	2.30	2.15	1.98
826-2730	MS25100-30	On-X-On-4†	2.88	2.30	2.15	1.98
826-2723	MS25100-23	On-X-On-6§	2.51	2.01	1.88	1.73

SINGLE AND DOUBLE POLE MEDIUM DUTY

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-99	100-Up
826-4012	ST12A	On-X-Off-2*	1.20	.88	.80	.75
826-4028	ST12B	On-X-Off-2*	1.45	1.06	.97	.91
826-4055	ST12C	Off-X-On-2*	1.55	1.14	1.04	.97
826-4013	ST13A	On-X-Off-2*	1.24	.97	.83	.78
826-4016	ST16A	On-X-Off-2*	1.53	1.12	1.02	.96
826-4032	ST16B	On-X-Off-2*	1.59	1.17	1.06	1.00
826-4059	ST16C	Off-X-On-2*	1.59	1.17	1.06	1.00
826-4017	ST17A	On-X-Off-2*	1.28	.94	.86	.80
826-4081	ST12D	On-X-On-3‡	1.39	1.02	.93	.87
826-4082	ST13D	On-X-On-3‡	1.43	1.05	.96	.90
826-4085	ST16D	On-X-On-3‡	1.43	1.05	.96	.90
826-4086	ST17D	On-X-On-3‡	1.57	1.15	1.05	.98
826-4276	ST22K	On-X-Off-4†	1.65	1.21	1.10	1.03
826-4277	ST22L	On-X-Off-4†	1.90	1.39	1.27	1.19
826-4278	ST22M	Off-X-On-4†	1.90	1.39	1.27	1.19
826-4279	ST22N	On-X-On-4†	1.80	1.32	1.20	1.13
826-4376	ST23K	On-X-Off-4†	1.69	1.24	1.13	1.06
826-4676	ST26K	On-X-Off-4†	1.79	1.31	1.20	1.12
826-4677	ST26L	On-X-Off-4†	1.94	1.42	1.30	1.22
826-4678	ST26M	Off-X-On-4†	2.04	1.49	1.36	1.28
826-4776	ST27K	On-X-Off-4†	1.83	1.34	1.22	1.15
826-4279	ST22N	On-X-On-6§	1.80	1.32	1.20	1.12
826-4379	ST23N	On-X-On-6§	1.84	1.34	1.23	1.15
826-4679	ST26N	On-X-On-6§	1.80	1.32	1.20	1.13
826-4779	ST27N	On-X-On-6§	1.94	1.42	1.30	1.22

Arrow-Hart Switches



Small laminated canopy, intermediate molded, heavy-duty power, and midget switches. Fig. E and G AC-only with high capacity in small unit. All: 15⁄32" shank, except ‡13⁄32". Shank dia. 15⁄32" e §3⁄4". †Fine silver buttons. Solder terminals e # screw. With 2 mtg. nuts. ▪U.L. Recog. 4 oz

SPST (2-POSITION—ON-OFF) *Momentary

Stock No.	Mfr's Type	Fig.	Amperes 125V	Amperes 250V	hp	Wiping Action	Silver-Plated Contacts	Silver-Plated Terms.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	EACH 100-499
717-0330	20994LH	A	.....	3	....	No	No	No	.92	.69	.64	.53	.48
717-0320	‡20994BF	B	.....	3	....	No	No	No	.92	.69	.64	.53	.48
717-0325	20994CS	B	.....	3	....	No	No	No	.92	.69	.64	.53	.48
717-0465	81015AW	C	6	3	....	Yes	Yes	No	1.21	.91	.84	.70	.63
717-0472	*81045FB	C	6	3	....	Yes	Yes	No	1.94	1.44	1.33	1.11	1.00
717-0616	83050	D	3	1	....	Yes	Yes	Yes	1.21	.91	.84	.70	.63
717-0601	83001	E	6	3	1⁄6	No	Yes	No	.83	.62	.58	.48	.43
717-0520	#82600	E	15	10	3⁄4	No	Yes†	No	1.12	.83	.76	.64	.57
717-0523	82601	E	15	10	3⁄4	No	Yes†	No	.96	.72	.67	.56	.50

SPDT (2-POSITION—ON-ON) *Momentary

717-0340	21350EH	A	3	1	....	No	No	No	1.17	.87	.80	.67	.60
717-0335	21350BF	B	3	1	....	No	No	No	1.17	.87	.80	.67	.60
717-0467	81021AV	C	6	1	....	Yes	Yes	No	1.45	1.09	1.00	.84	.75
717-0473	*81051G	C	6	1	....	Yes	Yes	No	2.10	1.57	1.45	1.21	1.09
717-0618	83052	D	3	1	....	Yes	Yes	Yes	1.45	1.09	1.00	.84	.75
717-0607	83007	E	6	3	1⁄6	No	Yes	No	.89	.67	.62	.52	.46
717-0532	#82604	E	15	10	3⁄4	No	Yes†	No	1.34	.99	.91	.76	.68
717-0535	82605	E	15	10	3⁄4	No	Yes†	No	1.12	.83	.76	.64	.57

SPDT (3-POSITION—ON-OFF-ON)

717-0510	82022HD	F	6	3	....	Yes	Yes	No	2.35	1.76	1.62	1.35	1.22
717-0604	83004	E	6	3	1⁄6	No	Yes	No	.89	.67	.62	.52	.46
717-0526	#82602	E	15	10	3⁄4	No	Yes†	No	1.34	.99	.91	.76	.68
717-0529	82603	E	15	10	3⁄4	No	Yes†	No	1.12	.83	.76	.64	.57

DPST (2-POSITION—ON-OFF) *Momentary N.O.

717-0302	20902CX	A	3	1	....	No	No	No	1.68	1.26	1.16	.97	.87
717-0305	20902N	B	3	1	....	No	No	No	1.67	1.25	1.16	.97	.87
717-0469	81024GB	C	6	3	....	Yes	Yes	No	1.80	1.35	1.24	1.04	.93
717-0475	*81054H	C	6	3	....	Yes	Yes	No	2.52	1.89	1.74	1.45	1.31
717-0619	83053	D	3	1	....	Yes	Yes	Yes	1.80	1.35	1.24	1.04	.93
717-0440	#80600B	H	16	8	1	Yes	Yes	Yes	1.86	1.39	1.28	1.07	.96
717-0442	#80602C	H	20	10	1 1⁄2	Yes	Yes	Yes	3.21	2.41	2.23	1.86	1.67
717-0417	#80421	H	....	20	1 1⁄2	Yes	Yes	Yes	4.31	3.24	2.99	2.49	2.24
717-0610	83025	G	6	3	1⁄6	No	Yes	No	1.21	.91	.84	.70	.63
717-0538	#82606	G	15	10	3⁄4	No	Yes†	No	1.78	1.33	1.22	1.02	.92
717-0540	82607	G	15	10	3⁄4	No	Yes†	No	1.49	1.12	1.03	.86	.77

DPDT (2-POSITION—ON-ON) *Momentary

717-0315	20905FR	A	3	1	....	No	No	No	1.92	1.44	1.33	1.11	1.00
717-0310	20905BX	B	3	1	....	No	No	No	1.92	1.44	1.33	1.11	1.00
717-0471	81027CE	C	6	3	....	Yes	Yes	No	2.07	1.55	1.43	1.19	1.07
717-0477	*81057N	C	6	3	....	Yes	Yes	No	3.04	2.28	2.10	1.75	1.58
717-0620	83054	D	3	1	....	Yes	Yes	Yes	2.07	1.55	1.43	1.19	1.07
717-0614	83031	G	6	3	1⁄6	No	Yes	No	1.35	1.01	.94	.78	.70
717-0550	#82610	G	15	10	3⁄4	No	Yes†	No	2.18	1.63	1.51	1.26	1.13
717-0551	82611	G	15	10	3⁄4	No	Yes†	No	1.78	1.33	1.22	1.02	.92

DPDT (3-POSITION—ON-OFF-ON)

717-0514	82024HD	F	6	3	....	Yes	Yes	No	2.88	2.16	2.00	1.67	1.50
717-0612	83028	G	6	3	1⁄6	No	Yes	No	1.35	1.01	.94	.78	.70
717-0544	#82608	G	15	10	3⁄4	No	Yes†	No	2.18	1.63	1.51	1.26	1.13
717-0541	82609	G	15	10	3⁄4	No	Yes†	No	1.78	1.33	1.22	1.02	.92

DPDT (3-POSITION—ON-POSITIVE OFF-ON) Cannot move through center position without stoppin

717-0454	#80638D‡	....	10	5	3⁄4	Yes	Yes	No	5.90	4.42	4.08	3.40	3.06

3 AND 4-POLE—AC ONLY (Fig. J except 82612, not illus.)

Stock No.	Mfr's Type	Action	Amperes	hp	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99
717-0552	82612	3PST (On-Off)	10@250V, 15@125V	1@1-3ph,125V	3.36	2.53	2.33	1.95
717-0555	82615	3PDT (On-Off-On)	10@250V, 15@125V	1@1-3ph,125V	3.57	2.68	2.48	2.07
717-0557	82617	3PDT (On-None-On)	10@250V, 15@125V	1@1-3ph,125V	3.57	2.68	2.48	2.07
717-0565	†82636	4PDT (On-None-On)	10@250V	½@115-230V	5.35	4.01	3.70	3.09

M PUSHBUTTON DOUBLE-ACTION SPST SWITCHES

Require two pushes to operate. 3A @ 250 V, 6A @ 125 V AC-DC. *DPST, 8A @ 250 V, 16A @ 125 V. Av. wt.3 oz.

Stock No.	Mfr's Type	Button Color	EACH 1-9	10-24	25-49	50-99	100-Up
717-2010	86710	Nickel	1.66	1.24	1.14	.95	.86
717-2014	86710-CR	Red	1.95	1.46	1.35	1.13	1.01
717-2012	86710-C	Black	1.95	1.46	1.35	1.13	1.01
717-0460	*80863	Nickel	2.86	2.14	1.97	1.65	1.48

K SPST LOCK SWITCHES

81715-L. Fits panels to 9⁄32". Sleeve dia., 15⁄32". Switch must be open to remove key. 1 3⁄4x2 7⁄32x2 1⁄32". 81715-LE, Same, but key removable in open or closed position. Keys listed below right. 4 oz.

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	EACH 1-9	10-24	25-49	50-99	100-Up
717-0479	81715-L	6	3	2.84	2.13	1.97	1.64	1.48
717-0481	81715-LE	6	3	8.84	2.13	1.97	1.64	1.48

ROTARY POWER SWITCHES

Ideal for instrument, control panel, appliance uses, plus a w variety of other power applications. Rated: †1 amp @ 250 V- amp @ 125 V; §3 amp @ 250 V; #3 amp @ 250 V—6 amp @ 125 Have shanks 11⁄32" dia., 3⁄8" long with solder lugs. ▪U.L. Recog. shpg. wt., 2-oz.

Stock No.	Mfr's Type	Fig.	Action	EACH 1-9	10-24	25-49	50-99	1
717-0115	1561-B	N	§SPST	1.26	.94	.86	.72	
717-0120	1575	N	†DPDT	2.38	1.78	1.64	1.37	1.
717-0478	81715	L	#SPST	2.23	1.67	1.54	1.29	1.
717-0479	81727	L	#DPDT	3.25	2.44	2.25	1.88	1.

KEYS FOR LOCK SWITCHES

717-0480. For 81715-L. 1-9 ..... Each .27 10-24 ..... Each
25-49 ..... Each .19 50-99 ..... Each .16 100-Up ..... Each

717-0482. For 81715-LE. 1-9 ..... Each .27 10-24 ..... Each
25-49 ..... Each .19 50-99 ..... Each .16 100-Up ..... Each

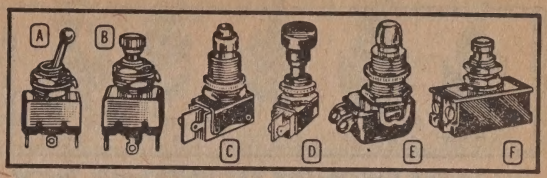
▪Recognized Under Component Program of Underwriter's Laboratories,

Arrow-Hart Switches and Accessories

MOMENTARY PUSH SWITCHES

C only except 80630 and 3594 are AC-DC. ‡Midget size, molded henolic; §canopy size, phenolic sections. 3 amp @ 125 VAC, 1-10 p @ 125 V except *8 amp @ 250 V, 16 amp @ 125 V, 1 HP; †1 mp @ 125 V, #1A @ 250 V, 3A @ 125 V, AC-DC. 15/32" dia. shanks. U.L. Recog. ††Button: B, black; R, red, N, nickel. 3 oz.

Stock No.	Mfr's Type	Fig.	Action	††	EACH 1-9	10-24	25-49	50-99	100-Up
17-0210	§3391-GL	D†	SPST-N.O.	B	1.31	.98	.90	.75	.68
17-0215	§3391-GL	D†	SPST-N.O.	R	1.31	.98	.90	.75	.68
17-0203	§3391-GJ	D†	SPST-N.C.	R	1.31	.98	.90	.75	.68
17-0206	§3391-GJ	D†	SPST-N.C.	B	1.31	.98	.90	.75	.68
17-0220	§3392	C†	SP2-N.C.	N	1.28	.96	.88	.74	.66
17-0225	§3392-AE	D†	SP2-N.C.	B	1.59	1.19	1.10	.92	.82
17-0230	§3392-AE	D†	SP2-N.C.	R	1.59	1.19	1.10	.92	.82
17-0243	#3594-Q	D	DPST-N.O.	R	2.78	2.09	1.93	1.61	1.45
17-0242	#3594-Q	D	DPST-N.O.	B	2.78	2.09	1.93	1.61	1.45
17-0240	#3594-PA	D	DPST-N.C.	R	2.78	2.09	1.93	1.61	1.45
17-0235	#3594-PA	D	DPST-N.C.	B	2.78	2.09	1.93	1.61	1.45
17-0250	#3599-GF	D	DPDT-N.C.	R	3.21	2.41	2.23	1.86	1.67
17-0245	#3599-GF	D	DPDT-N.C.	B	3.21	2.41	2.23	1.86	1.67
17-0420	‡80511	E	SPST-N.C.	N	.68	.51	.47	.40	.36
17-0421	‡80511-E	E	SPST-N.O.	N	.68	.51	.47	.40	.36
17-0430	‡80541-R	E	SPST-N.C.	R	1.31	.98	.90	.75	.68
17-0425	‡80541-E	E	SPST-N.O.	B	1.31	.98	.90	.75	.68
17-0426	‡80541-ER	E	SPST-N.O.	R	1.31	.98	.90	.75	.68
17-0450	*80630	F	DPST-N.O.	N	2.73	2.05	1.90	1.58	1.42



SUBMINIATURE SWITCHES

Gold-plated silver contacts; gold plated brass terminals; diallyl phthalate bases. Toggle types (Fig. A) 5A res. @ 29 VDC/115 VAC; meet MIL-S-3950. MS-75028, SPDT; MS-75029, DPDT. Pushbutton types (Fig. B), 2A res. @ 29 VDC/1A @ 115 VAC. Fig. A except PM-3 thru PM-7 which are Fig. B. *Momentary action. Shpg. wt., 1 oz.

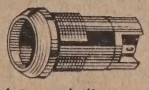
Stock No.	Mfr's Type	Gov't Mil Spec No.	Action	EACH
717-0075	TC-3M	75028-21	On-Off-On	3.20
717-0090	TS-3M	75028-23	On-None-On	3.20
717-0086	TG-3M	75028-27	On*-Off-On*	3.40
717-0083	TE-3M	75028-31	On*-Off-On	3.40
717-0080	TC-6M	75029-21	On-Off-On	4.10
717-0095	TS-6M	75029-23	On-None-On	4.10
717-0053	PM-3	.....	SPDT	2.86
717-0056	PM-6	.....	DPDT	3.51
717-0057	PM-7	.....	3PST-N.O.	3.31

ARROW-HART SUBMINIATURE SWITCHES

NEW ADAPT-A-SWITCHES

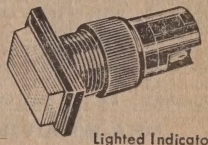
Lens

Lamp


Actuator-Indicator

Mounting Nut

Contact Block


Lighted Indicator

leal for business machines and computers. Lighted pushbutton vitches designed to offer up to 25,344 combinations with 31 com- ponents listed below. Rated: 5A, 125VAC; 2A, 250VAC; 5A, VDC. 10 microamp minimum for dry circuit, 50 mV. Av. shpg. t. ¼ oz.

- Double-break wiping contacts
- Easy to mount, no special tools
- High density Mounting
- Snap-on Contact Blocks

RECTANGULAR ACTUATOR INDICATORS

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-Up
7-1080	83501	Rec. Momentary action	1.87	1.40	1.12	1.05
7-1083	83504	Rec. Alternate action	2.93	2.20	1.76	1.65
7-1081	83502	Square Momentary action	1.87	1.40	1.12	1.05
7-1084	83505	Square Alternate action	2.93	2.20	1.76	1.65
7-1082	83503	Round Momentary action	1.87	1.40	1.12	1.05
7-1085	83506	Round Alternate action	2.93	2.20	1.76	1.65

LENSES FOR ABOVE INDICATORS

Stock No.	Mfr's Type	Description	Stock No.	Mfr's Type	Description
7-1050	83500-70	Rect. white	717-1064	83500-84	Sq. yellow
7-1051	83500-71	Rect. red	717-1065	83500-85	Sq. amber
7-1052	83500-72	Rect. green	717-1066	83500-86	Sq. black
7-1053	83500-73	Rect. blue	717-1068	83500-90	Round white
7-1054	83500-74	Rect. yellow	717-1069	83500-91	Round red
7-1055	83500-75	Rect. amber	717-1070	83500-92	Round green
7-1056	83500-76	Rect. black	717-1071	83500-93	Round blue
7-1060	83500-80	Sq. white	717-1072	83500-94	Round yellow
7-1061	83500-81	Sq. red	717-1073	83500-95	Round amber
7-1062	83500-82	Sq. green	717-1074	83500-96	Round black
7-1063	83500-83	Sq. blue	.....	.....	.....

?.....Each .27 10-24.....Each .20
-99.....Each .16 100-Up.....Each .15

CONTACT BLOCKS (*Silver plated contacts, †gold plated)

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-Up
717-0030	8500-30	Standard Duty*	2.00	1.50	1.20	1.13
717-0031	83600-30	Low Energy†	3.33	2.50	2.00	1.88

SNAP-ON BEZEL

717-1035	83500-46	Bright chrome	.27	.20	.16	.15

SNAP-ON CLIP TO CONVERT ANY ACTUATOR TO INDICATOR

717-1039	83500-51	.27	.20	.16	.15

717-0080. Mounting Wrench. For use in tightening molded nylon mounting nuts when installing Adapt-a-Switches. ¼ oz.....1.33

LAMPS

Stock No.	Mfr's Type	Volts	Amps	Base	Bulb Style	PER PKG. of 10 1-9	10-49	50-Up
749-3048	327	28	.04	Mid. Flanged	T-1¾	4.75	3.50	3.00
749-3051	328	6	.20	Mid. Flanged	T-1¾	3.75	2.70	2.30
749-3053	330	14	.08	Mid. Flanged	T-1¾	6.35	4.60	4.00
749-3096	387	28	.04	Mid. Flanged	T-1¾	6.10	4.50	3.80

ADAPT-A-SWITCH LIGHTED PUSHBUTTON SWITCH KIT

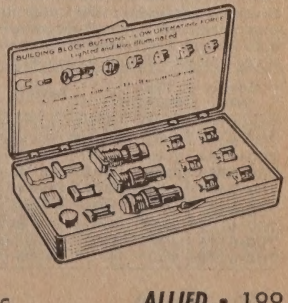
31 STOCK COMPONENTS BUILD 25,344 DIFFERENT VARIATIONS

Build 3- or 4-Pole Switches
Build Thousands of Variations

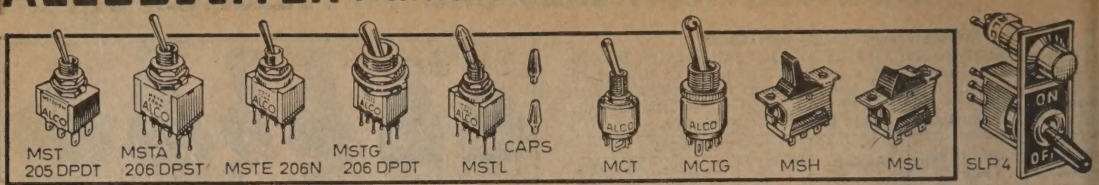
- Finger Snap-On Contact Blocks
- All Parts Made in U.S.A.

rerything you need to construct your own sh buttons through easy fingertip assembly. l parts are manufactured in the U.S.A. to manding performance standards and offer the aximum in design flexibility. No special ols are necessary. Actuators are either momen- ry or alternate action to meet circuit require- nts. You can build up to 4-pole momentary d 3-pole alternate action push button switches.

Included are: nine lenses, 3 round, 3 square, 3 rectangular; two momentary actuator indica- tors; one alternate actuator indicator; six contact blocks; one adaptor for making any actuator an indicator only. Attractive external appearance will complement any modern elec- trical panel design. Comes in durable case, each component individually set. 6¾x1¼x3⅝".
717-1025. Shpg. wt. 5 oz.....16.70



ALCOSWITCH Miniature Switches and Accessories



MST TOGGLE SWITCH—SLIM BAT HANDLE—30° THROW

Ideal for aircraft and other high-density applications. Feature high current capacity and long life. Rated at 5 amps @ 115 VAC. 1000 megs @ 500 VDC insulation tests. 1000 V @ 60 Hz breakdown. DPDT switches are only ½-inch square. All have silver contacts. ¼-inch bushing. *Momentary contact. †Special switch with 3 "on" positions. Av. shpg. wt., 1 oz.

Stock No.	Type MST-	Action	EACH 1-9	10-24	25-49	50-Up
700-5780	105D	SPDT On-None-On	1.65	1.12	.99	.83
700-5781	105E	SPDT On-Off-On	1.95	1.33	1.17	.97
700-5782	105F	SPDT None-On-On*	1.95	1.33	1.17	.97
700-5783	105G	SPDT On*-Off-On*	1.95	1.33	1.17	.97
700-5784	105H	SPDT On-Off-On*	1.95	1.33	1.17	.97
700-5795	205N	DPDT On-None-On	2.15	1.43	1.29	1.08
700-5797	205P	DPDT On-Off-On	2.55	1.72	1.53	1.28
700-5799	205R	DPDT On-None-On*	2.55	1.72	1.53	1.28
700-5800	205S	DPDT On*-Off-On*	2.55	1.72	1.53	1.28
700-5802	205T	DPDT On-Off-On*	2.55	1.72	1.53	1.28
700-5798	205PA	†DP3T On-On-On	2.85	1.90	1.71	1.42
700-5801	205SA	†DP3T On*-On-On*	3.15	2.14	1.89	1.58
700-5803	205TA	†DP3T On-On-On*	3.15	2.14	1.89	1.58
700-5820	305D	3PDT On-None-On	3.85	2.57	2.31	1.92
700-5821	305E	3PDT On-Off-On	4.15	2.82	2.49	2.08
700-5822	305F	3PDT None-On-On*	4.15	2.82	2.49	2.08
700-5824	305H	3PDT On-Off-On*	4.15	2.82	2.49	2.08
700-5840	405N	4PDT On-None-On	4.85	3.29	2.91	2.43
700-5842	405P	4PDT On-Off-On	5.35	3.64	3.21	2.68

MSTA MINIATURE 6-AMP TOGGLE SWITCHES

Reliable miniature switch. Plastic case withstands high impact. Low loss, high temperature coefficient. Bonded solid-silver contacts rated 6 amps 125 VAC. ¼"-40 bushing. Av. wt., 1 oz.

Stock No.	Mfr's Type	Contacts	Description	EACH 1-9	10-24	25-49	50-Up
700-5901	MSTA-106D	SPDT	On-None-On	1.80	1.23	1.08	.90
700-5911	MSTA-106E	SPDT	On-Off-On	2.25	1.53	1.35	1.13
700-5925	MSTA-206N	DPDT	On-None-On	2.35	1.60	1.41	1.18
700-5927	MSTA-206P	DPDT	On-Off-On	2.85	1.90	1.71	1.42
700-5930	MSTA-206PA	DP3T	On-On-On	3.15	2.14	1.89	1.58
700-5940	MSTA-306D	3PDT	On-None-On	4.05	2.75	2.43	2.03
700-5941	MSTA-306E	3PDT	On-Off-On	4.45	3.03	2.67	2.23
700-5955	MSTA-406N	4PDT	On-None-On	5.10	3.47	3.06	2.55
700-5957	MSTA-406P	4PDT	On-Off-On	5.65	3.84	3.39	2.83
700-5959	MSTA-406PA	4P3T	On-On-On	6.15	4.18	3.69	3.08

MSTE SERIES WATERPROOF TOGGLE SWITCHES

New case design with high voltage barriers, low loss, high impact materials. Turret terminals. Bonded silver contacts rated 6 amp @ 115 VAC. All types listed have "O" rings, permanently sealed terminals. Shpg. wt., 1 oz.

Stock No.	Type MSTE-	Action	EACH 1-9	10-24	25-49	50-Up
700-6020	106D	SPDT On-None-On	1.95	1.33	1.17	.98
700-6021	106E	SPDT On-Off-On	2.55	1.72	1.53	1.28
700-6030	206N	DPDT On-None-On	2.55	1.72	1.53	1.28
700-6032	206P	DPDT On-Off-On	3.15	2.14	1.89	1.58
700-6033	206PA	DP3T On-On-On	3.45	2.35	2.07	1.73
700-6040	306D	3PDT On-None-On	4.25	2.89	2.55	2.13
700-6041	306E	3PDT On-Off-On	4.75	3.23	2.85	2.38
700-6050	406N	4PDT On-None-On	5.35	3.64	3.21	2.68
700-6051	406P	4PDT On-Off-On	5.95	4.05	3.57	2.98

MSTG "MUSTANG" SERIES SWITCHES

Features a standard 15/32" hole mounting, but with a rear space requirement of a miniature switch. Case construction of low loss, high impact and temperature materials, with turret terminals and silver contacts. Rated 6 amp @ 115 VAC. Av. wt., 1 oz.

Stock No.	Type MSTG-	Action	EACH 1-9	10-24	25-49	50-Up
700-6080	106D	SPDT On-None-On	2.15	1.43	1.29	1.08
700-6081	106E	SPDT On-Off-On	2.75	1.87	1.65	1.38
700-6384	206N	DPDT On-None-On	2.75	1.87	1.65	1.38
700-6385	206P	DPDT On-Off-On	3.35	2.28	2.01	1.68
700-6386	206PA	DP3T On-On-On	3.65	2.48	2.19	1.83
700-6387	306D	3PDT On-None-On	4.45	3.03	2.67	2.23
700-6102	306E	3PDT On-Off-On	4.95	3.37	2.97	2.48
700-6115	406N	4PDT On-None-On	5.55	3.77	3.33	2.78
700-6116	406P	4PDT On-Off-On	6.15	4.18	3.69	3.08

MSTL MINIATURE LEVER-LOCKING SWITCHES

Spring-loaded lever pulls forward, snaps back into accident-pro detent. Have high-voltage barriers with high impact, low-loss, hi temperature cases, turret terminals, bonded silver contacts. Rat 6 amps, 125 VAC. Bushing, ¼"-40 by 0.316". Depth behind pan 0.661". Overall, 1.645x.394". Av. wt., 1 oz.

Stock No.	Type MSTL-	Action	EACH 1-9	10-24	25-49	50-U
700-6150	106D	SPDT On-None-On	3.15	2.14	1.89	1.5
700-6151	106E	SPDT On-Off-On	3.85	2.57	2.31	1.9
700-6160	206N	DPDT On-None-On	3.85	2.57	2.31	1.9
700-6161	206P	DPDT On-Off-On	4.45	3.03	2.67	2.2
700-6162	206PA	DP3T On-On-On	4.75	3.23	2.85	2.3
700-6175	306D	3PDT On-None-On	5.65	3.84	3.39	2.8
700-6176	306E	3PDT On-Off-On	6.25	4.24	3.75	3.1
700-6185	406N	4PDT On-None-On	6.95	4.73	4.17	3.4
700-6186	406P	4PDT On-Off-On	7.45	5.06	4.47	3.7
700-6187	406PA	4P3T On-On-On	7.95	5.40	4.77	3.9

MINIATURE CYLINDRICAL TOGGLE SWITCHES

New cylindrical case for toggle switches when a positive feel a reliability are desired in a small size. Metal construction, hi impact terminal insulator. Rated 10 A at 125 VAC. Internal conta resistance: under 20 milliohms at 2-4 VDC, 1 amp. Life of 40,0 on-off operations. Silver on copper contacts. MCT series has mi ature ¼" bushings. MCTG has standard 15/32" bushings. Wt. 1

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	5 U
700-4015	MCT-110D	SPDT On-None-On	1.95	1.33	1.17	.
700-4020	MCT-220N	DPDT On-None-On	2.55	1.72	1.53	1.
700-4040	MCTG-110D	SPDT On-None-On	1.95	1.33	1.17	.
700-4049	MCTG-220N	DPDT On-None-On	2.55	1.72	1.53	1.

MSH LEVER AND MSH ROCKER SWITCHES

Versatile DPDT action switches have choice of actuators, eit long lever or rocker. Rated 3 amps at 125 volts AC. Estimated cycle: at least 25,000 operations. Silverplated contacts assure e cient load capabilities. Av. wt. 1 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-49	5
700-5110	MSH-203N	DPDT Lever Switch	1.25	.85	.75	.
700-5125	MSL-203N	DPDT Rocker Switch	1.15	.78	.69	.

COLORED CAPS FOR ALCOSWITCH TOGGLE SERIES

C-10 and C-17 for MST, MSTA, MSTE series. Plastic. Specify co Red, White, Black, Blue, Gray, Green, Yellow or Pink. Shpg. wt. 2

C-15 for MSTG "Mustang" series. Plastic. Specify color: Red, Wh Black, Blue or Green. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Description	PKG. OF 25 1-3	4-19	20-
700C1010	C-10	Plastic Cap	.84	.55	.5
700C1017	C-17	Flat Top Cap	.84	.55	.5
700C1015	C-15	Plastic Cap	1.33	.90	.8

SWITCH ACCESSORIES

Stock No.	Mfr's Type	Description	PER PKG. OF 1-3	4-19	20-
700-6501	N-1A	¼"-20 Perfect Fit Nut	1.20	.83	.
700-6502	N-1B	15/32" Perfect Fit Nut	1.67	1.10	1.
700-6503	N-1C	3/8"-32 Perfect Fit Nut	1.67	1.10	1.
700-6510	N-2	¼"-40 Hex Nut	.67	.45	.
700-6511	N-3	¼"-40 Decorative Nut	1.20	.83	.

BLACK ANODIZED ALUMINUM SWITCH PLATES

SLP-4 is 1 9/32x5/8", has hole for 3/8" pilot light; SP-3 and SI 1x3/8"; no hole for pilot light. Specify Marking: ON-ON, ON-OFI PWR-OFF. Av. shpg. wt., 1 oz. per package.

For ¼" Bushing		For 15/32" Bushing		PER PKG. OF 1-9	10-24	25-
Stock No.	Type	Stock No.	Type			
700C7604	SLP-4	.....	.....	.90	.65	.6
700C7640	SP-3	700C7641	SP-4	.75	.55	.5

SEE PAGE 351 FOR TYPE MRA SWITCH KNOB

Pushbutton Switches

ALCOSWITCH

MSPG "MUSTANG" PUSHBUTTON SWITCHES

)PDT switches rated 6 amps at 125 VAC. (same specs as Mustang oggle switches). 1⁹⁄₃₂" bushings. Av. shpg. wt., 1 oz.

Stock No.	Type MSPG-	Action	Cap Color	EACH 1-9	10-24	25-49	50-Up
00-5420	206N-B	Push on/off	Black	3.15	2.14	1.89	1.58
00-5425	206N-R	Push on/off	Red	3.15	2.14	1.89	1.58
00-5435	206R-B	Momentary	Black	3.15	2.14	1.89	1.58
00-5445	206R-R	Momentary	Red	3.15	2.14	1.89	1.58

MSPN ILLUMINATED PUSHBUTTON SWITCHES

nap-action DPDT switches. Side terminals. Current rating 6, mps at 125 VAC, 3 amps at 250 VAC. Life: Over 20,000 operations. lack phenolic resin case. Solid-silver contacts. Mount in standard ⁹⁄₃₂" hole. Order caps and lamps from tables below. *Transparent aps available in Red, Yellow, Green, Amber, Blue, Clear. Specify olor when ordering. Av. wt., shpg. 1 oz.

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-Up
00-5514	MSPN-206R	Momentary	4.80	3.26	2.88	2.40
00-5510	MSPN-206N	Push on/off	4.80	3.36	2.88	2.40

Stock No.	Mfr's Type	Description	PER PKG. OF 25 1-3	4-19	20-39
700C7072	RS	½" Round Cap*	1.70	1.50	1.25
700C7066	RM	⅝" Round Cap*	2.05	1.80	1.50
700C7065	RL	¾" Round Cap*	2.55	2.25	1.88
700C7665	SS	½" Square Cap*	1.70	1.50	1.25
700C7615	SM	⅝" Square Cap*	2.05	1.80	1.50
700C7601	SL	¾" Square Cap*	2.55	2.25	1.88

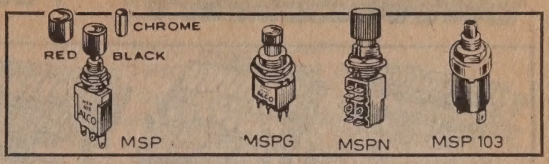
(LAMPS SOLD PER PKG. OF 10)

749-3087	379	Lamp: 6.3 V, 0.2 A 1-9. Ea. 7.90 10-Up. Ea. 6.40
749-3095	386	Lamp: 14 V, .08 A 1-9. Ea. 10.00 10-Up. Ea. 8.10
749-3099	388	Lamp: 28 V, .04 A 1-9. Ea. 10.10 10-Up. Ea. 8.20

MSP-103 ECONOMY PUSHBUTTON SWITCHES

ated 3 amps at 125 VAC. Silver-plated low pressure contacts and rminals. Plastic button plunger travels .098" overall. Less than ⅛" deep behind panel. ¼"-40 bushing. *Red button, †Black button. ıpg. wt., 1 oz.

Stock No.	Type MSP-	Description	EACH 1-9	10-24	25-49	50-Up
700-5220	103B†	SPST N.C.	.65	.44	.39	.33
700-5221	103C*	SPST N.O.	.65	.44	.39	.33



MSP PUSHBUTTON SWITCHES (Less Buttons)

Usable normally open or normally closed, 5 amps @ 115 VAC. Solid silver contacts. ½x½x¾". *SPDT. †DPDT. Av. wt., 1 oz.

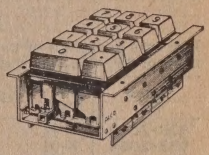
Stock No.	Type MSP-	Action	EACH 1-9	10-24	25-49	50-Up
700-5237	105F	*-Momentary	1.95	1.33	1.17	.98
700-5235	105D	*-Push on/off	1.95	1.33	1.17	.98
700-5249	205R	†-Momentary	2.85	1.90	1.71	1.42
700-5255	205N	†-Push on/off	2.85	1.90	1.71	1.42

BUTTONS FOR ABOVE SWITCHES (*Specify Red, Green, Black)

Stock No.	Mfr's Type	Description	PER PKG. OF 25 1-3	4-19	20-Up
700C1012	C-12	*Plastic Button	1.08	.80	.75
700C1013	C-13	*Large Button	1.88	1.35	1.25
700-1014	C-14L	Chrome Button	1.88	1.35	1.25

SERIES SB REED-OPERATED KEY BOARD SWITCH ASSEMBLIES

- "Positive Lockout" Between Sections and Rows
- Single-Pole, Open-Circuit Reed Switches



Single-pole, open-circuit reed switches have life over two million operations. Short-stroke design for smooth operation. Square gray buttons (¹⁹⁄₃₂"). Standard 0-9 markings with decimal button or triple "0" bar, or 1-12 numeral markings. Contacts 100 mA at 48 VDC. 1⅝" mtg. dpth. Size, 3⅝x2⅞x2¼". Shpg. wt. 10½ oz.

Stock No.	Mfr's Type	Description	EACH
700-7532	SB-032	Interlock 0-9 ("0" triple bar)	28.50
700-7540	SB-033	Interlock 0-9 and "decimal"	28.50
700-7545	SB-034	Interlock 1-12 numerals	29.95
700-7550	SB-035	Momentary 1-12 numerals	28.50

INTERMARKET THUMBWHEEL PRINTED CIRCUIT SWITCHES

IMLEC

STANDARD MODULES (Size, 1.785x0.50x2.56")

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-99	100-Up
6-0182	SI10ND	10-pos. decimal	3.66	2.75	2.61	2.48
6-0174	SI02ND	2-pos. decimal, +, −	4.67	3.50	3.32	3.15
6-0132	SB10N1248	10-pos. BCD	7.33	5.50	5.22	4.95
6-0124	SB10N1248E	10-pos. BCD, extended diode bd.	6.98	5.25	4.98	4.71
6-0092	SBC10N1248	10-pos. BCD with complements	8.79	6.60	6.27	5.94
6-0084	SBC10N1248E	10-pos. BCD, with complements, extended diode bd.	7.66	5.75	5.46	5.18
6-0152	SDP	Divider plates	1.33	1.00	.95	.90
6-0232	SBM	Blank module	1.00	.75	.71	.67
6-0172	SEP	End plates	1.33	1.00	.95	.90

MINIATURE MODULES (.965x0.50x1.52")

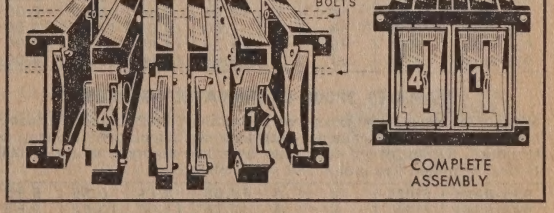
6-0082	M110ND	10-pos. decimal	5.34	4.00	3.80	3.70
6-0074	M102ND	2-pos. decimal, +, −	5.67	4.25	4.03	3.82
6-0052	MB10N1248	10-pos. BCD	9.34	7.00	6.65	6.30
6-0044	MB10N1248E	10-pos. BCD, ext. diode board	6.67	5.00	4.74	4.50
6-0042	MBC10N1248	10-pos. BCD with complements	14.00	10.50	9.02	8.55
6-0034	MBC10N1248E	10-pos. BCD, complements, extended diode board	7.33	5.50	5.23	4.95
6-0227	MBM	Blank module (divider use also)	1.00	.75	.71	.67
6-0072	MEP	End plates	1.33	1.00	.95	.90

ASSEMBLY HARDWARE

Number of modules that can be assembled.

Stock No.	Mfr's Type	*	Stock No.	Mfr's Type	*	Stock No.	Mfr's Type	*
816-0213	H-1	1	816-0216	H-4	4	816-0219	H-7	7
816-0214	H-2	2	816-0217	H-5	5	816-0220	H-8	8
816-0215	H-3	3	816-0218	H-6	6	816-0221	H-9	9

?..... Each 1.00 10-24..... Each .75 25-99..... Each .72
0-249.... Each .68 250-499..... Each .64 500-Up..... Each .60

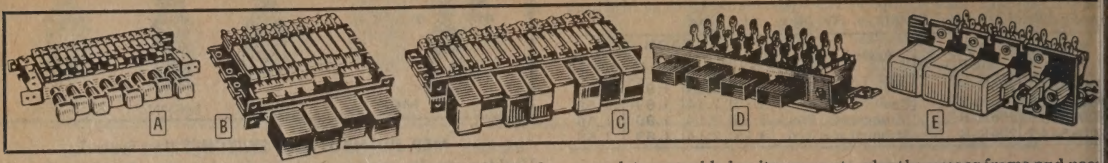


Low-cost printed circuit thumbwheel switches for industrial applications where adverse environmental conditions are not ordinarily encountered. Use for manual insertion of data into computers, control processes, numerical control systems. Permits selection of more functions in smaller panel space than older "wafer" switches.

Each module is ½" wide and provides numerical indication of switch function. Special interlocking feature and the use of two threaded rods at the rear permit construction of complete module banks enabling the user to take advantage of maximum custom design flexibility. Divider plates and blank modules separate the banks into clearly defined sections.

Current: switching, 0.5 amp max. per switch. Voltage: 200 volts, maximum power of 24 watts with 12 watts energized output. Insulation resistance: 1000 megohms. Contact resistance; 0.10 ohm. Life: 100,000 cycles. Available in 10-position decimal, BCD, or BCD-with-complements outputs. Semi-gloss black body with white characters on black wheel. Order from tables at left. From England. Av. shpg. wt., 1 oz.

SWITCHCRAFT® INC. Pushbutton Multi-Switches



Pushbutton "Multi-Switch" components on this page may be used to assemble a complete "Multi-Switch" unit in the field. For a complete assembled unit you must order the proper frame and nec sary stack switches for each station on the frame.

A SERIES 21000 ILLUMINATED FRAMES

Mounts on panels up to ⅜" thick, 3⁵⁄₁₆" depth behind panel. Buttons on ⅝" centers. Interlock function easily converts to non-lock or all-lock. Up-front lamp removal. Lights in actuated position. Supplied less stack switches. Av. wt. per station 2 oz.

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-7420	21200	2	8	14.18	9.57	8.77	7.98
933-7440	21400	4	11	23.96	16.17	14.82	13.48
933-7460	21600	6	15	33.73	22.77	20.87	18.98
933-7480	21800	8	17	43.56	29.40	26.95	24.50
933-9630	211000	10	21	53.78	36.30	33.28	30.25
933-9650	211200	12	24	63.56	42.90	39.33	35.75

LOCK-OUT BAR

Prevents operation of more than one button at a time. Mounts on back of 21000 Series frame. Supplied with mounting hardware.

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-2002	K-02	2	5	2.93	1.98	1.82	1.65
933-2004	K-04	4	5	3.20	2.16	1.98	1.80
933-2006	K-06	6	5	3.42	2.31	2.12	1.93
933-2008	K-08	8	5	3.69	2.49	2.28	2.08
933-2010	K-10	10	5	4.18	2.82	2.59	2.35
933-2012	K-12	12	5	4.67	3.15	2.89	2.63

LAMPS FOR SERIES 21000 AND 37000

Stock No.	Ind. No.	Description	PKG. OF 10 1-9	10-49
749-3051	328	6-volt	3.40	2.70
749-3048	327	28-volt	4.30	3.50

B SERIES 35000 NON-ILLUMINATED FRAMES

Compact, low silhouette design. Only ¾" high, 2⁵⁄₁₆" depth behind panel. Modern, square black buttons on ⅝" centers. Part numbers shown below indicate interlock function with "built-in" lockout. For other functions substitute following number for last digit of part number. Non-lock (2), All-lock (3), Push-to-lock, Push-to-release (7). Supplied less stack switches.

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-7921	35021	2	2	7.56	5.10	4.68	4.25
933-7941	35041	4	4	10.67	7.20	6.60	6.00
933-7961	35061	6	6	14.22	9.60	8.80	8.00
933-7981	35081	8	8	17.80	12.00	11.00	10.00
933-8001	35101	10	10	21.34	14.40	13.20	12.00
933-8021	35121	12	12	24.89	16.80	15.40	14.00

C SERIES 37000 ILLUMINATED FRAMES

Similar to Series 35000 except with illuminated rectangular buttons. Up-front lamp replacement. Interlock with lock-out function is standard. Order other functions in same manner as for 35000 Series. Supplied less lamps and stack switches.

933-8321	37021	2	2	10.58	7.14	6.55	5.95
933-8341	37041	4	4	17.16	11.58	10.62	9.65
933-8361	37061	6	6	23.73	16.02	14.69	13.35
933-8381	37081	8	8	30.76	20.76	19.03	17.30
933-8401	37101	10	10	37.34	25.20	23.10	21.00
933-8421	37121	12	12	43.90	29.64	27.17	24.70

STACK SWITCHES FOR LITTEL "MULTI-SWITCH" SWITCHES

Switch stacks for Series 35000, 37000. Series 80P cross bar welded palladium contacts rated at 3 amps, 300 watts, max. AC non-inductive load. Order Series 80P for switching circuit only. Order H83P (2 per station) for lighting circuit on Series 37000. Supplied with pressure plate and screws. Shpg. wt. 1 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-Up
933-5684	81P	1-A	.71	.48	.44	.40
933-5685	82P	1-B	.71	.48	.44	.40
933-5687	83P	1-C	.93	.63	.58	.53
933-1424	H-83P	1-C	1.29	.87	.80	.73

SWITCH STACKS FOR SERIES 21000

Series 70P welded cross-bar palladium contacts rated 3 amp 300 watts, max. AC non-inductive load. Supplied with pressu plate and screws. Shpg. wt. 1 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-U
933-5625	71-P	1-A	.71	.48	.44	.40
933-5633	72-P	1-B	.71	.48	.44	.40
933-5645	73-P	1-C	.93	.63	.58	.52
933-5657	74-P	2-A	1.20	.81	.743	.67
933-5665	75-P	2-B	1.20	.81	.743	.67
933-5678	76-P	2-C	1.47	.99	.91	.83

SOLENOID RELEASE

For Series 21000, 35000, 37000. Provides remote electrical relea of depressed stations. For 115 VAC, 60 Hz. Series "J" for 210 Series. Series "NJ" for 35000 and 37000 Series. With mounti bracket and screws. Shpg. wt. 4 oz.

Stock No.	Mfr's Type	Function	EACH 1-9	10-24	25-49	50-U
933-1801	J-1	Interlock	8.45	5.70	5.23	4.7
933-1803	J-3	All-lock	8.90	6.00	5.50	5.0
933-2751	NJ-1	Interlock	8.90	6.00	5.50	5.0
933-2753	NJ-3	All-lock	8.90	6.00	5.50	5.0

SERIES 65000 AND 67000 FACTORY ASSEMBLED "DW" SERIES "MULTI-SWITCH"

Series 65000 non-illuminated, low-cost "Multi-Switch." Facto assembled with DPDT switch module per station. Double wi bifurcated silver-plated brass contacts are rated 3 Amperes AC, Amperes DC; 125 Volts non-inductive load. Size, 1¹⁄₁₆" depth hind panel. ¾" length plus ⅝" for each station; 2³⁄₃₂" high.

Series 67000 illuminated version of above. Features front-of-pa lamp replacement. Accepts Ind. #327 and #328 lamps. Av. sh wt. 4 oz.

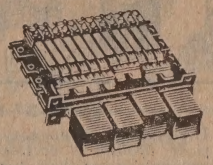
Stock No.	Mfr's Type	Function	Stations	EACH 1-9	10-24	25-49	50-
933-9251	65021K-206	Interlock	2	2.49	1.68	1.54	1.4
933-9252	65022-206	Non-lock	2	2.36	1.59	1.46	1.3
933-9253	65023-206	All-lock	2	2.49	1.68	1.54	1.4
933-9260	65041K-206	Interlock	4	4.45	3.00	2.75	2.5
933-9261	65042-206	Non-lock	4	4.31	2.91	2.67	2.4
933-9263	65043-206	All-lock	4	4.45	3.00	2.75	2.5
933-9271	65061K-206	Interlock	6	6.40	4.32	3.96	3.6
933-9272	65062-206	Non-lock	6	6.22	4.20	3.85	3.5
933-9273	65063-206	All-lock	6	6.43	4.32	3.96	3.6
933-9281	65081K-206	Interlock	8	8.36	5.64	5.17	4.7
933-9282	65082-206	Non-lock	8	8.20	5.52	5.06	4.6
933-9283	65083-206	All-lock	8	8.36	5.64	5.17	4.7
933-9291	65101K-206	Interlock	10	10.26	6.93	6.35	5.7
933-9292	65102-206	Non-lock	10	10.04	6.78	6.22	5.6
933-9293	65103-206	All-lock	10	10.26	6.93	6.35	5.7
933-9295	65121K-206	Interlock	12	12.23	8.25	7.56	6.8
933-9296	65122-206	Non-lock	12	12.00	8.10	7.43	6.7
933-9298	65123-206	All-lock	12	12.23	8.25	7.56	6.8
933-9321	67021K-506	Interlock	2	3.29	2.22	2.04	1.8
933-9322	67022-506	Non-lock	2	3.04	2.04	1.87	1.7
933-9323	67023-506	All-lock	2	3.29	2.22	2.04	1.8
933-9324	67041K-506	Interlock	4	5.95	4.02	3.69	3.3
933-9332	67042-506	Non-lock	4	5.43	3.66	3.36	3.0
933-9333	67043-506	All-lock	4	5.95	4.02	3.69	3.3
933-9341	67061K-506	Interlock	6	8.63	5.82	5.34	4.8
933-9342	67062-506	Non-lock	6	7.83	5.28	4.84	4.4
933-9343	67063-506	All-lock	6	8.63	5.82	5.34	4.8
933-9351	67081K-506	Interlock	8	11.29	7.62	6.99	6.3
933-9352	67082-506	Non-lock	8	10.23	6.90	6.33	5.7
933-9353	67083-506	All-lock	8	11.29	7.62	6.99	6.3
933-9371	67101K-506	Interlock	10	13.95	9.42	8.64	7.8
933-9372	67102-506	Non-lock	10	12.63	8.52	7.81	7.1
933-9373	67103-506	All-lock	10	13.95	9.42	8.64	7.8
933-9381	67121K-506	Interlock	12	16.62	11.22	10.29	9.3
933-9382	67122-506	Non-lock	12	15.03	10.14	9.30	8.4
933-9383	67123-506	All-lock	12	16.62	11.22	10.29	9.3

Pushbutton Multi-Switches

SWITCHCRAFT® INC.

SERIES 35000 NON-ILLUMINATED MULTI-SWITCH WITH DPDT CIRCUITRY

- Low Silhouette Design
- All Functions Available



ality-engineered non-illuminated "ulti-Switch" features extremely npact, low silhouette design for unting into even the most inaces-le areas. All switching functions ilable. Interlock, non-lock, all-lock l push-to-lock-push-to-release. In-lock function features built-in lock-out mechanism preventing eration of more than one button simultaneously. Each station ers DPDT circuitry for a wide variety of military, industrial and sumer applications with a minimum of installation requirements. nger is mounted on 5/8" centers. All switching functions listed ow are supplied with 2-C stack switch for each station. Positive-ion switching assures long-life and reliable service. Complete t measures only 3/4" high and 2 5/16" deep behind panel. Order ctions below.

INTERLOCK FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
3-7821	35021K-206	2	2	9.20	7.62	6.99	6.35
3-7841	35041K-206	4	4	14.73	12.24	11.22	10.20
3-7861	35061K-206	6	6	20.65	17.16	15.73	14.30
3-7881	35081K-206	8	8	26.58	22.08	20.24	18.40
3-7890	35101K-206	10	10	32.50	27.00	24.75	22.50
3-7894	35121K-206	12	12	38.43	31.92	29.26	26.60

NON-LOCK FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
3-7922	35022-206	2	2	9.20	7.62	6.99	6.35
3-7924	35024-206	4	4	14.73	12.24	11.22	10.20
3-7962	35062-206	6	6	20.65	17.16	15.73	14.30
3-7982	35082-206	8	8	26.58	22.08	20.24	18.40
3-8002	35102-206	10	10	32.50	27.00	24.75	22.50
3-8022	35122-206	12	12	38.43	31.92	29.26	26.60

ALL-LOCK FUNCTION

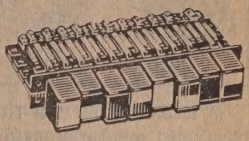
Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
3-7923	35023-206	2	2	9.20	7.62	6.99	6.35
3-7943	35043-206	4	4	14.73	12.24	11.22	10.20
3-7963	35063-206	6	6	20.65	17.16	15.73	14.30
3-7983	35083-206	8	8	26.58	22.08	20.24	18.40
3-8003	35103-206	10	10	32.50	27.00	24.75	22.50
3-8023	35123-206	12	12	38.43	31.92	29.26	26.60

PUSH-PUSH FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
3-7927	35027-206	2	2	9.20	7.62	6.99	6.35
3-7947	35047-206	4	4	14.73	12.24	11.22	10.20
3-7967	35067-206	6	6	20.65	17.16	15.73	14.30
3-7987	35087-206	8	8	26.58	22.08	20.24	18.40
3-8007	35107-206	10	10	32.50	27.00	24.75	22.50
3-8027	35127-206	12	12	38.43	31.92	29.26	26.60

SERIES 37000 ILLUMINATED MULTI-SIWTCH WITH DPDT CIRCUITRY

- Low, Silhouette Design
- 3 Lighting Arrangements



Multi-Switches similar to Series 35000 but have added feature of illuminated buttons for instantaneous identification of operation. Each pushbutton station serves as a color and legend coded panel indicator light. Front panel lamp replacement provides fast, efficient servicing with a minimum of effort. Switching mechanism may be wired for any of three separate lighting arrangements depending upon specific requirements: "L" type (button lights in "IN" position); "M" type (button lights in "OUT" position); "N" type (button lights in both "IN" and "OUT" positions simultaneously. Switches listed below are supplied with two "C" stack switches for each station. Switch frames are available less stack switches on special order. 3/4" high, 2 5/16" depth behind panel. Plungers mounted on 5/8" centers. All functions available. Order below.

INTERLOCK FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-8235	37021K-1206	2	2	14.52	12.06	11.06	10.05
933-8241	37041K-1206	4	4	25.80	21.42	19.64	17.85
933-8261	37061K-1206	6	6	37.06	30.78	28.22	25.65
933-8281	37081K-1206	8	8	48.68	40.44	37.07	33.70
933-8290	37101K-1206	10	10	59.95	49.80	45.65	41.50
933-8294	37121K-1206	12	12	71.20	59.16	54.23	49.30

NON-LOCK FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-8322	37022-1206	2	2	14.52	12.06	11.06	10.05
933-8342	37042-1206	4	4	25.80	21.42	19.64	17.85
933-8362	37062-1206	6	6	37.06	30.78	28.22	25.65
933-8382	37082-1206	8	8	48.68	40.44	37.07	33.70
933-8402	37102-1206	10	10	59.95	49.80	45.65	41.50
933-8422	37122-1206	12	12	71.20	59.16	54.23	49.30

ALL-LOCK FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-8323	37023-1206	2	2	14.52	12.06	11.06	10.05
933-8343	37043-1206	4	4	25.80	21.42	19.64	17.85
933-8363	37063-1206	6	6	37.06	30.78	28.22	25.65
933-8383	37083-1206	8	8	48.68	40.44	37.07	33.70
933-8403	37103-1206	10	10	59.95	49.80	45.65	41.50
933-8423	37123-1206	12	12	71.20	59.16	54.23	49.30

PUSH-PUSH FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-8327	37027-1206	2	2	14.52	12.06	11.06	10.05
933-8347	37047-1206	4	4	25.80	21.42	19.64	17.85
933-8367	37067-1206	6	6	37.06	30.78	28.22	25.65
933-8387	37087-1206	8	8	48.68	40.44	37.07	33.70
933-8407	37107-1206	10	10	59.95	49.80	45.65	41.50
933-8427	37127-1206	12	12	71.20	59.16	54.23	49.30

SERIES 21000 ILLUMINATED MULTI-SWITCH WITH DPDT CIRCUITRY

- Square, Illuminated Buttons
- Up-Front Lamp Replacement
- Knurled Collar Diffuses Light
- Buttons Light in "In" Position

ality-engineered illuminated "Multi-Switch" features positive-ion switching for longevity as well as reliable service. Modern iare button design boasts "human-engineered styling for y and sure operation. Provides both front and side illumination extreme visibility. Knurled retaining collar assures quick l effortless up-front lamp replacement. Each station features ible-pole-double-throw circuitry for a wide latitude of military, ustrial and consumer switching applications. Special light-fusing jeweled apparatus provides even distribution of illumin-on in quiet, pleasing tones. Push-button selectors light in "In" ition for instantaneous and foolproof indication of operating functions. "M" and "N" type lighting available on special order. Function and circuit changes in switching apparatus can be facilitated easily in the field. Interlock function quickly converts to non-lock as well as all-lock functions without extensive modification or adjustment. Complete switching device boasts extremely conservative dimensions to aid in mounting in relatively inaccessable areas. Entire unit mounts on panels up to 3/8" thick with 3 5/16" depth behind panel. Buttons mounted on 1/2" centers. With 2 "C" stack switches per station.

INTERLOCK FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
3-7410	21200K-506	2	8	16.94	14.07	12.90	11.73
3-7435	21400K-506	4	11	28.13	23.37	21.42	19.48
3-7454	21600K-506	6	15	39.29	32.64	29.92	27.20
3-7474	21800K-506	8	17	50.52	41.97	38.47	34.98
3-9625	211000K-506	10	21	62.26	51.72	47.41	43.10
3-9645	211200K-506	12	24	73.63	61.17	56.07	50.98

PUSH-TO-LOCK-PUSH-TO-RELEASE FUNCTION

Stock No.	Mfr's Type	Stations	Wt. Oz.	EACH 1-9	10-24	25-49	50-Up
933-7424	21207-506	2	8	16.04	13.32	12.24	11.10
933-7444	21407-506	4	11	28.13	23.37	21.42	19.48
933-7464	21607-506	6	15	40.16	33.36	30.58	27.80
933-7484	21807-506	8	17	52.29	43.44	39.82	36.20
933-9633	211007-506	10	21	64.74	53.79	49.31	44.83
933-9655	211207-506	12	24	76.84	63.84	58.52	53.20

Make Allied Electronics your one complete source for all your electronics needs. You get fast service, prompt handling and factory OEM prices. Simply contact the Allied Electronics facility nearest you.

A ILLUMINATED "NF-LITE" PUSHBUTTON SWITCHES

Illuminated pushbutton switches indicate switching and circuit functions at a glance. Lighting circuit is independent of switching circuit. Fine-silver contacts rated 3 amps, 300 watts maximum, AC noninductive. Come with four color chips (red, amber, green, yellow) for changing color of pushbutton. Require 11/16" minimum, 1 5/16" maximum behind panel; mount in 3/8" hole in panels up to 1/4" thick. Less 6-volt or 28-volt lamp, lower right. 3 oz.

Stock No.	Mfr's Type	Action	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-6606	4106	DPDT	2-C	2.20	1.65	1.51	1.38	1.10
933-6609	4109	3PDT	3-C	2.84	2.13	1.95	1.78	1.42

B "LITTEL" PUSHBUTTON SWITCHES

Designed for limited-space applications. Have one-piece button and shaft. Integral spring contacts are of nickel-silver, insulated from mounting bushing with high-grade phenolic. Button color: *black, †red. Mount in single hole with 3/8" threaded brass bushing. Recommended for low-level circuits only. Shpg. wt., 3 oz.

933-5701	†101	SPST	1-A	.84	.63	.58	.53	.42
933-5702	†102	SPST	1-B	.84	.63	.58	.53	.42
933-5703	†103	SPDT	1-C	1.00	.75	.69	.63	.50
933-5751	*201	SPST	1-A	.84	.63	.58	.53	.42
933-5752	*202	SPST	1-B	.84	.63	.58	.53	.42
933-5753	*203	SPDT	1-C	1.00	.75	.69	.63	.50

B ILLUMINATED "LITTEL-LITE" PUSHBUTTON SWITCHES

Same as above, but illuminated pushbutton. Clear plastic button and shaft illuminated by a single 6 or 28 V lamp (less lamp, lower right). Rated at 3 amps, at 300 W maximum noninductive load. With four color chips (red, amber, green, yellow). Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-5761	211S	SPST	1-A	1.80	1.35	1.24	1.13	.90
933-5763	213S	SPDT	1-C	2.12	1.59	1.46	1.33	1.06

C D "BUTTON SWITCHES"

Small momentary-action pushbutton switches. Enclosed in metal housing; black or red plastic button. Types 903 and 913 (Figure C) are 7/8" long; for behind-panel mounting in panels up to 19/64" thick; fit 15/32" hole. Types 923 and 933 (Figure D) are 1 1/4" long; mount in front of panels up to 5/32" thick; fit 1/4" hole. All are rated 250 mA, 30 watts maximum, AC noninductive. Contact Form, 1-C. Wt., 3 oz.

Red Button Stock No.	Red Button Mfr's Type	Black Button Stock No.	Black Button Mfr's Type	Action	EACH 1-9	10-24	25-49	50-99	100-Up
933-6203	903	933-6213	913	SPDT	1.24	.93	.85	.78	.62
933-6223	923	933-6233	933	SPDT	1.32	.99	.91	.83	.66

E CORD PUSHBUTTON SWITCH

Precision switch for remote control of recorders, lights, etc. Hole at one end for 2-conductor line; other end has nonlocking, spring-return pushbutton switch. Rated 250 mA, noninductive load. 30 watts max. Nickel-plated sleeve 11/16" dia. 2 3/16" long. 4 oz.

Stock No.	Mfr's Type	Color	Contacts	EACH 1-9	10-24	25-49	50-99	100-Up
933-0823	E903	Red	1-C	2.00	1.50	1.38	1.25	1.00
933-0816	E923	Black	1-C	2.00	1.50	1.38	1.25	1.00

F PUSHBUTTON "TINY SWITCHES"

Subminiature pushbutton switches for limited space applications. For use in microphones, radio and automotive test instruments. Nickel-plated brass frame and bushing. With mounting hardware. 1/4" threaded shank; 13/64" long. For use with low-level currents only. Require 5/16" behind panels up to 3/32" thick. Wt., 3 oz.

Red Button Stock No.	Red Button Mfr's Type	Black Button Stock No.	Black Button Mfr's Type	Action	Contact Form	EACH 1-9	10-24	25-49	50-99	100-Up
933-6251	951	933-6261	961	SPST	1-A	.84	.63	.58	.53	.42
933-6252	952	933-6262	962	SPST	1-B	.84	.63	.58	.53	.42
933-6253	953	933-6263	963	SPDT	1-C	1.00	.75	.69	.63	.50

G "HI-D" PUSHBUTTON SWITCHES

High-density, momentary-action switches for limited-space appl tions. Switch is enclosed in well-insulated housing. One-p pushbutton and shaft. Integral silver-plated springs rated at 1 a 100 watts maximum, AC noninductive load. Button color: * †black. Mount in 3/8" hole in panels up to 5/32" thick on 5/8" cen Require 13/32" behind panel. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	Contacts	EACH 1-9	10-24	25-49	50-99
933-1451	*H-101	SPST	1-A	.96	.72	.66	.60
933-1452	*H-102	SPST	1-B	.96	.72	.66	.60
933-1453	*H-103	SPDT	1-C	1.08	.81	.74	.68
933-1481	†H-201	SPST	1-A	.96	.72	.66	.60
933-1482	†H-202	SPST	1-B	.96	.72	.66	.60
933-1483	†H-203	SPDT	1-C	1.08	.81	.74	.68

H "FF" PUSHBUTTON SWITCHES

Rugged flat-frame switches provide a simple, direct-ac momentary pushbutton contact. Fine-silver contacts rated 3 a 300 watts maximum, AC noninductive load. Insulated springs form-free at flex point to assure long life. One-piece black bu and shaft. Threaded mounting shank is 3/8" in diameter and long. Comes with locknut and washer. Shpg. wt., 3 oz.

933-6301	1001	SPST n.o.	1-A	1.12	.84	.77	.70
933-6303	1003	SPDT	1-C	1.24	.93	.85	.78
933-6304	1004	DPST n.o.	2-A	1.36	1.02	.94	.85
933-6306	1006	DPDT	2-C	1.56	1.17	1.07	.98
933-6309	1009	3PDT	3-C	2.24	1.68	1.54	1.40

J MINIATURE "TF" PUSHBUTTON SWITCHES

Tiny-frame momentary-action pushbutton switches occupy m mum space. Each has cadmium-plated steel frame, phenolic sulation, nickel-silver springs, integral contacts. Recommended low-level circuits where contact resistance is unimportant. Mou 1/4" hole and require 1 19/32" behind panel which can be up to thick. All are 3/8" wide. Stack height, 19/32" min. 3 oz.

Stock No.	Mfr's Type	Action	Contacts	EACH 1-9	10-24	25-49	50-99
933-6276	976	DPDT	2-C	1.36	1.02	.94	.85

K "UNISWITCH" ILLUMINATED/NON-ILLUMINATED SWITC

Low-cost momentary action pushbutton switches for computers, processing equipment, test and measuring devices, telephones telephone apparatus. *Illuminated (solder lug lighter terminals †non-illuminated. Only 11/16" square—mount in single panel cu from panel front. Require 1 3/64 to 1 15/16" behind panel. "Adju Clip" for instant "snap-lock" installation—may be set in any tion for panels 3/64-1 7/64" thick. Bronze, silver-plated termi Phosphor bronze, silver-plated contactor. 250 mA., 30 W m AC noninductive. SPST N.O. White. 2 oz. Lamp, 6V Bi-Pin,

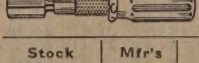
Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-99
933-2301	*LUS-05-1	1A	1.52	1.14	1.05	.95
933-4150	†US-05-1	1A	1.20	.90	.83	.75
933-3235	P-2290	Lamp for*	1.28	.96	.88	.80

LAMPS FOR ILLUMINATED SWITCHES

CHICAGO MINIATURE. For all Switchcraft illuminated switches cluding: "Little-Lite," "NF-Lite," "Lever-Lite." All take 28 V lamp. 2 oz.

Stock No.	Type	Volts	PKG. OF
749-3376	1768	6	6.50
749-3058	335	28	11.00

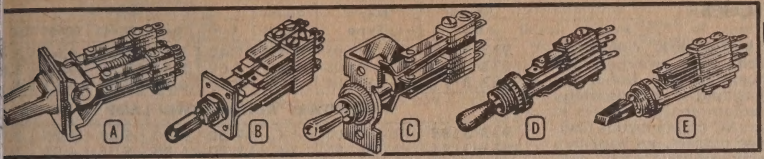
SWITCH WRENCHES

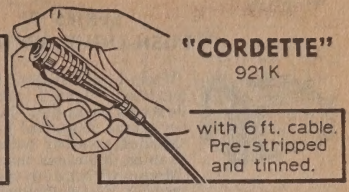


Fit knurled or milled-edge locknuts toggle, lever and button switches jacks. Adjustable sleeve. Wt., 10 oz.

Stock No.	Mfr's Type	Nut Size	EACH 1-9	10-24	25-49	50-99	100
933-0107	A-1070	15/32"-32	6.00	4.50	4.13	3.75	3.
933-0171	A-1071	1/4"-32	6.00	4.50	4.13	3.75	3.

SWITCHCRAFT® INC. Lever and Remote Switches





A MULTICOLOR-ILLUMINATED "LEVER-LITE" SWITCHES

Switch indicates each position in different illuminated colors. Nickel-silver springs. Fine-silver contacts rated 3 amps, 300 watts maximum, AC noninductive. Supplied with 6-volt lamp (28-volt lamp available on facing page). Mount in panels up to 3/32" thick. All are 2-position types, except *3-position types which have same contact form for both sections on each side. Series 25000 includes six color chips (red, green, amber, yellow, blue, white) replaceable in the field. Behind-panel size, 1 7/32x3 9/64x2 1/4". Mount on 5/8" centers. Series 27000 has larger contoured lever and larger factory-installed color filters. On 2-position types, amber lights in "neutral" position, green lights in "down." On 3-position types, red lights in "up" position, amber in "neutral," green in "down." Behind-panel size, 1 7/32x3/4x2 3/16". Mount on 3/4" centers. †N.O., center position "off." Contact forms on facing page. Shpg. wt., 3 oz.

SERIES 25000

Mfr's Type	Stock No. Locking Type	Stock No. Nonlocking Type	Action	Contact Form	EACH 1-9	10-24	25-49	50-99	100-Up
25201	933-7702	.....	SPST	1-A	3.88	2.91	2.67	2.43	1.94
25206	933-7710	933-7711	DPDT	2-C	4.84	3.63	3.33	3.03	2.42
25209	933-7716	933-7717	3PDT	3-C	5.56	4.17	3.82	3.48	2.78
25304	933-7730	.....	SPST	1-A	4.40	3.30	3.03	2.75	2.20
25306	933-7734	933-7735	SPDT	1-C	4.84	3.63	3.33	3.03	2.42
25308	933-7738	933-7739	DPST	2-A	5.36	4.02	3.69	3.35	2.68
25312	933-7746	933-7747	DPDT	2-C	5.80	4.35	3.99	3.63	2.90

SERIES 27000

27206	933-7750	933-7751	DPDT	2-C	6.32	4.74	4.35	3.95	3.16
27212	933-7760	933-7761	4PDT	4-C	7.76	5.82	5.34	4.85	3.88
27206	933-7770	.....	SPDT	1-C	6.32	4.74	4.35	3.95	3.16
27307	933-7772	933-7773	SPDT	1-C	6.44	4.83	4.43	4.03	3.22
27312	933-7784	933-7785	DPDT	2-C	7.76	5.82	5.34	4.85	3.88
32	933-5932	Escutcheon Plate			.28	.21	.19	.18	.14

B "TELEVER" SWITCHES

Rugged telephone-type switches with "T-Beam" steel frame construction. Nylon rollers actuate nickel-silver springs, provide smooth switching action. Extra-long springs punched from special alloy assure long, dependable life. Welded cross-bar palladium contacts rated 3 amps, 120 V AC noninductive, up to 3 amps, 300 watts maximum. All have tinned solder-lug terminals. Series 6000 is tapped for 3-48 mounting screws; standard telephone mounting centers, 1 7/32x1 3/16". Series 16000 has 1 5/32"-32 threaded mounting bushing. All have insulated black knob. 3-position types have same contact form for both sections on each side. Shpg. wt., 3 oz.

SERIES 6000 TWO-POSITION TYPES

6006	933-6706	.....	DPDT	2-C	4.44	3.33	3.05	2.78	2.22
60012	933-9211	933-9212	4PDT	4-C	5.92	4.44	4.07	3.70	2.96

SERIES 6000 THREE-POSITION TYPES

60312	933-9225	933-0226	DPDT	2-C	5.92	4.44	4.07	3.70	2.96
60324	933-9237	933-9236	4PDT	4-C	9.04	6.78	6.22	5.65	4.52
330	933-5936	Escutcheon Plate			.56	.42	.39	.35	.28

SERIES 16000 TWO-POSITION TYPES

16006	933-0956	933-0957	DPDT	2-C	4.64	3.48	3.19	2.90	2.32
16012	933-9512	933-9513	4PDT	4-C	6.32	4.74	4.35	3.95	3.16
16024	933-9524	933-9525	SPDT	8-C	9.24	6.93	6.35	5.78	4.62

SERIES 16000 THREE-POSITION TYPES

16038	933-7320	933-7321	SPDT	2-A	5.20	3.90	3.58	3.25	2.60
60312	933-9532	933-9532	DPDT	2-C	6.32	4.74	4.35	3.95	3.16
60324	933-9542	933-9543	4PDT	4-C	9.24	6.93	6.35	5.78	4.62

C "FEATHER-LEVER" SWITCHES

Miniature "Tini-Stack" switch stack of special nickel-silver springs with fine-silver contacts. 2 amps, 200 watts max., AC noninductive. Insulated black knob. Mount on 7/16" centers in 5/16" hole, or in panels up to 1/8" thick. *3-position types have same contact form for both sections on each side. †N.O., center position "off." 3 oz.

29203	933-7830	.....	SPDT	1-C	2.12	1.59	1.46	1.33	1.06
29304	.....	933-7833	SPST	1-A	2.40	1.80	1.65	1.50	1.20
29306	933-7836	.....	SPDT	1-C	2.72	2.04	1.87	1.70	1.36
29307	933-7838	933-7839	SPDT	1-C	2.76	2.07	1.90	1.73	1.38

D "LEV-R" SWITCHES

Require half the space normally needed for lever switches. Frame bushing and shaft of nickel-plated brass. Fine-silver contacts rated 3 amps, 300 watts maximum, AC noninductive. Nonlocking types have spring return. All are 5/8" wide; require 21 9/64" behind panel, and 1 5/32" mounting hole. With locknut and screw-on black knob. 3-position switches have same contact form for both sections on each side. †N.O., center position "off." Types 3033 and 13033 are 3-position switches with one form C only. Series 3000 has 13/64" mounting bushing; mounts in panels up to 3/32" thick. Series 13000 has 3/8" mtg. bushing; for panels up to 1/4" thick. See forms, facing page. 3 oz.

SERIES 3000 TWO-POSITION TYPES

Mfr's Type	Stock No. Locking Type	Stock No. Nonlocking Type	Action	Contact Form	EACH 1-9	10-24	25-49	50-99	100-Up
3001	933-6501	933-6502	SPST	1-A	1.92	1.44	1.32	1.20	.96
3003	933-6505	933-6506	SPDT	1-C	2.28	1.71	1.57	1.43	1.14
3004	933-6507	933-6508	DPST	2-A	2.48	1.86	1.71	1.55	1.24
3006	933-6511	933-6512	DPDT	2-C	2.76	2.07	1.00	1.73	1.38
3009	933-6509	933-6519	3PDT	3-C	3.56	2.67	2.45	2.23	1.78

SERIES 3000 THREE-POSITION TYPES

3033	933-6533	933-6534	SPDT	1-C†	2.48	1.86	1.71	1.55	1.24
3034	933-6535	933-6536	SPST	1-A	2.56	1.92	1.76	1.60	1.28
3036	933-6539	933-6540	SPDT	1-C	2.88	2.16	1.98	1.80	1.44
3037	933-6541	933-6542	SPDT	1-C†	2.96	2.22	2.04	1.85	1.48

SERIES 13000 TWO-POSITION TYPES

13001	933-7100	933-7102	SPST	1-A	2.08	1.56	1.43	1.30	1.04
13003	933-7105	933-7106	SPDT	1-C	2.40	1.80	1.65	1.50	1.20
13006	933-7111	933-7112	DPDT	2-C	2.88	2.16	1.98	1.80	1.44
13009	933-7117	933-7118	3PDT	3-C	3.84	2.88	2.64	2.40	1.92

SERIES 13000 THREE-POSITION TYPES

13033	933-7133	933-7134	SPDT	1-C†	2.64	1.98	1.82	1.65	1.32
13036	933-7139	933-7140	SPDT	1-C	3.16	2.37	2.17	1.98	1.58
13037	933-7141	933-7142	SPDT	1-C†	3.16	2.37	2.17	1.98	1.58

E "LEV-R" SWITCHES WITH MOLDED-ON KNOBS

As above, but permanently molded-on black knob. All 2-position except *3-position types which have same contact form for both sections on each side. Nylon roller for smoother action. With locknut and nonturn ring to keep switch from turning. Mount on 5/8" centers in panels to 3/32" thick. Require 1 5/32" hole (1/8" for nonturn ring) and 2 17/64" behind panel. †Normally open, center position "off." Shpg. wt., 3 oz.

Mfr's Type	Stock No. Locking Type	Stock No. Nonlocking Type	Action	Contact Form	EACH 1-9	10-24	25-49	50-99	100-Up
28203	933-7790	933-7791	SPDT	1-C	3.04	2.28	2.09	1.90	1.52
28204	933-7792	933-7793	DPST	2-A	2.96	2.22	2.04	1.85	1.48
28206	933-7794	933-7795	DPDT	2-C	3.52	2.64	2.42	2.20	1.76
*28304	933-7801	933-7802	SPST	1-A	3.32	2.49	2.28	2.08	1.66
*28306	933-7805	933-7806	SPDT	1-C	3.64	2.73	2.50	2.28	1.82
*28307	933-7807	933-7808	SPDT	1-C†	3.72	2.79	2.56	2.33	1.86

"CORDETTE" REMOTE CONTROL SWITCHES

TYPE 921-K. Momentary-action pendant switch. Provides remote switching of industrial and commercial instrumentation, control devices, nurse-call systems, X-ray equipment in hospitals, projectors, cameras. Fits comfortably in the hand, yet is rugged enough for critical applications. High-strength molded plastic one-piece body is enclosed to protect switching contacts. Molded plastic construction guards against contamination. Has SPST switch circuit with integral brass, hard-gold-plated 500-mA contacts, 50 watts max., AC noninductive load. 6-ft. gray, 2-conductor unshielded cable, stripped and tinned. 1 3/16" wide, 2 15/16" long. Shpg. wt., 4 oz. Type 921. Has Switchcraft Phono-Jax output molded direct to body. Standard jack accepts most phono plugs. Wt., 1 oz. Both types for low-voltage circuits.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
933-6221	921-K	4.20	3.15	2.89	2.63	2.10
933-6220	921	3.60	2.70	2.48	2.25	1.80

Specify Stock No., Mfr's Type and Locking or Nonlocking Operation When Ordering

Switchcraft and Continental-Wirt Switches

SERIES PL PUSH-LIGHT SWITCHES

"Push-Lite" switch is the first completely enclosed, lighted pushbutton switch which features long-life, highly-reliable leaf-spring switching. Standard pushbutton color is white. Molded crossbar palladium contacts rated at 2 amps, 200 watts, max; AC non-inductive load. Mount with clamp-type bracket, no hardware needed. Flange mounting requires 1″x.875″ panel cutout. Barrier mounting requires 1 3/16″x.875″ panel cutout. Depth behind panel only 1¾.″ "Push-Lite" switch accepts std. T-1¾ flange base lamps (not included) in either 6V, 28V or neon 115V. Use one lamp for single lamp type or two lamps of twin-lamp type when split-face lighting. Light dividers are used in lighting between twin-lamps.

MOUNTING BARRIERS (BLACK)

Stock No.	Mfr's Type	Description	EACH				
			1-9	10-24	25-49	50-99	100-Up
933-3155	PL-102	End Barrier	.12	.09	.825	.075	.06
933-3160	PL-202	Center Barrier	.12	.09	.825	.075	.06

MOMENTARY ACTION—SINGLE LAMP

Stock No.	Mfr's Type	Contacts	EACH				
			1-9	10-24	25-49	50-99	100-
933-3165	PL-1032-05	1-C	7.40	5.55	5.09	4.63	3.7
933-3173	PL-1062-05	2-C	7.60	5.70	5.23	4.75	3.8
933-3179	PL-1122-05	4-C	8.20	6.15	5.64	5.13	4.1

MOMENTARY ACTION—TWIN LAMP

933-3185	PL-2032-05	1-C	7.60	5.70	5.23	4.75	3.8
933-3191	PL-2062-05	2-C	7.80	5.85	5.36	4.88	3.9
933-3197	PL-2122-05	4-C	8.40	6.30	5.78	5.25	4.2

PUSH-LOCK/PUSH-RELEASE—SINGLE LAMP

933-3170	PL-1037-05	1-C	7.80	5.85	5.36	4.88	3.9
933-3175	PL-1067-05	2-C	8.00	6.00	5.50	5.00	4.0
933-3182	PL-1127-05	4-C	8.60	6.45	5.91	5.38	4.3

PUSH-LOCK/PUSH-RELEASE—TWIN LAMP

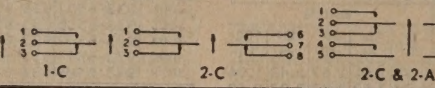
933-3188	PL-2037-05	1-C	8.60	6.45	5.91	5.38	4.3
933-3194	PL-2067-05	2-C	8.80	6.60	6.05	5.50	4.4
933-3205	PL-2127-05	4-C	9.40	7.05	6.46	5.88	4.7

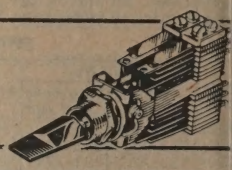
LIGHT DIVIDER

933-3162	PL-551		.08	.06	.055	.05	.04

SWITCHCRAFT SWITCHES

These Functional Diagrams Refer To Both Switches Below

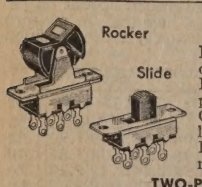




SERIES BX BOX SWITCHES

Tiny flush-mounted, momentary-action pushbutton switches provide up to 4 poles of switching. Only 1 1/16″ square—mount in .615″ square hole from front of panel. Take little panel space, yet have broad switching capability. Rated to 250 mA, 30 watts maximum, AC non-inductive load. Protected from dirt and damage by molded-plastic case. Easy snap-in mounting saves assembly time and allows adjacent-mounting on matrix configurations. Special "Adjusto-Clips" mount switch in 3/64 to 17/64″ thick panels, and lock it in reliably to resist vibration and shock conditions. Attractive low-silhouette bezel frames pushbutton and serves as escutcheon. Integral silver-plated brass contacts. Solder lugs are spaced and identified for quick, easy wiring. Contact assemblies listed in table below are diagramed in illustration above. Specify White, Black, Red, or Green Pushbutton. Av. shpg. wt., ½ oz.

Stock No.	Mfr's Type	Contact Assembly	EACH				
			1-9	10-24	25-49	50-99	100-Up
933C0271	BX-1	1-A	2.76	2.07	1.90	1.73	1.38
933C0273	BX-3	1-C	2.88	2.16	1.98	1.80	1.44
933C0276	BX-6	2-C	3.16	2.37	2.17	1.98	1.58
933C0280	BX-10	2-C & 2-A	3.60	2.70	2.48	2.25	1.80



PHASE II SLIDE SWITCHES

Exclusive double-wipe action prevents oxidation, ensures good electrical contact. Positive-action detent tab holds slide at position. Terminals: silver-plated brass. Contacts: silver-plated brass alloy. 1 3/8″ long, 17/32″ wide, 1½″ mounting centers. Rated 0.5 amp DC; 3 amps AC, 125 volts noninductive load. Av. shpg. wt., 4 oz.

TWO-POSITION SLIDE SWITCHES

Stock No.	Mfr's Type	Action	EACH				
			1-9	10-24	25-49	50-99	100-Up
933-9101	46201MR	SPST N.O. Locking	.32	.24	.22	.20	.16
933-9103	46202LR	SPST N.C. Locking	.28	.21	.19	.18	.14
933-9104	46202MR	SPST N.C. Momentary	.32	.24	.22	.20	.16
933-9105	46203LR	SPDT Locking	.32	.24	.22	.20	.16
933-9106	46203MR	SPDT Momentary	.36	.27	.25	.23	.18
933-9107	46204LR	DPST Locking	.36	.27	.25	.23	.18
933-9111	46206LR	DPDT Locking	.40	.30	.28	.25	.20
933-9112	46206MR	DPDT Momentary	.48	.36	.33	.30	.24
933-9120	46256LFR	DPDT Locking	.56	.42	.39	.35	.28

THREE-POSITION SLIDE SWITCHES (Center Locking)

933-9130	46311LDR	SPTT Lock/Lock	.52	.39	.36	.33	.26
933-9131	46311TDR	SPTT Lock/Momentary	.56	.42	.39	.35	.28
933-9134	46313LDR	DPTT Lock/Lock	.56	.42	.39	.35	.28
933-9196	46313TDR	DPTT Lock/Momentary	.60	.45	.41	.38	.30

TWO-POSITION ROCKER SWITCHES

933-9180	51202LR	SPST N.C. Locking	.72	.54	.50	.45	.36
933-9182	51203LR	SPDT Locking	.76	.57	.52	.48	.38
933-9187	51206LR	DPDT Locking	.84	.63	.58	.53	.42

SERIES 41000 "LT" MINIATURE LEVER SWITCHES

Telephone-type. Detent guide prevents accidental actuator byp of switch position. Contacts rated 3A, 200 W max, AC non-i load. Long life nickel-silver springs. Damping block minimi leaf-spring travel. Ground term. on frame. Mount in 15/32″ hole, s hardware; 23/32″ mtg. centers. 2 1/8″ behind panel. 5/8x3/4x3 3/4″. *P 1 and 2, identical contact assemblies. Shpg. wt. 1 lb.

TWO-POSITION SWITCHES

Mfr's Type	Stock No.		Contact Assem.	EACH				
	Locking Type	Non-Locking Type		1-9	10-24	25-49	50-99	10 U
41203	933-8901	933-8902	1-C	3.56	2.67	2.45	2.23	1.7
41206	933-8907	933-8908	2-C	4.44	3.33	3.05	2.78	2.4
41208	933-8911	933-8912	4-A	4.88	3.66	3.36	3.05	2.4
41212	933-8920	933-8921	4-C	6.00	4.50	4.13	3.75	3.0

THREE-POSITION SWITCHES

41306	933-8940	933-8941	1-C*	4.44	3.33	3.05	2.78	2.4
41308	933-8944	933-8945	2-A*	4.88	3.66	3.36	3.05	2.4
41312	933-8952	933-8953	2-C*	6.00	4.50	4.13	3.75	3.0
41324	933-8970	933-8971	4-C*	8.84	6.63	6.08	5.53	4.4

CONTINENTAL-WIRT ECONOMY SLIDE SWITCHES

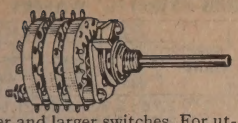
Low-cost AC-DC switches for many applicatio Cadmium-plated steel housings. Solder lug terr nals. Size, 35/64x1 13/32″. Types G124, G126, G12 1x1 3/32″. Recognized Under the Component P gram of Underwriter's Laboratories, Inc. A shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	Amps @ 125 V	EACH				
				1-9	10-99	100-249	250-499	50 99
759-5531	SPDT	SPDT	0.5	1.56	1.25	.78	.52	.2
759-5535	SPDT	SPDT	0.5	.63	.50	.32	.22	.1
759-5537	DPDT	DPDT	0.5	.94	.75	.42	.28	.1
759-5538	DP3T	DP3T	0.5	.94	.75	.53	.35	.2
759-5545	DP4T	DP4T	0.5	1.25	1.00	.68	.44	.3
759-5560	SPST	SPST	3.0	.63	.50	.20	.13	.0
759-5561	SPDT	SPDT	3.0	.63	.50	.20	.13	.0
759-5562	SPST	DPST	3.0	.63	.50	.24	.16	.1
759-5563	SPDT	DPDT	3.0	.63	.50	.24	.16	.1
759-5580	SP3T	DP3T	3.0	.63	.50	.33	.22	.1
759-5550	G338L	DP4T	3.0	1.25	1.00	.66	.44	.3
759-5555	GF361	3PDT	3.0	1.25	1.00	.51	.34	.2
759-5568	GF342	4PDT	3.0	1.25	1.00	.66	.44	.3
759-5570	GF623	SPST	6.0	.63	.50	.21	.13	.0
759-5571	GF624	SPDT	6.0	.63	.50	.21	.13	.0
759-5572	GF625	DPST	6.0	.63	.50	.29	.19	.1
759-5573	GF626	DPDT	6.0	.63	.50	.27	.18	.1
759-5585	GF1123	SPST	11	.63	.50	.32	.21	.1
759-5575	GG350	DPDT	3.0	.63	.50	.30	.20	.1
759-5582	GH360	4PTT	3.0	1.98	1.50	.78	.52	.3
759-5584	GH368	3PTT	3.0	1.25	1.00	.63	.42	.3

Depend on Allied Electronics for Off-the-Shelf Delivery in Industrial Quantiti

Centralab Switches and Assemblies

SERIES PS-100 SUBMINIATURE CERAMIC ROTARY SWITCHES



tra-small; igh less in 1 ounce, have same ectrical aracter- cs as heavier and larger switches. For ut- st dependability required in band switch-, transistor circuits, aircraft instruments, ded missiles, etc. 1" dia. Bushing, ¼" . by ¼" long. Shaft, ⅛" dia. by 1" long. ver-plated clips, contacts. Positive 30° lexing. Fixed stop. .550 mA @ 28 VDC 170 mA at 115 VAC. With knob, nut, kwasher. Av. shpg. wt., 4 oz.

Shorting		Non-Shorting		Total Poles	No. of Pos.	Poles per Sec.	No. of Sec.	EACH					
Stock No.	Type PS-	Stock No.	Type PS-					1-4	5-9	10-24	25-49	50-99	100-Up
747-1100	100	747-1101	101	1	11	1	1	5.04	4.20	3.78	3.60	3.36	3.02
747-1102	102	747-1103	103	2	11	1	2	6.30	5.25	4.72	4.50	4.20	3.77
747-1104	104	747-1105	105	2	5	2	1	5.04	4.20	3.78	3.60	3.36	3.02
.....	....	747-1107	107	3	11	1	3	7.56	6.30	5.67	5.41	5.04	4.52
747-1108	108	747-1109	109	3	3	3	1	5.04	4.20	3.78	3.60	3.36	3.02
747-1110	110	747-1111	111	4	5	2	2	6.30	5.25	4.72	4.50	4.20	3.77
.....	....	747-1113	113	4	2	4	1	5.04	4.20	3.78	3.60	3.36	3.02
.....	....	747-1115	115	6	5	2	3	7.56	6.30	5.67	5.41	5.04	4.52
747-1116	116	747-1117	117	6	3	3	2	6.30	5.25	4.72	4.50	4.20	3.77
.....	....	747-1119	119	8	2	4	2	7.56	6.30	5.67	5.41	5.04	4.52
.....	....	747-1121	121	9	3	3	3	7.56	6.30	5.67	5.41	5.04	4.52

SERIES PS-20 CERAMIC SECTIONS FOR ABOVE

r fixed-stop indexing and switching not supplied in PS-100 series ɔminiature switches above. Use with index and shaft assemblies 501 through P-510 at right to produce custom switches to meet ɔcial requirements. Av. shpg. wt., 2 oz.

Shorting		Non-Shorting		Total Poles	No. Pos.
Stock No.	Type	Stock No.	Type		
747-0160	PS-20	747-0161	PS-21	1	2-11
747-0162	PS-22	747-0163	PS-23	2	2-5
.....	.....	747-0165	PS-25	3	2-3

.....Each 2.20 5-9.....Each 1.83 10-24.....Each 1.65
-49.....Each 1.57 50-99.....Each 1.47 100-Up....Each 1.32

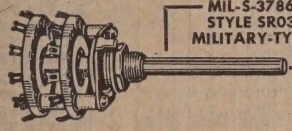
SERIES P-500 INDEX AND SHAFT ASSEMBLIES FOR ABOVE

Hardware for subminiature switches with up to 3 sections. Includes: P-106 pointer knob; six 3/32" spacers; two 1/16" spacers; two 1/8" spacers; two 3/16" spacers; two 1 1/8" tie bolts, nuts, lockwashers; 16 plastic spacer washers, 30° indexing; fixed stop. 2 oz.

Stock No.	Mfr's Type	No. of Pos.	Stock No.	Mfr's Type	No. of Pos.
747-0501	P-501	2	747-0505	P-505	6
747-0502	P-502	3	747-0507	P-507	8
747-0503	P-503	4	747-0509	P-509	10
747-0504	P-504	5	747-0510	P-510	11

1-4.....Each 1.95 5-9.....Each 1.63 10-24.....Each 1.47
25-49.....Each 1.40 50-99.....Each 1.30 100-Up ...Each 1.17

RIES PA-6000 MINIATURE CERAMIC ROTARY SWITCHES



½" dia. Pos. 30° in- xing. Adjustable stop, cept *fixed stop. 450 A @ 115 VAC; 8 ips @ 6 VDC; 5½ ips @ 12 VDC. Knob, kwasher. Av. shpg. ., 4 oz.

SHORTING TYPES

Stock No.	Type PA-	Total Poles	No. of Pos.	No. of Sec.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
47-6000	6000	1	2-11	1	3.58	2.98	2.68	2.56	2.39	2.14
47-6002	6002	2	2-5	1	3.58	2.98	2.68	2.56	2.39	2.14
47-6004	6004	2	2-11	2	5.46	4.55	4.10	3.90	3.64	3.27
47-6006	6006	3	2-3	1	3.58	2.98	2.68	2.56	2.39	2.14
47-6010	6010*	4	2	1	3.58	2.98	2.68	2.56	2.39	2.14
47-6012	6012	4	2-5	2	5.46	4.55	4.10	3.90	3.64	3.27

NON-SHORTING TYPES

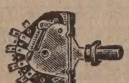
7-6001	6001	1	2-11	1	3.58	2.98	2.68	2.56	2.39	2.14
7-6003	6003	2	2-5	1	3.58	2.98	2.68	2.56	2.39	2.14
7-6005	6005	2	2-11	2	5.46	4.55	4.10	3.90	3.64	3.27
7-6007	6007	3	2-3	1	3.58	2.98	2.68	2.56	2.39	2.14
7-6013	6013	4	2-5	2	5.46	4.55	4.10	3.90	3.64	3.27
7-6019	6019	6	2-3	2	5.46	4.55	4.10	3.90	3.64	3.27
7-6025	6025*	8	2	2	5.46	4.55	4.10	3.90	3.64	3.27
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

JV-9000 HEAVY-DUTY ROTARY POWER SWITCHES

Silicone-treated ceramic switches for transmitters, industrial and commercial controls, and test gear. Rated 9 A at 110 VAC (resistive); 30 A at 5 VDC; .015 A at 2500 VAC rms. Breakdown, 3000 V rms. 20° positive index; adjustable stop. All metal parts except clips, contacts and index spring are cadmium plated. Coin silver contacts. Non-shorting, except †shorting. Bushing, ⅜"x32 thread, ⅜" long. Flattened shaft, ¼x2¼" from mtg. surface. ⅛" thick ceramic sections; 1" between sections. Wafer size, 2x2 13/16". Av. shpg. wt., 4 oz.

Stock No.	Type JV-	Sec.	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-Up
747-9001	9001	1	1	2-17	11.56	9.63	8.67	8.27	7.71
747-9033	9033	1	2	2-8	11.56	9.63	8.67	8.27	7.71
747-9005	9005	2	2	2-17	19.14	15.95	14.36	13.65	12.76
747-9003	9003	1	3	2-5	11.56	9.63	8.67	8.27	7.71
747-9009	9009	3	3	2-17	26.74	22.28	20.06	19.07	17.82
747-9035	9035	2	4	2-8	19.14	15.95	14.36	13.65	12.76
747-9013	9013	4	4	2-17	34.32	28.60	25.75	24.48	22.88
747-9007	9007	2	6	2-5	19.14	15.95	14.36	13.65	12.76
747-9037	9037	3	6	2-8	26.74	22.28	20.06	19.07	17.82
747-9021	9021	6	6	2-17	49.84	41.53	37.40	35.55	33.22
747-9039	9039	4	8	2-8	34.32	28.60	25.75	24.48	22.88
747-9015	9015	4	12	2-5	34.32	28.60	25.75	24.48	22.88
747-9019	9019	5	15	2-5	41.92	34.93	31.45	29.90	27.95
747-9000	9000	1†	1	2-17	11.56	9.63	8.67	8.27	7.71
747-9004	9004	2†	2	2-17	19.14	15.95	14.36	13.65	12.76
747-9002	9002	1†	3	2-5	11.56	9.63	8.67	8.27	7.71

LOW-COST LEVER-ACTION PHENOLIC SWITCHES



ependable switches for new and replacement use in test equipment, in- rcoms, PA equipment, speaker selectors, and other applications. ature nylon rotor and silver-plated brass clips and contacts. All have ° indexing. Voltage breakdown of 1000 VAC rms. Contacts rated 1.5 ips at 28 VDC; 230 mA at 115 VAC rms. Contact resistance .0035 ohm. Minimum tational life is 25,000 cycles. Mounting bracket has two 6-32 tapped holes on 1 5/8" centers. minated phenolic insulation. 1 7/8x1 7/16" (1¼" behind panel). Complete with knob and neces- ry mounting hardware. Av. shpg. wt., 4 oz.

Shorting		Non-Shorting		Total Poles	No. of Pos.	Type of Indexing	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
Stock No.	Mfr's Type	Stock No.	Mfr's Type									
7-1452	1452	747-1454	1454	2	3	Positive	1.60	1.33	1.20	1.14	1.07	.96
.....	.....	747-1455	1455	2	3	Spring Return	1.60	1.33	1.20	1.14	1.07	.96
7-1466	1466	747-1467	1467	2	3	Pos. & Sp. Ret.	1.60	1.33	1.20	1.14	1.07	.96
7-1456	1456	.....	1457	4	2	Spring Return	1.78	1.48	1.34	1.27	1.19	1.07
7-1459	1459	.....	1458	4	2	Positive	1.78	1.48	1.34	1.27	1.19	1.07

SMALL GENERAL-PURPOSE SWITCHES

Step-type switches rated 1.5 amps at 28 VDC; 230 mA at 115 VAC. Shaft, ¼" dia., 1 7/8" long. All have non-shorting contacts, except *shorting. Widely used in radio-phono combinations; PA channel selectors; meter reversers and selectors; intercom talk-listen, dual speaker and stereo speaker applications; momentary line or remote speaker returns on intercoms; and many other applications. Type 1472 is for use in FM-AM-phonos. Type 1463 and 1464 are for intercoms. Av. wt., 5 oz.

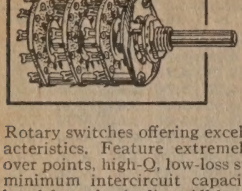
Stock No.	Mfr's Type	Description
747-1460	1460*	SPDT phono-radio
747-1461	1461*	SP-3-pos. selector
747-1462	1462*	DPDT bandswitch
747-1463	1463	SPDT momentary
747-1464	1464	DPDT momentary
747-2517	1472	DP-3-position

1-4.....Each 1.14 5-9.....Each .95
10-24....Each .86 25-49.....Each .82
50-99....Each .76 100-Up ....Each .68

ATTENTION INDUSTRIAL BUYERS

Allied supplies Lutron Powerdial Power Controls and Ohmite Omitrol Power Controls for precision use in a wide variety of industrial applications. See page 412 for complete price and ordering information.

Centralab High-Reliability Rotary Switches



PA-2000 SERIES

Precision Constructed

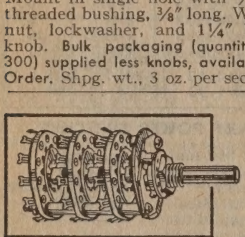
Rotary switches offering excellent RF characteristics. Feature extremely high flash-over points, high-Q, low-loss steatite bodies, minimum intercircuit capacity, and insulated front-back clips. All have positive 30° indexing, adjustable stop or continuous rotation, except * 60° indexing.

All are rated 2.75 amps @ 15 VDC; 230 mA @ 115 VAC. †Type 2042 has 1 off, up to 9 progressively shorting positions.

All are 1½x1 7/16" dia.; have ⅜" spacing between front plate and first section; ½" spacing between all other sections. Sections are .105" thick. Full round, ¼" diameter shafts are 2¼" long from mounting surfaces. Mount in single hole with ⅜"-32NEF-2A threaded bushing, ⅜" long. With mounting nut, lockwasher, and 1¼" black pointer knob. **Bulk packaging (quantities of 100 to 300) supplied less knobs, available on Special Order.** Shpg. wt., 3 oz. per section.

MINIATURE CERAMIC SWITCHES—1½x1 7/16" WAFERS

Non-Shorting Stock No.	Non-Shorting Type PA-	Shorting Stock No.	Shorting Type PA-	Total Poles	No. Pos.	Sections	EACH 1-4	5-9	10-24	25-49	50-99	1
747-2001	2001	747-2000	2000	1	2-12	1	2.76	2.30	2.07	1.97	1.84	1.
747-2003	2003	747-2002	2002	2	2-6	1	2.76	2.30	2.07	1.97	1.84	1.
747-2005	2005	747-2004	2004	2	2-12	2	3.90	3.25	2.93	2.79	2.60	2.
747-2007	2007	747-2006	2006	3	2-5	1	2.76	2.30	2.07	1.97	1.84	1.
747-2009	2009	747-2008	2008	3	2-12	3	4.98	4.15	3.74	3.56	3.32	2.
747-2011	2011	747-2010	2010	4	2-6	2	3.90	3.25	2.93	2.79	2.60	2.
747-2013	2013	747-2012	2012	4	2-12	4	5.98	4.98	4.49	4.28	3.99	3.
747-2015	2015	.....	.....	5	2-3	1	2.76	2.30	2.07	1.97	1.84	1.
747-2017	2017	747-2016	2016	5	2-12	5	7.16	5.97	5.37	5.12	4.78	4.
747-2019	2019	.....	.....	6	2	1	2.76	2.30	2.07	1.97	1.84	1.
747-2021	2021	747-2020	2020	6	2-5	2	3.90	3.25	2.92	2.79	2.60	2.
747-2023	2023	747-2022	2022	6	2-6	3	4.98	4.15	3.74	3.56	3.32	2.
747-2025	2025	747-2024	2024	6	2-12	6	8.32	6.94	6.24	5.95	5.55	4.
747-2027	2027	747-2026	2026	8	2-6	4	5.98	4.98	4.49	4.28	3.99	3.
747-2029	2029	.....	.....	9	2-5	3	4.98	4.15	3.74	3.56	3.32	2.
747-2031	2031	747-2030	2030	10	2-3	2	3.90	3.25	2.92	2.79	2.60	2.
747-2033	2033	.....	.....	10	2-6	5	7.16	5.97	5.37	5.12	4.78	4.
747-2035	2035	.....	.....	12	2	2	3.90	3.25	2.92	2.79	2.60	2.
747-2037	2037	.....	.....	12	2-6	6	8.32	6.94	6.24	5.95	5.55	4.
747-2039	2039	.....	.....	15	2-3	3	5.64	4.70	4.23	4.03	3.76	3.
747-2041	2041	.....	.....	18	2	3	5.64	4.70	4.23	4.03	3.76	3.
747-2043	.....	747-2042	2042†	1	2-10	1	2.50	2.08	1.88	1.79	1.67	1.
.....	2043*	.....	.....	1	2-6	1	2.50	2.08	1.88	1.79	1.67	1.
747-2045	2045*	.....	.....	2	2-6	2	3.46	2.88	2.60	2.47	2.31	2.



PA-1000 SERIES

Phenolic Insulated

All have 30° indexing, adjustable stop. 1½ x1 7/16" dia.; shaft, 2¼" long. 2.75 amps @ 15 VDC; 230 mA @ 115 VAC. Index assemblies and hardware identical to PA-2000 Series. Phenolic insulated and precision made. With knob, nut and lockwasher. Shpg. wt., 3 oz.

MINIATURE PHENOLIC SWITCHES—1½x1 7/16" WAFERS

Non-Shorting Stock No.	Non-Shorting Type PA-	Shorting Stock No.	Shorting Type PA-	Total Poles	No. Pos.	Sections	EACH 1-4	5-9	10-24	25-49	50-99	1
747-1001	1001	747-1000	1000	1	2-11	1	2.08	1.73	1.56	1.49	1.39	1.
747-1003	1003	747-1002	1002	2	2-5	1	2.08	1.73	1.56	1.49	1.39	1.
747-1005	1005	747-1004	1004	2	2-11	2	2.96	2.47	2.22	2.12	1.97	1.
747-1007	1007	747-1006	1006	3	2-3	1	2.08	1.73	1.56	1.49	1.39	1.
747-1009	1009	747-1008	1008	3	2-11	3	3.76	3.13	2.82	2.69	2.51	2.
747-1011	1011	747-1010	1010	4	2	1	2.08	1.73	1.56	1.49	1.39	1.
747-1013	1013	747-1012	1012	4	2-5	2	2.96	2.47	2.22	2.12	1.97	1.
747-1015	1015	747-1014	1014	4	2-11	4	4.38	3.65	3.29	3.13	2.92	2.
747-1017	1017	747-1016	1016	5	2-11	5	5.16	4.30	3.87	3.69	3.44	3.
747-1019	1019	747-1018	1018	6	2-3	2	2.96	2.47	2.22	2.12	1.97	1.
747-1021	1021	747-1020	1020	6	2-5	3	3.76	3.13	2.82	2.69	2.51	2.
747-1025	1025	747-1024	1024	8	2	2	2.96	2.47	2.22	2.12	1.97	1.
747-1027	1027	747-1026	1026	8	2-5	4	4.38	3.65	3.29	3.13	2.92	2.
747-1029	1029	.....	.....	12	2	3	3.76	3.13	2.82	2.69	2.51	2.
747-1031	1031	.....	.....	10	2-5	5	5.16	4.30	3.87	3.69	3.44	3.

KNOBS FOR BULK PACK OF SERIES 1000 AND 2000

TYPE 2300. Black pointer knobs (1¼" diameter) for Series 1000 and 2000 switches. Shpg. wt., 1 oz.

747-2300, 1-9	Each .13	10-24	Each .10
25-99	Each .08	100-Up	Each .07

PA-1000 PHENOLIC SECTIONS

Provide maximum flexibility in assembly of special switches to meet specialized requirements. For use with PA-300, PA-301 and PA-302 shaft and index assemblies listed at right. Sections are made of 1/16" thick phenolic. Meet rigorous commercial or military specifications. All have 30° indexing and adjustable stop. Same electrical ratings as PA-1000 Series Switches above. †In table below indicates all unused contacts are connected and shorted out. Av. shpg. wt., 2 oz.

Shorting Stock No.	Shorting Type PA-	Non-Shorting Stock No.	Non-Shorting Type PA-	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-0130	30	747-0131	31	1	2-11	1.00	.83	.75	.72	.67	.60
747-0132	32	747-0133	33	2	2-5	1.00	.83	.75	.72	.67	.60
.....	.....	747-0135	35	3	2-3	1.00	.83	.75	.72	.67	.60
.....	.....	747-0137	37	4	2	1.00	.83	.75	.72	.67	.60
.....	.....	747-0141	41†	2	2-11	1.00	.83	.75	.72	.67	.60

PA-2000 CERAMIC SECTIONS

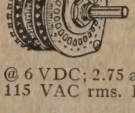
All have 30° indexing. For use with index assemblies PA-300, PA-301 and PA-302 listed in next column. *Unused contacts on one side of common are connected and shorted out. †Unused contacts are connected and shorted out. ‡Has one off, and up to 9 shorting positions. Shpg. wt., 2 oz.

Shorting Stock No.	Shorting Type PA-	Non-Shorting Stock No.	Non-Shorting Type PA-	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
747-0100	0	747-0101	1	1	2-12	1.38	1.15	1.04	.99	.92	.83
747-0102	2	747-0103	3	2	2-6	1.38	1.15	1.04	.99	.92	.83
747-0104	4	747-0105	5	3	2-5	1.38	1.15	1.04	.99	.92	.83
747-0106	6	747-0107	7	5	2-3	1.38	1.15	1.04	.99	.92	.83
747-0108	8	747-0109	9	6	2	1.38	1.15	1.04	.99	.92	.83
.....	.....	747-0119	19*	1	2-5	1.38	1.15	1.04	.99	.92	.83
747-0111	11‡	747-0118	18†	2	2-11	1.38	1.15	1.04	.99	.92	.83
747-0112	12‡	.....	.....	1	2-10	1.38	1.15	1.04	.99	.92	.83

PA-300 SERIES SHAFT AND INDEX ASSEMBLIES

Hardware for assembling miniature switches. Each type conta a 30° PA index assembly, a P-120 pointer knob, an adjusta stop plate, an assortment of spacers, tie bolts, nuts, fiber spa washers, lock washers, and instructions. Shpg. wt. 3 oz.

Stock No.	Type PA-	Shaft Lgth.	Sec.	EACH 1-4	5-9	10-24	25-49	50-99	100-
747-0300	300	2"	1-3	1.50	1.25	1.13	1.07	1.00	.9
747-0301	301	4"	4-6	1.98	1.65	1.49	1.42	1.32	1.
747-0302	302	6"	7-9	2.58	2.15	1.94	1.84	1.72	1.



PA-3000 AND PA-4000 SERIES SWITCH

18 and 24-position switches using hill-and-d index mechanism. Voltage breakdown, 1000 AC rms. Sections are 2 5/16" high, 1/16" thick. F 3000 Series. 2 1/64" wide; PA-4000 Series, 1 wide. ¼" dia. shafts. 2¼" long. Rated 5.5 an @ 6 VDC; 2.75 amps @ 15 VDC; 1.5 amps @ 28 VDC; 230 mA 115 VAC rms. Indexing: PA-3000, 20°; PA-4000, 15°. Wt., 4

NON-SHORTING TYPES

Stock No.	Type PA-	Sections	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-99	10
747-3001	3001	1	1	2-17	2.24	1.87	1.68	1.60	1.49	1.
747-3003	3003	2	2	2-17	3.24	2.70	2.43	2.32	2.16	1.
747-3005	3005	3	3	2-17	4.22	3.52	3.17	3.02	2.82	2.
747-3007	3007	4	4	2-17	5.14	4.28	3.86	3.68	3.43	3.
747-4001	4001	1	1	2-23	2.38	1.98	1.79	1.70	1.59	1.
747-4003	4003	2	2	2-23	3.50	2.92	2.63	2.50	2.34	2.
747-4005	4005	3	3	2-23	4.58	3.82	3.44	3.27	3.05	2.
747-4007	4007	4	4	2-23	5.48	4.57	4.11	3.92	3.66	3.

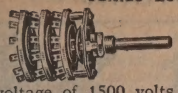
SHORTING TYPES

Stock No.	Type PA-	Sections	Total Poles	No. Pos.	EACH 1-4	5-9	10-24	25-49	50-99	10
747-3000	3000	1	1	2-17	2.24	1.87	1.68	1.60	1.49	1.
747-3002	3002	2	2	2-17	3.24	2.70	2.43	2.32	2.16	1.
747-3004	3004	3	3	2-17	4.22	3.52	3.17	3.02	2.82	2.
747-3006	3006	4	4	2-17	5.14	4.28	3.86	3.68	3.43	3.
747-4000	4000	1	1	2-23	2.38	1.98	1.79	1.70	1.59	1.
747-4002	4002	2	2	2-23	3.50	2.92	2.63	2.50	2.34	2.
747-4004	4004	3	3	2-23	4.58	3.82	3.44	3.27	3.05	2.
747-4006	4006	4	4	2-23	5.48	4.57	4.11	3.92	3.66	3.

Centralab Rotary Switches and Assemblies

CENTRALAB

SERIES 2500 CERAMIC ROTARY SWITCHES—1⅝x1⅞" WAFERS



on-treated ste-
switches for
l change and
switch uses.
ide breakdown voltage of 1500 volts
All are rated 2.75 amps at 15 volts
350 mA at 115 volts AC, make and
k, resistive load. All metal parts, except
and contacts, are cadmium-plated
. 1⅝x1⅞" dia. ½" from plate and be-
n sections for 1- and 2-section switches;
acing for others. Bushing, ⅜" diameter
" long. Shaft, ¼" dia. x 2¼" long from
nting surface. Positive 30° indexing;
justable stops. Wt., 3 oz. per section.

Shorting		Non-Shorting		Total Poles	No. of Pos.	Poles per Sec.	No. of Sec.	EACH					
Stock No.	Mfr's Type	Stock No.	Mfr's Type					1-4	5-9	10-24	25-49	50-99	100-Up
747-2500	2500	747-2501	2501	1	2-6	1	1	2.96	2.47	2.22	2.12	1.97	1.77
747-2502	2502	747-2503	2503	1	2-11	1	1	2.96	2.47	2.22	2.12	1.97	1.77
747-2504	2504	747-2505	2505	2	2-5	2	1	2.96	2.47	2.22	2.12	1.97	1.77
747-2506	2506	747-2508	2507	3	2-3	3	1	2.96	2.47	2.22	2.12	1.97	1.77
747-2510	2510	747-2511	2511	2	2-6	1	2	4.22	3.52	3.17	3.02	2.81	2.53
747-2512	2512	747-2513	2513	2	2-11	1	2	4.22	3.52	3.17	3.02	2.81	2.53
747-2514	2514	747-2515	2515	4	2-5	2	2	4.22	3.52	3.17	3.02	2.81	2.53
.....	.....	747-2517	2517	6	2-3	3	2	4.22	3.52	3.17	3.02	2.81	2.53
.....	.....	747-2521	2521	3	2-6	1	3	5.42	4.52	4.07	3.88	3.62	3.24
.....	.....	747-2523	2523	3	2-11	1	3	5.42	4.52	4.07	3.88	3.62	3.24
.....	.....	747-2525	2525	6	2-5	2	3	5.42	4.52	4.07	3.88	3.62	3.24

SERIES 1400 PHENOLIC ROTARY SWITCHES—1⅝x1⅞" WAFERS

nplete line of
nated, phenolic-
ilated rotary
ches. Used pri-
ily for band
ge and general tap-switch applications
re miniaturization is not essential.
ch, 1⅝x1⅞" diameter. Bushing, ⅜"
eter x ⅜" long. Shaft, 1⅞" long from
of bushing.

ex assemblies and hardware are identical
eries 2500 (above) allowing interchange-
ty. All metal parts, except clips and
acts, are cadmium-plated steel. Positive
indexing. Come complete with mount-
nut, washer and 1¼" black pointer
b. All are rated 2.75 amps at 15 volts
; 350 mA at 115 volts AC, make and
k resistive load. Provide breakdown
age of 1000 volts. Wt., 3 oz. per section.

Shorting		Non-Shorting		Total Poles	No. of Pos.	Poles per Sec.	No. of Sec.	EACH					
Stock No.	Mfr's Type	Stock No.	Mfr's Type					1-4	5-9	10-24	25-49	50-99	100-Up
747-1400	1400	747-1401	1401	1	2-6	1	1	2.64	2.20	1.98	1.89	1.76	1.58
.....	.....	747-1403	1403	1	2-11	1	1	2.64	2.20	1.98	1.89	1.76	1.58
747-1404	1404	747-1405	1405	2	2-5	2	1	2.64	2.20	1.98	1.89	1.76	1.58
.....	.....	747-1407	1407	3	2-3	3	1	2.64	2.20	1.98	1.89	1.76	1.58
.....	.....	747-1409	1409	4	2	4	1	2.64	2.20	1.98	1.89	1.76	1.58
.....	.....	747-1411	1411	2	2-6	1	2	3.22	2.68	2.42	2.30	2.15	1.93
747-1412	1412	747-1413	1413	2	2-11	1	2	3.22	2.68	2.42	2.30	2.15	1.93
.....	.....	747-1415	1415	4	2-5	2	2	3.22	2.68	2.42	2.30	2.15	1.93
.....	.....	747-1417	1417	6	2-3	3	2	3.22	2.68	2.42	2.30	2.15	1.93
.....	.....	747-1419	1419	8	2	4	2	3.22	2.68	2.42	2.30	2.15	1.93
.....	.....	747-1421	1421	3	2-6	1	3	4.10	3.41	3.08	2.93	2.73	2.45
.....	.....	747-1423	1423	3	2-11	1	3	4.10	3.41	3.08	2.93	2.73	2.45
.....	.....	747-1425	1425	6	2-5	2	3	4.10	3.41	3.08	2.93	2.73	2.45
.....	.....	747-1427	1427	4	2-6	1	4	4.72	3.93	3.54	3.37	3.15	2.82
.....	.....	747-1429	1429	4	2-11	1	4	4.72	3.93	3.54	3.37	3.15	2.82
.....	.....	747-1431	1431	8	2-5	2	4	4.72	3.93	3.54	3.37	3.15	2.82

INDEX ASSEMBLIES FOR SERIES 1400 AND 2500

endable assemblies for use with above series sections. One-piece
shaft, 3/16" thick. 30° positive index. Includes one index, one
20 pointer knob and hardware to complete switch. Use with
ions at right to design special application switches. Wt., 2 oz.

tock No.	Mfr's Type	No. of Sec.	EACH					
			1-4	5-9	10-24	25-49	50-99	100-Up
-0270	P-270	1-3	1.65	1.38	1.24	1.18	1.10	.99
-0271	P-271	3-5	2.10	1.75	1.58	1.50	1.40	1.26
-0272	P-272	5-10	2.85	2.38	2.14	2.03	1.90	1.71

CERAMIC SECTIONS FOR SERIES 2500

For changing sections of Series 2500 switches above. Have .187" rotor slot for use with P-270, P-271 and P-272 assemblies at left. All unused contacts of Types GGD and FFD connected and shorted out; Type PISD is progressive. *Total poles. Wt., 2 oz.

Shorting		Non-Shorting		*	No. Pos.	EACH					
Stock No.	Type	Stock No.	Type			1-4	5-9	10-24	25-49	50-99	100-Up
747-0035	TD	747-0045	XD	1	2-6	1.42	1.18	1.07	1.02	.95	.85
747-0040	UD	747-0050	YD	1	2-11	1.42	1.18	1.07	1.02	.95	.85
747-0018	RD	747-0019	RRD	2	2-5	1.42	1.18	1.07	1.02	.95	.85
.....	.....	747-0030	SSD	3	2-3	1.42	1.18	1.07	1.02	.95	.85
747-0015	PISD	.....	.....	1	2-10	1.42	1.18	1.07	1.02	.95	.85
747-0007	GGD	747-0006	FFD	1	2-11	1.42	1.18	1.07	1.02	.95	.85

GENERAL-PURPOSE ROTARY SWITCHES

nolic-insulated switches. Breakdown, 1000 VAC.
threaded shanks, ⅜" long. ¼" shafts, 1⅞" long.
itacts rated 1.75 amps at 28 VDC; 350 mA at 115
C. With knobs. Momentary action, except
sitive one side. Shpg. wt., 3 oz.

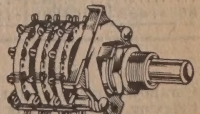
tock No.	Mfr's Type	Total Poles	No. of Pos.	EACH					
				1-4	5-9	10-24	25-49	50-99	100-Up
-1488	1488	6	3	3.78	3.15	2.84	2.70	2.52	2.26
-1489	1489	6†	3	3.78	3.15	2.84	2.70	2.52	2.26
-1451	1451	4	2	2.52	2.10	1.89	1.80	1.68	1.51

PHENOLIC SECTIONS FOR SERIES 1400

For replacing or changing individual sections of Series 1400 rotary switches shown in listing above. Sections can also be used with index assemblies P-270, P-271 and P-272 (at left, above) to design and assemble switches with special characteristics. Shpg. wt., 2 oz.

.....	.....	747-0008	HD	1	2-6	1.12	.93	.84	.80	.75	.67
747-0002	BD	747-0010	JD	1	2-11	1.12	.93	.84	.80	.75	.67
747-0003	CD	747-0011	KD	2	2-5	1.12	.93	.84	.80	.75	.67
747-0004	DD	747-0012	LD	3	2-3	1.12	.93	.84	.80	.75	.67
.....	.....	747-0013	MD	4	2	1.12	.93	.84	.80	.75	.67

PSA SUBMINIATURE ROTARY SWITCHES



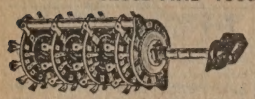
llyl phthalate rotary switches offer subminiature
, yet have same electrical rating as much larger
tches. Positive 30° indexing with adjustable stops
versatility. Two-ball star-wheel lateral thrust
struction for excellent torque control and feel.
tions are ⅛" thick, spaced ⅛". Clips and rotor contacts silver-plated brass. Mounting bushing has ⅜"-32 NEF thread by ⅜" long. Full round shaft, ¼" dia., 1⅜" L.F M.S. Rating: 0.55 amp at 28 VDC; make and break load, 170 mA at 115 VAC. Current Carrying Capacity: 7 amps. Contact Resistance: 5 milliohms. Index Rotational Life: 25,000 cycles minimum. 4 oz.

Shorting		Non-Shorting		Total Poles	No. Pos.	Poles/ Sec.	No. Sec.	EACH					
tock No.	Type	Stock No.	Type					1-4	5-9	10-24	25-49	50-99	100-Up
47-0200	PSA-200	747-0201	PSA-201	1	2-12	1	1	4.80	4.00	3.60	3.42	3.20	2.88
47-0202	PSA-202	747-0203	PSA-203	2	2-6	2	1	4.80	4.00	3.60	3.42	3.20	2.88
47-0204	PSA-204	747-0205	PSA-205	2	2-12	1	2	6.00	5.00	4.50	4.28	4.00	3.60
.....	.....	747-0207	PSA-207	3	2-5	3	1	4.80	4.00	3.60	3.42	3.20	2.88
.....	.....	747-0209	PSA-209	3	2-12	1	3	7.20	6.00	5.40	5.13	4.80	4.32
47-0210	PSA-210	747-0211	PSA-211	4	2-6	2	2	6.00	5.00	4.50	4.28	4.00	3.60
.....	.....	747-0215	PSA-215	5	2-3	5	1	4.80	4.00	3.60	3.42	3.20	2.88
.....	.....	747-0221	PSA-221	6	2-5	3	2	6.00	5.00	4.50	4.28	4.00	3.60
47-0222	PSA-222	747-0223	PSA-223	6	2-6	2	3	7.20	6.00	5.40	5.13	4.80	4.32
47-0228	PSA-228	.....	.....	9	2-5	3	3	7.20	6.00	5.40	5.13	4.80	4.32
47-0230	PSA-230	747-0231	PSA-231	10	2-3	5	2	7.20	6.00	5.40	5.13	4.80	4.32
47-0238	PSA-238	747-0239	PSA-239	15	2-3	5	3	7.80	6.50	5.85	5.55	5.20	4.68

Mallory and Ohmite Switches

MALLORY ROTARY SWITCHES AND DIAL PLATES

1200L AND 1300L ROTARY SWITCHES



Phenolic sections. ½" spacing for 1 section, 1" for extras. 30° index. 1¾" dia. mtg. space.⅜"-32 bushing, ⅜" long. Shaft, ¼" dia. x2". Breakdown, 1000 VAC or DC, 0.6 amps @ 300 VDC or 1 amp @ 300 VAC (resistive). With bar knob. †Add'l. "off" position, all circuits open. *No. of poles. Shpg. wt., 3 oz. per section.

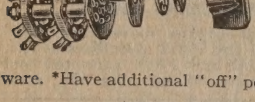
NON-SHORTING

Stock No.	Mfr's Type	Sec.	*	Pos. Per Pole	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
851-0711	1311L	1	1	11	2.71	2.05	1.84	1.74	1.64	1.47
851-0725	1315L†	1	2	5	2.71	2.05	1.84	1.74	1.64	1.47
851-0720	1313L†	1	3	3	2.71	2.05	1.84	1.74	1.64	1.47
851-0731	1321L	2	2	11	3.30	2.51	2.25	2.13	2.00	1.80
851-0735	1325L†	2	4	5	3.30	2.51	2.25	2.13	2.00	1.80
851-0733	1323L†	2	6	3	3.30	2.51	2.25	2.13	2.00	1.80
851-0741	1331L	3	3	11	4.16	3.16	2.84	2.68	2.52	2.27
851-0751	1341L	4	4	11	4.90	3.72	3.34	3.16	2.97	2.67
851-0755	1345L†	4	8	5	4.90	3.72	3.34	3.16	2.97	2.67
851-0761	1351L	5	5	11	5.29	4.01	3.61	3.41	3.20	2.88
851-0766	1356L	5	10	6	5.82	4.42	3.97	3.76	3.53	3.18
851-0770	1361L	6	6	11	6.22	4.72	4.24	4.01	3.76	3.39

SHORTING

851-0561	1211L	1	1	11	2.71	2.05	1.84	1.74	1.64	1.47
851-0571	1221L	2	2	11	3.30	2.51	2.25	2.13	2.00	1.80
851-0575	1225L†	2	4	5	3.30	2.51	2.25	2.13	2.00	1.80
851-0591	1241L	4	4	11	4.90	3.72	3.34	3.16	2.97	2.67

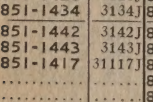
CERAMIC SECTION 30° INDEXING SWITCHES



Minimum RF loss. Adjustable stop. Non-shorting. Silver-plated contacts. 500 V AC/DC. Maximum non-breaking current (resistive load), 10 amps. ½" spacing between 2-section types, others have 1" spacing between sections. 1¼" base diameter. With 2" grooved shaft, knob and hardware. *Have additional "off" position. Shpg. wt., 3 oz. per section.

Stock No.	Mfr's Type	Sections	Total Poles	Pos. Per Pole	EACH 1-4	5-9	10-24	25-49	50-99	1
851-1172	172C	1	1	11	3.05	2.31	2.08	1.97	1.85	1
851-1173	173C*	1	2	5	3.05	2.31	2.08	1.97	1.85	1
851-1174	174C*	1	3	3	3.05	2.31	2.08	1.97	1.85	1
851-1176	176C	2	2	11	4.37	3.31	2.98	2.82	2.64	2
851-1177	177C*	2	4	5	4.37	3.31	2.98	2.82	2.64	2

SERIES 3100J AND 3200J SINGLE-SECTION SWITCHES

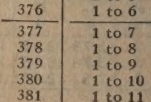


Enclosed, low-voltage switches. For use in tone control, band selector and antenna switching circuits. Phenolic resin insulation. Have ⅜" threaded bushing ⅜" long, ¼" diameter shaft 2" long.

Shafts are grooved at popular lengths for easy cutting. All $1^{11}/_{16}$" base types have adjustable stops. Breakdown rating is 500 volts, AC or DC. Current ratings (resistive load): .125 amp at 300 VDC; 3 amps at 6VDC; .2 amp at 300 VAC; 5 amps at 6 VAC. Bar knob and nut. Shpg. wt. 4 oz.

Shorting Stock No.	Shorting Mfr's Type	Non-Shorting Stock No.	Non-Shorting Mfr's Type	Poles	Positions	Base Dia.	EACH 1-4	5-9	10-24	25-49	50-99	100-Up
851-1415	3115J	851-1485	3215J	1	5	1¼"	1.32	1.00	.90	.85	.80	.72
851-1412	31112J	851-1472	32112J	1	12	1¼"	1.32	1.00	.90	.85	.80	.72
851-1422	3122J	851-1492	3222J	2	2	1¼"	1.32	1.00	.90	.85	.80	.72
851-1423	3123J	851-1493	3223J	2	3	1¼"	1.32	1.00	.90	.85	.80	.72
851-1426	3126J	851-1496	3226J	2	6	1¼"	1.32	1.00	.90	.85	.80	.72
851-1434	3134J	851-1534	3234J	3	4	1¼"	1.36	1.03	.93	.88	.83	.74
851-1442	3142J	851-1542	3242J	4	2	1¼"	1.36	1.03	.93	.88	.83	.74
851-1443	3143J	851-1543	3243J	4	3	1¼"	1.36	1.03	.93	.88	.83	.74
851-1417	31117J	851-1477	32117J	1	17	$1^{11}/_{16}$"	2.01	1.52	1.37	1.30	1.22	1.10
.....	.....	851-1499	3229J	2	9	$1^{11}/_{16}$"	2.01	1.52	1.37	1.30	1.22	1.10
.....	.....	851-1536	3236J	3	6	$1^{11}/_{16}$"	2.12	1.61	1.45	1.37	1.29	1.16
851-1463	3163J	851-1563	3263J	6	3	$1^{11}/_{16}$"	2.12	1.61	1.45	1.37	1.29	1.16

DIAL PLATES



These dial plates are switches 1200L, 130 and 1¼" base 31 and 3200J. Etched minum. Black ba ground. $1^{13}/_{16}$" diame plate. Mounting has $^{7}/_{16}$" diameter. Shpg. wt., 4 oz.

30° SPACING FOR 1¼" BASE SWITCH

Mfr's Type	Marking	Mfr's Type	Markin
372	1 to 2	382	1 to 12
373	1 to 3	383	Off 1 to
374	1 to 4	384	Off 1 to
375	1 to 5	385	Off 1 to
376	1 to 6	386	Off 1 to
377	1 to 7	387	Off 1 to
378	1 to 8	388	Off 1 to
379	1 to 9	389	Off 1 to
380	1 to 10	390	Off 1 to
381	1 to 11	.....	.....

851 C 5372. Specify Type..... Each

SPECIA PURPO ROTAR SWITCH

A Type 151L "Hamswitch". Two-section, 5-position switch; 1 per section. Non-shorting. 2¼" spacing between sections. R 1000 volts AC (rms) or 1500 volts DC, 60° indexing. With b bushing ⅜" long, ⅜" dia. Shaft, 2" by ¼" dia. is grooved for cutt With hardware. Shpg. wt., 6 oz.

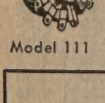
B Type 13124L 24-Point Tap Switch. Single circuit, 24-position, shorting tap switch. Excellent for use in test equipment appl tions. Continuous rotation, with 15° indexing between positi Bushing, ⅜" dia. by ⅜" long. 2" shaft is notched for cutting. W dial plate and hardware. Same ratings as Type 151L. Shpg. wt.,

B Type 1400L Circuit-Opening Switch. Opens any 1 of 12 circ maintains other 11. Ideal for meter switching, inserting resis and capacitors, etc. Breaking currents: 6A @ 300 VDC; 8A 6 VDC; 1A @ 300 VAC; 10A @ 6 VAC. Non-breaking, Max. VDC, 500 V. 30° indexing. ½x2" shaft. ⅜x⅜" bush Hardware, dial plate. Shpg. wt., 6 oz.

Stock No.	Mfr's Type	Fig.	EACH 1-4	5-9	10-24	25-49	50-99	100-
851-0951	151L	A	3.47	2.63	2.36	2.24	2.10	1.8
851-0713	13124L	B	3.55	2.70	2.43	2.30	2.16	1.9
851-0801	1400L	B	6.01	4.56	4.10	3.88	3.64	3.2

OHMITE CERAMIC-INSULATED POWER TAP SWITCHES

Ceramic-insulated rotary types. Non-shorting, SPST deck. 30° indexing. Model 111 is rated 15 amperes @ 125 VAC; diameter, 1¾". Model 212 rated 20 amperes @ 150 VAC; diameter, 2¼". Model 312 rated 30 amperes @ 300 VAC, 150 volts between ta diameter, $3^{5}/_{16}$". Require 1⅛ to 2¼" behind panel. Have ¼" flu shafts. U.L. Component Program-Recognized. Shpg. wt., 10



Model 111

Model 212

MODEL 111 Stock No.	Taps	1-4, EA.	5-Up	MODEL 212 Stock No.	Taps	1-4, EA.	5-Up	MODEL 312 Stock No.	Taps	1-4, EA.	5-U
876-5112	3	4.68	3.61	876-5217	5	9.46	7.31	876-5318	4	12.38	9.
876-5113	4	4.84	3.74	876-5219	6	9.79	7.57	876-5322	6	12.93	9.
876-5114	5	4.95	3.83	876-5223	8	10.23	7.91	876-5328	9	13.48	10.
876-5115	6	5.12	3.95	876-5231	12	11.00	8.50	876-5330	10	13.75	10.

ALLIED GIVES YOU HUGE SELECTION, FAST SERVICE, OEM QUANTITY PRICES

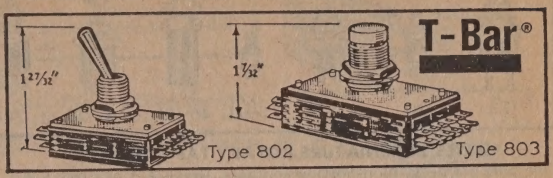
Allied maintains complete stocks of general and special-purpose switches. When you place your switch order at Allied, you get these advantages: Complete one-order service—you buy all you need from a single source; wide selection—all switches are stocked in-depth; lowest cost—you get OEM prices and reliable service.

E.C.I., George Risk, and Grayhill Switches

ELECTRONIC CONTROLS, INC. T-BAR MULTI-POLE SWITCHES

- Switch More Circuits in Less Space
- Control Up to 108 Circuits

eliable high density, multiple-pole, double-throw bat-handle ggle and momentary pushbutton switches. Unique design allows u to switch more circuits in less space. Control up to 108 circuits. otected from dust, damage and humidity by tight plastic case parated from the actuator assembly. Withstands MIL STD-202, ethod 106B moisture-resistance test. Gold-bonded fine silver con-cts providing many years of service are rated: non-inductive, 150 atts, 3 amps make-or-break; 500 watts, 5 amps carry. Contact fe: (Mechanical) Type 802, 50,000 cycles, Type 803, 500,000 cles; (Electrical) 50,000 cycles at 5 amps. 28 VDC or 115 VAC, sistive. Dielectric strength: (terminal to case) 1000 VAC at sea vel. Temperature Range: −55°C to +85°C. Operate and release nes: Less than 30 milliseconds. Av. shpg. wt., 6 oz.



SERIES 802 BAT-HANDLE TOGGLE SWITCHES

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-74	75-Up
74-0130	802-8C	8PDT	12.05	11.44	10.87	10.33	9.84
74-0134	802-12C	12PDT	13.35	12.68	12.05	11.44	20.91
74-0138	802-24C	24PDT	26.17	24.86	23.62	22.44	21.38
74-0142	802-36C	36PDT	36.26	34.40	32.68	31.05	29.58
74-0146	802-48C	48PDT	59.25	56.29	50.66	45.59	41.09
74-0148	802-72C	72PDT	89.26	84.80	76.32	68.69	61.90

SERIES 803 MOMENTARY PUSHBUTTON SWITCHES

Stock No.	Mfr's Type	Action	EACH 1-9	10-24	25-49	50-74	75-Up
774-0150	803-4C	4PDT	7.50	7.13	6.77	6.43	6.13
774-0152	803-8C	8PDT	10.05	9.54	9.06	8.61	8.20
774-0154	803-12C	12PDT	11.34	10.77	10.23	9.72	9.26
774-0156	803-24C	24PDT	24.17	22.96	21.81	20.72	19.75
774-0158	803-36C	36PDT	34.20	32.50	30.88	29.33	27.95

T-BAR CONNECTOR AND TOOLS

88601 Connector. Snap-in terms. for wire. Tools below. See page 250 for illustration and description.

774-0195.....Each 1.35
774-0190. 8601-51 Crimping Tool.....47.50
774-0193. 8601-61 Extraction Tool.....7.50

HERMETICALLY SEALED SWITCHES BY GEORGE RISK INDUSTRIES, INC.

A SERIES D SWITCHES

Dielectric Strength: 500 VAC. Insulation Res.: 100 meg. All series ave inert gas atmosphere. .850x.312" dia. Wt., 2 oz.

Part No.	Switch Forms	Amps	Operational Force 8-Oz. Stock No.	17-Gram Stock No.	EACH 1-9	10-99	100-Up
C-HA/FA	SPST-N.O.	.5	909-3623	909-3618	7.01	5.35	4.35
B-HC/FC	SPDT-B-M	.250	909-3615	909-3612	10.65	8.15	6.70

B SERIES T SWITCHES

Dielectric Strength: 500 VAC. Insulation Res.: 100 meg. Life Ex-ectancy: Form A and B; 20 million, full load, 50 million, half load. orm C: 10 million, full load, 20 million, half load. 1.75x.890" dia.

B-HC2/FC2	2PDT-B-M	.250	909-3650	.....	12.97	9.85	8.00

C SERIES R SWITCHES

Dielectric Strength: 500 VAC. Insulation Resistance: 100 meg. Life Expectancy: 10 million, full load. .625x.375" dia. 2 oz.

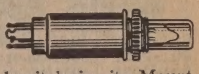
Part No.	Switch Forms	Amps	Operational Force 8-Oz. Stock No.	17-Gram Stock No.	EACH 1-9	10-99	100-Up
RB-HA	SPST-N.O.	.250	909-3646	.....	7.66	5.80	4.73
RB-HC	SPDT-B-M	.250	909-3648	.....	10.68	8.10	6.60

D SERIES G SWITCHES

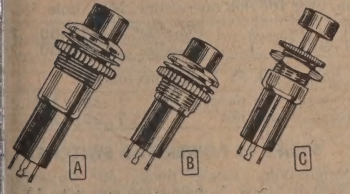
Dielectric: 500 VAC. Ins. Res.: 100 meg. .975x.625" dia. 2 oz.

GC-HA2/FA2	DPST-N.O.	.5	909-3641	.....	9.28	7.05	5.75
GC-HA/FA	SPST-N.O.	.5	909-3639	.....	6.93	5.25	4.30
GB-HC	SPDT-B-M	.250	909-3635	.....	10.57	8.05	6.55

GRAYHILL NEON AND INCANDESCENT SWITCHES



ALTERNATE AND MOMENTARY ACTION PUSHBUTTON SWITCHES



Alternate action switches, except Type 46-125, which is monentary contact. All are SPST. Type 46-502 has standard mounting; Types 46-125 and 46-525 have bezel mounting. 115 VAC, ¼ amp. 1000 VAC. Type 46-125, 1.554x0.625"; 46-502, 1.677x 0.375"; 46-525, 1.840x0.625". Av. shpg. wt. 2 oz.

Stock No.	Type 46-	Fig.	Butt. Color	EACH 1-9	10-49	50-Up
301-1545	125R	B	Red	2.47	2.35	1.76
301-1540	125B	B	Black	2.47	2.35	1.76
301-1615	502R	C	Red	3.68	3.50	2.63
301-1610	502B	C	Black	3.68	3.50	2.63
301-1645	525R	A	Red	4.10	3.90	2.93
301-1640	525B	A	Black	4.10	3.90	2.93

SERIES 40 LIGHTED PUSHBUTTON SWITCHES

Rated 115 VAC resistive, 1 amp. SPST, momentary contact. Low contact resistance. Voltage Breakdown, 1000 VAC. Insulation Resistance, 25,000 meg. Solder terminals, lamp and switch circuits. Mounting hole, 25/64". Lamp: neon, GE NE2-E or equiv.; incandescent, GE 1764 (20DC max.) or equiv. 1.85x.44" dia. Wt. 1 oz.

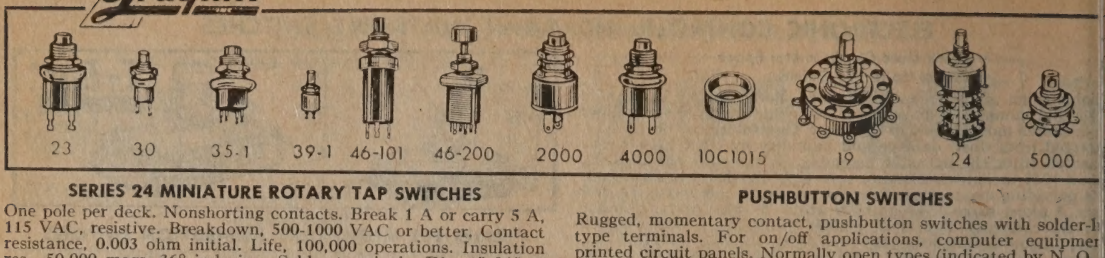
NEON LAMP TYPES

Stock No.	Mfr's Type	Contacts	Button Color	1-9	10-49	50-Up
801-0801	40-1	Normally open	Clear	2.58	2.45	1.84
801-0809	40-1	Normally open	Transparent Amber	2.58	2.45	1.84
801-0813	40-1	Normally open	Transparent Red	2.58	2.45	1.84
801-0805	40-1	Normally open	Frosted White	2.58	2.45	1.84
801-0840	40-2	Normally closed	Clear	2.84	2.70	2.02
801-0848	40-2	Normally closed	Transparent Amber	2.84	2.70	2.02
801-0852	40-2	Normally closed	Transparent Red	2.84	2.70	2.02
801-0844	40-2	Normally closed	Frosted White	2.84	2.70	2.02

INCANDESCENT LAMP TYPES

801-0901	40-100	Normally open	Clear	2.89	2.75	2.06
801-0923	40-100	Normally open	Transparent Amber	2.89	2.75	2.06
801-0927	40-100	Normally open	Transparent Red	2.89	2.75	2.06
801-0915	40-100	Normally open	Frosted White	2.89	2.75	2.06
801-0910	40-100	Normally open	Frosted Red	2.89	2.75	2.06
801-0905	40-100	Normally open	Frosted Green	2.89	2.75	2.06
801-0919	40-100	Normally open	Frosted Yellow	2.89	2.75	2.06
801-0951	40-102	Normally closed	Clear	3.16	3.00	2.25
801-0973	40-102	Normally closed	Transparent Amber	3.16	3.00	2.25
801-0977	40-102	Normally closed	Transparent Red	3.16	3.00	2.25
801-0965	40-102	Normally closed	Frosted White	3.16	3.00	2.25
801-0960	40-102	Normally closed	Frosted Red	3.16	3.00	2.25
801-0955	40-102	Normally closed	Frosted Green	3.16	3.00	2.25
801-0969	40-102	Normally closed	Frosted Yellow	3.16	3.00	2.25

Grayhill Miniature Switches



SERIES 24 MINIATURE ROTARY TAP SWITCHES

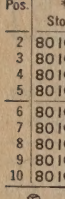
One pole per deck. Nonshorting contacts. Break 1 A or carry 5 A, 115 VAC, resistive. Breakdown, 500-1000 VAC or better. Contact resistance, 0.003 ohm initial. Life, 100,000 operations. Insulation res., 50,000 megs. 36° indexing. Solder terminals. Dia. 1". ⅜"-32 bushing. 0.25"-long flatted shaft. *Depth behind panel. 4 oz.

Pos.	1-Deck *.58" Stock No.	Type 24001-	EACH 1-9	10-49	50-Up	2-Deck *1.39" Stock No.	Type 24002-	EACH 1-9	10-49	50-Up
2	801C3002	2	3.81	3.05	2.29	801C3052	2	6.69	5.35	4.01
3	801C3003	3	3.94	3.15	2.36	801C3053	3	6.94	5.55	4.16
4	801C3004	4	4.06	3.25	2.44	801C3054	4	7.19	5.75	4.31
5	801C3005	5	4.19	3.35	2.51	801C3055	5	7.44	5.95	4.46
6	801C3006	6	4.31	3.45	2.59	801C3056	6	7.69	6.15	4.61
7	801C3007	7	4.44	3.55	2.66	801C3057	7	7.94	6.35	4.76
8	801C3008	8	4.56	3.65	2.75	801C3058	8	8.19	6.55	4.91
9	801C3009	9	4.69	3.75	2.81	801C3059	9	8.44	6.75	5.06
10	801C3010	10	4.81	3.85	2.89	801C3060	10	8.69	6.95	5.21

SERIES 5000 MINIATURE ROTARY TAP SWITCHES

Nonshorting switches with one pole and 2 to 10 positions per deck. 36° index. Rated to break 1 amp at 115 VAC, resistive, or carry 5 amps. Mtg. hole ⅜" dia. 1½" dia. *Depth behind panel. 4 oz.

Pos.	1-Deck *.47" Stock No.	Type 5001-	EACH 1-9	10-49	50-Up	2-Deck *1.25" Stock No.	Type 5002-	EACH 1-9	10-49	50-Up
2	801C2502	2	2.88	2.30	1.73	801C2552	2	6.13	4.90	3.68
3	801C2503	3	2.94	2.35	1.76	801C2553	3	6.25	5.00	3.75
4	801C2504	4	3.00	2.40	1.80	801C2554	4	6.38	5.10	3.83
5	801C2505	5	3.06	2.45	1.84	801C2555	5	6.50	5.20	3.90
6	801C2506	6	3.13	2.50	1.88	801C2556	6	6.63	5.30	3.98
7	801C2507	7	3.19	2.55	1.91	801C2557	7	6.75	5.40	4.05
8	801C2508	8	3.25	2.60	1.95	801C2558	8	6.88	5.50	4.13
9	801C2509	9	3.31	2.65	1.99	801C2559	9	7.00	5.60	4.20
10	801C2510	10	3.38	2.70	2.03	801C2560	10	7.13	5.70	4.28



SERIES 50 ROTARY SWITCHES

CD—commercial; no seals, adjustable stops, phenolic base. MD—military, meets MIL-S-3786, integral shaft and panel seal, adjustable stops, diallyl phthalate base. Both are rated to make or break 50mA, 115 VAC for 25,000 cycles; or 200 mA, 115 VAC for 10,000 cycles. Nonshorting contacts, 36° indexing.§ Poles/deck. *PC terminals. Wt., 4 oz.

Stock No.	Mfr's Type	Stop Adjust	EACH 1-9	10-49	50-Up
801-2001	50CD36-01-1§	2 thru 10	7.75	6.20	4.85
801-2002	50CD36-01-2§	2 thru 5	10.13	8.10	6.00
801-2030	50MD36-01-1§	2 thru 10	9.38	7.50	5.63
801-2031	50MD36-01-2§	2 thru 5	11.75	9.40	7.95
801-2050	50MDP36-01-1-AJN*	2 thru 10	9.38	7.50	5.63
801-2051	50MDP36-01-2-AJN*	2 thru 5	11.75	9.40	7.05

SERIES 51 ROTARY SWITCHES

Similar to series 50, except 12 position, 30° angle of throw. 51MDP-30-01-1-AJN has printed circuit tabs.

801C2070	51MD30-01-1-AJN	2 thru 12	10.06	8.05	6.04
801C2075	51MDP30-01-1-AJN	2 thru 12	10.06	8.05	6.04

PUSHBUTTON SWITCHES

Rugged, momentary contact, pushbutton switches with solder-l type terminals. For on/off applications, computer equipmer printed circuit panels. Normally open types (indicated by N. O. table below) have red buttons. Normally closed types (indicated N. C. in table below) have black buttons. In Series 2000 and Seri 46, "R" after Mfr's Type No. indicates red button, "B" bla button. Av. shpg. wt., 2 oz.

Series 23. Miniature, over 500,000 operations. Contact resistanc 10 milliohms. Mounting hole, 21/64".

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	EACH 1-9	10-49	50-U
801-0501	23-1	SPST N.O.	¼	1¾4x½"	1.38	1.10	.8

Series 30. Subminiature, over 1 million operations. Contact resis ance, 10 milliohms. Mounting hole, 17/64".

801-0701	30-1	SPST N.O.	1	63/64x3/8"	1.19	.95	.7
801-0702	30-2	SPST N.C.	1	63/64x3/8"	1.19	.95	.7

Series 35. Miniature, over 100,000 operations. Mtg. hole, 31/64".

801-0735	35-1	DPST N.O.	½	117/64x51/64"	1.88	1.50	1.1

Series 39. Ultraminiature, over 1 million operations. Butt contac Mounting hole, 11/64".

801-0750	39-1	SPST N.O.	½	39/64x1¼"	1.44	1.15	.8

Series 46. Miniature, over 250,000 operations. †In Action colum indicates break-before-make, ‡ make-before-break. Mtg. hole, 17/6

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	EACH 1-9	10-49	50
801-1515	46-101R	SPDT†	¼	1 1/3x7/16"	1.75	1.40	1.0
801-1510	46-101B	SPDT†	¼	1 1/3x7/16"	1.75	1.40	1.0
801-1530	46-110R	SPDT‡	¼	1 1/3x7/16"	1.94	1.55	1.1
801-1525	46-110B	SPDT‡	¼	1 1/3x7/16"	1.94	1.55	1.1
801-1555	46-200R	DPDT†	¼	1 9/16x1 7/32" sq.	3.88	3.10	2.3
801-1550	46-200B	DPDT†	¼	1 9/16x1 7/32" sq.	3.88	3.10	2.3
801-1565	46-201R	DPDT‡	¼	1 9/16x1 7/32" sq.	4.25	3.40	2.5
801-1560	46-201B	DPDT‡	¼	1 9/16x1 7/32" sq.	4.25	3.40	2.5

Series 2000. Snap-Action, over 25,000 operations. Mtg. hole, 31/64"

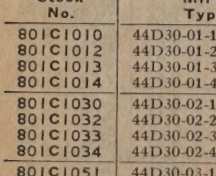
Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	EACH 1-9	10-49	50- U
801-2201	2201	SPST N.O.	10	1 59/64x7/8"	3.31	2.65	1.9
801-2202	2202	SPST N.C.	10	1 59/64x7/8"	3.31	2.65	1.9
801-0035	7-26R	SPDT	10	1 9/64x7/8"	4.81	3.85	2.8
801-0026	7-26B	SPDT	10	1 9/64x7/8"	4.81	3.85	2.8

Series 4000. Silent-Action, over 100,000 operations. Mtg. hole, 31/64

801-2251	4001	SPST N.O.	1	1 17/32x51/64"	1.25	1.00	.7
801-2252	4002	SPST N.C.	1	1 17/64x51/64"	1.25	1.00	.7

Button Guard. For Series 2000, 4000, 35. Cadmium-plated.

801-0007	10C1015	Provides button recess.	.38	.30	.2
801-0315	7C1040	Decorative mtg. nut.	.25	.20	.1



SERIES 44D ROTARY TAP SWITCHES

Fully enclosed with adjustable stop system. 44 Series, 30° throw angle, 1.162" diameter; 42 Series, 36° throw angle, 1.00" diameter. Rated make/break, 1 A @ 115 VAC resistive, or carry 10 A. Non-shorting contacts. Cont. resistive, .003 ohm initial. Ins. res., 50K megs minimum. Behind panel, 1-deck, 1.025"; 2-deck, 1.371"; 3-deck, 1.717".

Stock No.	Mfr's Type	Decks	Poles /Deck	Max. Pos.	Wt., Oz.	EACH 1-9	10-49	50-Up
801C1010	44D30-01-1-ADJN	1	1	12	3	8.13	6.50	4.87
801C1012	44D30-01-2-ADJN	1	2	6	3	9.13	7.30	5.47
801C1013	44D30-01-3-ADJN	1	3	4	3	9.63	7.70	5.77
801C1014	44D30-01-4-ADJN	1	4	3	3	10.13	8.10	6.07
801C1030	44D30-02-1-ADJN	2	1	12	4	10.50	8.40	6.30
801C1032	44D30-02-2-ADJN	2	2	6	4	12.50	10.00	7.50
801C1033	44D30-02-3-ADJN	2	3	4	4	13.50	10.80	8.10
801C1034	44D30-02-4-ADJN	2	4	3	4	14.50	11.60	8.70
801C1051	44D30-03-1-ADJN	3	1	12	5	12.75	10.20	7.65
801C1052	44D30-03-2-ADJN	3	2	6	5	15.75	12.60	9.45
801C1054	44D30-03-4-ADJN	3	4	3	5	18.75	15.00	11.25

SERIES 19 POWER TAP SWITCHES

Single-pole, single deck. 30° indexing Built-in stops. Nonshorting contacts, 15 A 115 VAC resistive, 1 A, 115 VDC resistive Breakdown, 3500 VAC. Solder terminals ⅜"-32 bushing. 1.83x1.69" diameter. Re quire 0.95" behind panel. ½"-long flatte shaft. U.L. Component-Program Recog nized. Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Positions	EACH 1-9	10-49	50-Up
801C3502	19101-2UL	2	4.63	3.70	2.78
801C3503	19101-3UL	3	4.88	3.90	2.93
801C3504	19101-4UL	4	5.13	4.10	3.08
801C3505	19101-5UL	5	5.39	4.30	3.23
801C3506	19101-6UL	6	5.62	4.50	3.38
801C3507	19101-7UL	7	5.88	4.70	3.53
801C3508	19101-8UL	8	6.13	4.90	3.68
801C3510	19101-10UL	10	6.63	5.30	3.98
801C3511	19101-11UL	11	6.88	5.50	4.13

FOR ADDITIONAL GRAYHILL SWITCHES SEE PAGE 211

Snap-Action Switches

SNAP-ACTION SPDT SWITCHES WITH MICRO EQUIVALENTS

Popular replacements for Microswitch types. Feature clip-on covers, constant-stress rolling spring snap-action for long life. Operating forces given in ounces. Switches have screw terminals, except * solder terminals. U.L. Component Program-Recognized. C.S.A. Listed. Av. shpg. wt., 2 oz.

MODEL "V" MINIATURE TYPES WITH COVERS

ature sealed mechanism cover. Excellent con- t wiping action and bounce-free motion. Me- nical life, 10 million operations. Rated 15 amps at 125- 250 VAC. Easy-handling, one-piece integral actuators. †Micro equivalent is basic switch with actuator harness. *Solder term.

Stock No.	Mfr's Type	Micro Equiv.	Oper. Force	Pre-Travel	Fig.	EACH 1-9	10-19	20-49	50-99	100-199	200-Up
5-4521	*VD-0001	V3-19	14	.047″	A	1.20	.92	.82	.71	.66	.64
5-4527	VD-0007	V3-1	14	.047″	A	1.27	.97	.86	.76	.70	.68
5-4560	*VLD-0010	†V3-19 (JV-1)	14	.062″	B	1.32	1.01	.90	.78	.73	.71
5-4562	VLD-0012	†V3-1 (JV-1)	14	.062″	B	1.39	1.06	.94	.83	.77	.74
5-4563	*VLD-0013	†V3-19 (JV-7)	8	.156″	B	1.32	1.01	.90	.78	.73	.71
5-4565	VLD-0015	†V3-1 (JV-7)	8	.156″	B	1.39	1.06	.94	.83	.77	.74
5-4566	*VLD-0016	†V3-19 (JV-5)	14	.026″	C	1.53	1.17	1.04	.91	.85	.82
5-4568	VLD-0018	†V3-1 (JV-5)	14	.062″	C	1.62	1.24	1.10	.97	.90	.87
5-4569	*VLD-0019	†V3-19 (JV-20)	8	.156″	C	1.53	1.17	1.04	.91	.85	.82
5-4533	VLD-0021	†V3-1 (JV-20)	8	.156″	C	1.62	1.24	1.10	.97	.90	.87

STANDARD-DUTY TYPES

ontacts are rated at 15 amps, 120, 240 and 480 volts AC; 0.5 amp, 120 volts DC. *Solder term.

5-0455	*BRD2-1A	BZ-2R	9-13	.020″	D	1.88	1.44	1.28	1.12	1.04	1.01
5-0454	BRD2-1A-1S	BZ-2R-A2	9-13	.020″	D	2.06	1.58	1.40	1.23	1.14	1.10
5-0493	*BRD2-5L	BZ-2RL	5	.156″	F	2.18	1.67	1.48	1.30	1.20	1.17
5-0495	BRD2-5L-1S	BZ-2RL-A2	5	.156″	F	2.35	1.80	1.60	1.40	1.30	1.26
5-0473	*BRD2-2M	BZ-2RL2	5	.156″	E	2.76	2.12	1.88	1.65	1.53	1.48
5-0478	BRD2-2M-1S	BZ-2RL2-A2	5	.156″	E	2.94	2.25	2.00	1.75	1.63	1.58
5-0497	*BRD2-70	BZ-2RD	9-13	.025″	G	2.41	1.85	1.64	1.44	1.33	1.29
5-0498	BRD2-70-1S	BZ-2RD-1A	9-13	.025″	G	2.53	1.94	1.72	1.51	1.40	1.36
5-0457	*BRD2-1P	BZ-2RQ1	9-13	.025″	H	4.18	3.20	2.84	2.49	2.31	2.24
5-0458	BRD2-1P-1S	BZ-2RQ1-A2	9-13	.025″	H	4.30	3.29	2.92	2.56	2.37	2.30
5-0463	*BRD2-10	BZ-2RS	9-13	.025″	J	2.41	1.85	1.64	1.44	1.33	1.29
5-0461	BRD2-10-1S	BZ-2RS-A2	9-13	.025″	J	2.53	1.94	1.72	1.51	1.40	1.36
5-0372	*BRD2-LW8	BZ-2RW	2½	.406″	K	2.35	1.80	1.60	1.40	1.30	1.26
5-0374	BRD2-LW8-1S	BZ-2RW-A2	2½	.406″	K	2.53	1.94	1.72	1.51	1.40	1.36
5-0389	*BRD2-LW228	BZ-2RW22	6	.140″	L	3.06	2.34	2.08	1.82	1.69	1.64
5-0391	BRD2-LW228-1S	BZ-2RW22-A2	6	.140″	L	3.12	2.39	2.12	1.86	1.72	1.67

HEAVY-DUTY TYPES

ated at 21 amps, 120-240-480 volts AC; 1 hp at 120 volts AC and 2 hp at 240 VAC. Screw term.

5-1215	FAD2-1A-1S	BA-2R-A2	10-18	1/20″	D	2.00	1.53	1.36	1.19	1.11	1.07
5-1240	FAD2-5L-1S	BA-2RL-A2	9	1/32″	F	2.35	1.80	1.60	1.40	1.30	1.26
5-1225	FAD2-2M-1S	BA-2RL2-A2	9	1/32″	E	2.94	2.25	2.00	1.75	1.63	1.58
5-1229	FAD2-1P-1S	BA-2RQ1-A2	10-18	1/20″	H	4.30	3.29	2.92	2.56	2.37	2.30
5-1202	FAD2-LV-1S	BA-2RV-A2	2½	5/8″	K	2.53	1.94	1.72	1.51	1.40	1.36
5-1204	FAD2-LV2-1S	BA-2RV2-A2	2½	15/32″	L	3.18	2.43	2.16	1.89	1.76	1.70
5-1234	FAD2-40-1S	BA-2RB-A2	10-18	1/20″	G	2.53	1.94	1.72	1.51	1.40	1.36

SUBMINIATURE TYPES

Contacts rated at 5 amps, 120 and 240 volts AC. †Indicates double gang switch. Post solder term.

5-5324	ZD-0024	1SM1	3-5	.008-.020″	M	1.39	1.06	.95	.83	.77	.75
5-5336	ZLD-0036	111-SM1-T	2	.094″	N	1.93	1.48	1.31	1.15	1.07	1.03
5-5337	ZLD-0037	111-SM2-T	2	.094″	P	2.33	1.78	1.58	1.39	1.29	1.25
5-5388	†ZPD-0088	.....	20	.070″	R	7.65	5.85	5.20	4.55	4.23	4.10

MINIATURE LIGHT-PRESSURE SWITCHES

For a wide variety of applications. All are shock-esistant and constructed for long-life perform- nce. "M" types rated 10 amps, 125-250 VAC. "CM" types rated 3 amps, 250 VAC. All are SPDT. Operating forces are in ounces except ‡grams. Solder term.

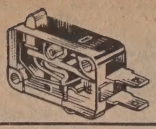
Stock No.	Mfr's Type	Actuator Type	Oper. Force	Pre-Travel	Fig.	EACH 1-9	10-19	20-49	50-99	100-199	200-Up
05-5701	1MD1-1A	Pin plunger	6	1/32″	S	1.56	1.19	1.06	.92	.86	.83
05-5710	2MD3-1A	Pin plunger	10	1/32″	S	1.56	1.19	1.06	.92	.86	.83
05-5702	1MD1-1A-A18M	Roller	2	5/32″	X	2.26	1.73	1.54	1.34	1.25	1.21
05-5703	1MD1-1A-A18	Flat leaf	2	5/32″	W	2.03	1.55	1.38	1.20	1.12	1.08
05-5500	1CMD1-2AXX	Pin plunger	‡20-27	3/64″	S	1.56	1.19	1.06	.92	.86	.83
05-5505	2CMD1-2AXX	Pin plunger	‡33-44	3/64″	S	1.56	1.19	1.06	.92	.86	.83
05-5519	3CMD1-2AXX	Pin plunger	‡45-60	3/64″	S	1.56	1.19	1.06	.92	.86	.83
05-5502	1CMD1-2AXX-A22	Wire leaf	‡2.5	.....	T	1.92	1.47	1.30	1.14	1.06	1.03
05-5507	2CMD1-2AXX-A24	Flat leaf	‡4	.....	W	1.92	1.47	1.30	1.14	1.06	1.03
05-5501	1CMD1-1AXX-A23M	Roller leaf	5-8	3/64″	X	1.92	1.47	1.30	1.14	1.06	1.03
05-5504	1CMD1-18AXX-A27	Nylon leaf	‡6	.....	W	1.82	1.40	1.24	1.09	1.01	.98

SNAP-ACTION PUSHBUTTON SWITCHES

Panel-mounting, momentary contact switches. All re overtravel plunger type. Solder lug terminals. Type QPD-5031 is SPDT; min. overtravel, .125″. Rated 10 amps, 125-250 VAC. Types 3DO5-5P, 3DC5-5P compact SPST switches rated 6 amps, 250 VAC; 12 amps, 125 VAC. Min. overtravel, .007″. Type 3DO5-5P is N.O., (has black button), 3DC5-5P is N.C. (red button).

Stock No.	Mfr's Type	Fig.	Oper. Force	Pre-Travel	Size H x Dia.	EACH 1-9	10-19	20-49	50-99	100-199	200-Up
05-3450	QPD-5031	Z	8 oz.	.050″	1 5/64x 23/32″	3.82	2.93	2.60	2.28	2.11	2.05
05-5811	3DO5-5P	Y	10-15 oz.	.10″	1 37/64x 1 5/16″	2.20	1.68	1.50	1.31	1.22	1.18
05-5805	3DC5-5P	Y	10-15 oz.	.03-.06″	1 37/64x 1 5/16″	2.20	1.68	1.50	1.31	1.22	1.18

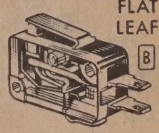
Robertshaw



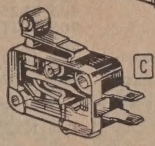
PIN PLUNGER A

FLAT LEAF

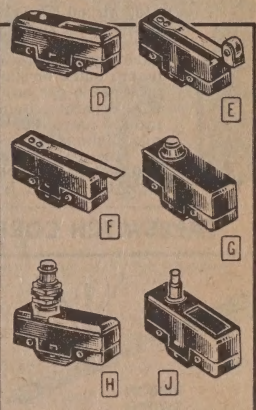
Mechanical Life Up to 10,000,000 Operations!



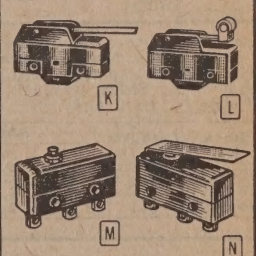
B



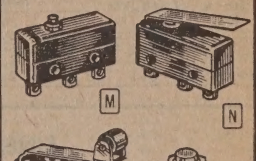
C ROLLER LEAF



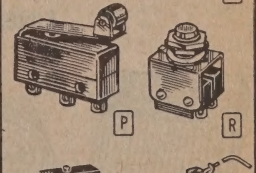
D E F G H J



K L

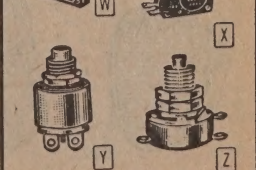


M N

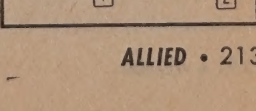


P R

S T



W X



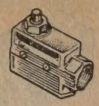
Y Z

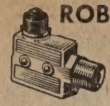
Switches—Snap, Fuseholder, Foot and Mat Types

ROBERTSHAW MODEL B SPLIT HOUSING METAL-CASE SWITCHE

2PN2

8PQ2


THREADED INTERNAL


MOUNTS EXTERNAL

2PN4

8PR

All types shown Are SPDT Action

SPDT snap-action switches. Bottom enclosure removable for wiring. Liner sea split housing and insulates bottom enclosure. SBH types are internally thread housing; SBHT type has externally threaded housing. Contacts rated 15 amp 120-240-480 VAC. Screw terminals. Side-mounting—two 6-32x1½" screws a washers. Size (less actuator), 1¾x3⅜x1". U. L. Component Program-Recognize C. S. A. Listed. *Operating force in ounces. †Height with actuator. 8 oz.

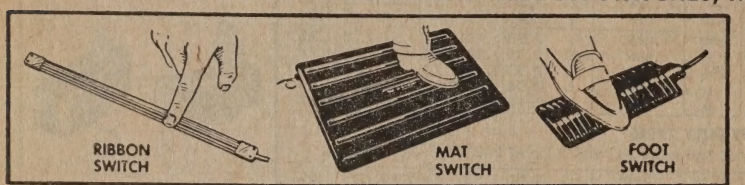
Stock No.	Mfr's Type	Micro Equivalent	Actuator Type	*Oper. Force	Pre-Travel	† Height	EACH 1-9	10-19	20-49	50-99	100-199	200 Up
905-3827	SBH2-7PN	BZE6-2RN	Sealed plunger	9-24	.078"	2 23/32"	7.70	5.90	5.24	4.59	4.25	4.1
905-3813	SBH2-2PN4	BZE6-2RN4	Sealed manual	10-20	.188"	3 11/32"	11.95	9.14	8.12	7.11	6.60	6.3
905-3825	SBH2-6PQ	BZE6-2RQ	Plunger	9-13	.020"	1½"	6.05	4.64	4.12	3.61	3.35	3.2
905-3831	SBH2-8PR	BZE6-2RQ8	Roller plunger	9-13	.020"	1 15/16"	10.25	7.83	6.96	6.09	5.66	5.4
905-3829	SBH2-8PQ2	BZE6-2RQ2	Adj. roller	10-18	.188"	2 9/16"	10.25	7.83	6.96	6.09	5.66	5.4
905-3811	SBH2-2PN2	.....	Seal adj. roll	10-20	.188"	3 11/32"	11.60	8.85	7.86	6.90	6.40	6.2
905-3803	SBHT2-2PN2	.....	Seal adj. roll	10-20	.188"	3 11/32"	11.90	9.09	8.08	7.07	6.57	6.3

ROWAN FC FUSEHOLDER, SWITCH AND PILOT LIGHT

115-volt, 60-Hz AC fuseholder, switch, and pilot light. Saves panel space, installation time and cost. Fully sintered silver-cadmium-oxide main-switch contacts have high arc resistance and extremely long life. Takes 6-amp quick or slow-lag 3AG fuse. Unit life: 50,000 cycles at 6 per minute. Use with Fast-on terminals. FCA: Separate circuits for main and pilot light. Main rated 6 amps. FCB: Same as FCA except one side of pilot light is common with main circuit. Mounts in ½" hole with two nuts. Suffix F—Plain Ferrule; K—Knurled Ferrule; N—Knurled Nut; W—Escutcheon requiring ¾" dia. hole. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	EACH 1-9	10-99	100-499	500-999	1000-Up
909-8035	FCA-F	4.70	3.60	3.20	2.60	2.40
909-8039	FCA-K	4.70	3.60	3.20	2.60	2.40
909-8042	FCA-N	4.70	3.60	3.20	2.60	2.40
909-8057	FCA-W	4.88	3.75	3.35	2.75	2.55
909-8065	FCB-F	4.70	3.60	3.20	2.60	2.40
909-8069	FCB-K	4.70	3.60	3.20	2.60	2.40
909-8072	FCB-N	4.70	3.60	3.20	2.60	2.40
909-8087	FCB-W	4.88	3.75	3.35	2.75	2.55

TAPESWITCH CORP. "CONTROFLEX" RIBBON SWITCHES, MATS AND FOOT SWITCHES



Type 131-A Controflex Wired Ribbon Switches. 40 oz. sensitivity. Normally open, momentary contact. 1 amp at 117 VAC/28 VDC. Ready to use. Sleeve terminals, 18" lead. ¾" wide, 3/16" thick. Gray.

Stock No.	Lgth. Ft.	Wt., Oz.	EACH 1	2-9	10-Up
959-0550	1	3	3.42	2.32	2.21
959-0551	2	4	4.70	3.20	3.04
959-0552	5	7	8.60	5.84	5.55

Type 121BP Sensitive Ribbon Switch. For highly sensitive alarm and control applications. Same as switches at left, but 8-oz. pressure closes circuit. 1 amp at 117 VAC/24 VDC. Sealed units have 18-inch leads. 9/16" wide, 5/32" thick. Green.

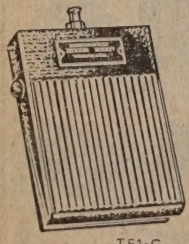
Stock No.	Lgth. Ft.	Wt., Oz.	EACH 1	2-9	10-Up
959-0505	1	3	3.42	2.32	2.21
959-0506	2	4	4.70	3.20	3.04

Type CVP 1723 Flexible Area Switching Ma Controflex elements spaced on 2¾" center Water-resistant vinyl. "Mylar" insulatio Overlay with masonite, carpeting or us exposed. Actuated by 5 lbs. pressure. 17 23x3½" thick. For 24 V circuits. 1¾ lb 959 X0510.....Each 14.1 2-9.....Each 9.60 10-Up.....Each 9.1

Type 111 100-Watt Foot Switch. Contro flex ribbon switches (momentary, normall open) sealed in weatherproof molded fla pad. 2x5x¼" thick; can be taped or cement ed to floor. With 6-ft. U.L. lead. 8 oz. 959-0540.....Each 4.4 2-9.....Each 3.04 10-Up.....Each 2.8

Type TS-1 Chime-Mat Annunciator Kit. (No illus.) Entrance signal system for store offices, plants, shops. Includes mat, dual note chime, transformer, wire and instruc tions. Mat is 17x23x3½" thick. 4½ lb 959 X 0520.....Each 33.7 2-9.....Each 22.95 10-Up....Each 20.6

LINEMASTER FOOT SWITCHES FREE HANDS FOR WORK


T51-S

491

632

L-2-S

Foot switches provide convenient switching operations when hands are occupied.

Model 491-S "Compact." SPDT 10-ampere. 125-volt AC contacts. Steel housing, black crackle finish. Skidproof base.

Model 491-SC. Above, 6-ft. cord plus 2-prong series plug. 491-SC3. 8-ft. cord and grounded plug.

Model 632-S. "Clipper." SPDT contacts rated 20 amps at 125-250 VAC. Cast iron housing has rubber anti-skid pad.

Model T-51-S. "Treadlite." For low-current loads. SPDT. 7 amps. 110-250 VAC. Rubber treading and skid-proof rubber base pad.

T51-SC. Wired. Above, 6-ft. cord, 2-prong series plug. T51-SC3. 6' cord, grounded plug.

Model 632-D. Same as Model 632-S, above, but maintains contact until again actuated.

Model L-2S "Lektro-Lok." Switch has 15-amp. 125-VAC contacts on each side. Mechanical interlock, steel housing. On-off switching from foot pressure.

Stock No.	Mfr's Type	Description	Size	Wt., Lbs.	EACH 1-9	10-19	20-49	50-Up
849-6658	T51-S	Momentary cont.	3½x2⅝x1"	½	3.24	2.47	2.20	2.06
849-6659	T51-SC	Above, 6' cord	3½x2⅝x1"	1	4.70	3.60	3.20	3.00
849-6660	T51-SC3	Above, 6' cord	3½x2⅝x1"	1½	5.89	4.50	4.00	3.75
849-6680	491-S	Momentary cont.	2⅞x2½x1⅛"	½	3.82	2.92	2.60	2.44
849-6681	491-SC	Above, 6' cord	2⅞x2½x1⅛"	1¼	5.89	4.50	4.00	3.75
849-6682	491-SC3	Above, 8' cord	2⅞x2½x1⅛"	1½	6.88	5.27	4.68	4.39
849-6690	632-S	Momentary cont.	4½x3½x1½"	2	9.72	7.42	6.60	6.19
849-6691	632-D	Maintains cont.	4½x3½x1½"	2½	12.95	9.90	8.80	8.25
849-6634	L-2S	Two-way	5x2½x1⅛"	1	6.83	5.22	4.64	4.35

Industrial Counters

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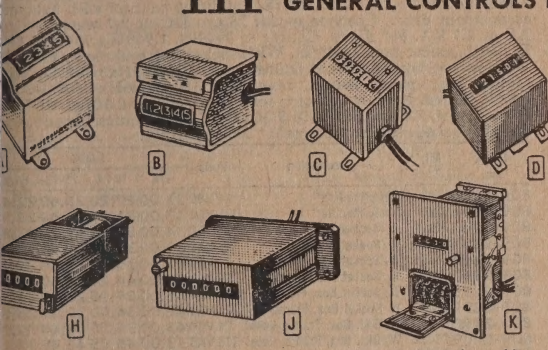
ITT GENERAL CONTROLS INC. ELECTRICAL COUNTERS



l counters for use in 60 Hz operation. Available in either base (A Type No.) or panel mount (B in Type No.) types.

EFIX "CE40." For coin equipment and moderate-duty industrial plications. Minimum make-time .050 second, break time .050 cond. Rated at 600 cpm. Enclosed in tamperproof case. Reset units unt to 4 digits, non-reset to 5. Shpg. wt., 1 lb.

EFIX "CE47." For built-in applications on lab and industrial uipment, with high speed and accuracy. Pushbutton reset except E47BE402, electric reset. CE47AP402 is base mount; others panel ount. Counts 4 digits at 1200 cpm, 30-million count life. 1 lb.

EFIX "CE50." Nonreset electric counter. Counts to 99,999 (at 600 pm) and repeats. Minimum life of 1,000,000 counts. AN, base; BN, anel mounting. Aluminum tamperproof enclosure. Operating emperatures, 0°F to 160°F. *U.L. Recog. 120 VAC. 5 oz.

EFIX "CE59." Pushbutton reset, for 3 or 4 digits. Suffix "302" dicates 3-digit; "402," 4-digit. Rated 1000 cpm, 10-million count fe. CE59AP, base mount; CE59BP, panel mount. Wt., 6 oz.

EFIX "CE60." Non-reset type for use at temperatures from —40° F) +160° F. Rated at 600 cpm, 1-million count life minimum. E60AN is base mount; CE60BN is panel mount. Shpg. wt., 8 oz.

EFIX "CE61." Fast pushbutton reset type counts to 6 digits. ated 1000 cpm, 10-million count life. CE61AP602 is base mount. E61BP602 is panel mounting. Shpg. wt., 1½ lbs.

EFIX "CE62." Predetermined output actuates switch when counter eaches preset number. Reset by button or electric pulse. Button pens door to expose easily-set wheels. Panel mount. CE62BP402 as pushbutton reset; CE62BE402 has electric reset with 0.30 econd min. pulse. Rated at 900 cpm, 20-million count life. Counts o 4 digits. Shpg. wt., 2½ lbs.

EFIX "CE600." For general industrial applications. Minimum make nd break time, .030 second. Enclosed in dust-resistant housing. ated at 1000 cpm, with 50-million count life. Continuous-duty oils. Counts to 6 digits. Shpg. wt., 1 lb.

EFIX "CE800." Heavy-duty, with 200-million count life. For drill nd punch presses, etc. Minimum make and break time is .030 sec-nd. Die-cast aluminum housing. Dustproof and tamperproof. ated at 1000 counts per minute. Continuous duty coils. 5 lbs.

EFIX "CE900." 6-digit, continuous-duty industrial quality. 1200 pm with 100 million count life. Minimum make and break time, .25 sec. 5 watts power. Shpg. wt. 1 lb.

NON-RESET TYPES *Imported

Stock No.	Mfr's Type	Fig.	AC Volts	EACH 1-9	10-24	25-49	50-99	100-Up
320-0026	CE40AN502	A	120	7.75	6.59	6.20	5.81	5.43
320-0034	CE40BN502	B	120	8.35	7.10	6.68	6.26	5.85
320-0042	CE50AN502U*	C	120	4.50	3.83	3.60	3.38	3.15
320-0044	CE50BN502U*	C	120	4.50	3.83	3.60	3.38	3.15
320-0054	CE60AN601	D	24	8.25	7.01	6.60	6.19	5.78
320-0056	CE60AN602	D	120	8.25	7.01	6.60	6.19	5.78
320-0058	CE60BN601	D	24	8.75	7.44	7.00	6.56	6.13
320-0060	CE60BN602	D	120	8.75	7.44	7.00	6.56	6.13

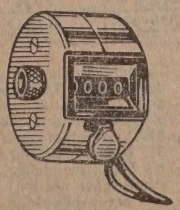
SIZE CHART

Fig.	Size	Mount Type and Mtg. Centers
A & E	2.484x1.719x1.563"	Base—1.125x1.937"
B	1.562x1.719x2.422"	Panel—.812x640"
C	2.675x1.350x1.563"	Base—1.125x1.750"; Panel—1.563x2.675"
D	2.500x1.530x1.742"	Base—1.860x1.125"; Panel—.781x.351"
F	1.937x2.812x2.422"	Panel—1.562x2.437"
G	2.756x3.150x2.283"	Base—1.890x1.181"; Panel—2.362x.709"
H	0.877x3.598x1.043"	Base—.590x.709"
H	1.535x3.878x1.576"	Panel—1.259x.689"
J	1.181x2.992x3.188"	Base—2.795x.787"; Panel—2.992x1.181"
K	3.780x2.500x2.913"	Panel—3.307x2.441"
L	2.500x1.656x3.500"	Base—3.234x1.359"
M	2.812x1.875x4.437"	Panels—4.063x1.500"
N	3.125x5.625x4.687"	Base—5.250x2.500"

RESET TYPES *Imported

Stock No.	Mfr's Type	Fig.	AC Volts	EACH 1-9	10-24	25-49	50-99	100-Up
820-0028	CE40AS402	E	120	15.25	12.96	12.20	11.44	10.67
820-0030	CE40BS401	F	24	15.95	13.56	12.76	11.96	11.17
820-0032	CE40BS402	F	120	15.95	13.56	12.76	11.96	11.17
820-0036	CE47AP402*	G	120	22.00	18.70	17.60	16.50	15.40
820-0040	CE47BP402*	G	120	22.00	18.70	17.60	16.50	15.40
820-0038	CE47BE402*	G	120	41.00	34.85	32.80	30.75	28.70
820-0046	CE59AP302*	H	120	14.95	12.71	11.96	11.21	10.47
820-0048	CE59AP402*	H	120	16.75	14.24	13.40	12.56	11.73
820-0050	CE59BP302*	H	120	14.95	12.71	11.96	11.21	10.47
820-0052	CE59BP402*	H	120	16.75	14.24	13.40	12.56	11.73
820-0063	CE61AP602*	J	120	25.50	21.68	20.40	19.13	17.85
820-0064	CE61BP602*	J	120	26.50	22.53	21.20	19.88	18.55
820-0068	CE62BP402*	K	120	57.70	49.05	46.16	43.28	40.39
820-0066	CE62BE402*	K	120	73.00	62.05	58.40	54.75	51.10
820-0070	CE900CS601	L	24	20.75	17.64	16.60	15.56	14.53
820-0072	CE900CS602	L	120	20.75	17.64	16.60	15.56	14.53
820-0074	CE600BS601	M	24	23.00	19.55	18.40	17.25	16.10
820-0076	CE900BS602	M	120	23.00	19.55	18.40	17.25	16.10
820-0078	CE800CS602	N	120	50.00	42.50	40.00	37.50	35.00

MICRONTA HAND TALLY 4-DIGIT COUNTER



This handy little gadget has hundreds of uses. Fits in the palm of your hand. Fast pushbutton knob reset prevents inconvenient delays. Accurately counts from 0 to 9999. Comes in a very attractive polished chrome steel case, resists perspiration stains and corrosion. Easy to read at a quick glance. Overall measurement: 1⅞x1⅝".

63-835. Shpg. wt. ¼ lb. 2.99

*Recognized Under the Component Program of Underwriter's Laboratories, Inc.

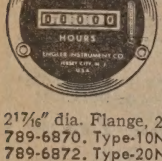
Counters, Timers and Stopclocks

ALLIED'S OWN RESET COUNTERS

Available in Choice of Ratchet or Hand-Operated Models

These precision-crafted Allied counters are designed for years of trouble-free performance. The ratchet type counter is ideal for use with production machines, vending machines, etc., where minimum space is required. Hand-operated types are extremely useful in assembly-line parts counting, inventory uses, etc. Ratchet counter has five-digit capacity, black case. Maximum count speed of 500 per minute. Size, 1½x2 1/2x 1¼". Desk tally hand-operated counter has 4 digit capacity, chrome plated case. Size, 2½x1¾x2⅛". Both ratchet and hand-operated types have reset feature. Order below.

Stock No.	Mfr's Type	Description	EACH				
			1-9	10-24	25-49	50-99	100-Up
706-0055	0055	5 digit ratchet	4.50	4.05	3.64	3.27	3.05
706-0050	0050	4 digit desk tally	3.95	3.50	3.20	3.00	2.94

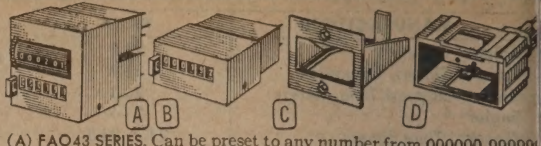


ENGLER SERIES 200 AC HOUR METERS

Registers to 99,999, plus tenths of an hour. Accuracy, 1% of elapsed time. Synchronous motor. Temperature, −65°F to +165°F. Counter drums have 3/16" high figures. Hours, white on black; tenths, black on white. Dielectric strength, 1000 VDC. Insulation resistance, 100 megohms at 100 V ±10%. Rated voltage input, 10%; rated frequency input, 5%. UL approved. Lexan case. Universal bolt circle fits 2 1 7/32, 2 1 7/16" dia. Flange, 2 2 3/32". Wt. ½ lb.

789-6870. Type-10N-G7 115VAC, 60 Hz. 1-4. 10.50 5-Up. 9.95
789-6872. Type-20N-G7 230VAC, 60 Hz. 1-4. 11.50 5-Up. 10.95

HECON PRECISION MODULAR ELECTROMAGNET COUNTER



(A) FA043 SERIES. Can be preset to any number from 000000-99999 triggers built-in SPDT switch when desired number is attained 5/32" digits. Counter speed: 25 cps DC at 3.7 watts; 16 cps AC at 3 VA. Manual reset. Switch handles 125 VDC, 250 VAC at 1 Amp 1.969 Wx1.969Hx3.150" D. With socket box, 3.642"D. With socket box and reset 4.685"D. With socket box and panel frame, 2.362W 2.953Hx3.465"D. With socket box, panel frame and reset, 2.362W 2.953Hx4.508"D. (B) FO43 SERIES. Totalizing counter with balanced escapement drive. Counter speed: 25 cps DC at 2.7 watts; 16 cps AC at 2.7 VA. 5/32" digits. Counts to 999999. 1.969Wx.984Hx3.150 D. With socket box, 3.642"D. With socket box and reset, 4.685"D With socket box and panel frame, 2.362Wx1.969Hx3.465"D. With socket box, panel frame, reset, 2.362Wx1.696Hx4.508"D. (C PANEL FRAME. Requires cutout: for FA043 Series, 2.107x2.107"; for FO43 Series, 2.126x1.181". (D) SOCKET BOX. For quick plug-in. Can be interlocked. Solder terminals.* Manual reset.

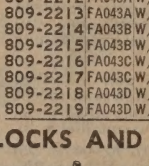
Stock No.	Mfr's Type	Description	Volts	EACH			
				1-9	10-24	25-49	50-U
809-2200	F043	Basic Module*	24 VDC	32.00	27.20	25.60	22.4
809-2201	F043	Basic Module*	115 VAC	37.00	31.45	29.60	25.9
809-2202	F043A	W/Socket Box*	24 VDC	34.00	28.90	27.20	23.8
809-2203	F043A	W/Socket Box*	115 VAC	39.00	33.15	31.20	27.3
809-2204	F043B	W/Socket Box, Reset	24 VDC	42.00	35.70	33.60	29.4
809-2205	F043B	W/Socket Box, Reset	115 VAC	52.00	44.20	41.60	36.4
809-2206	F043C	W/Socket Box, Frame*	24 VDC	35.00	29.75	28.00	24.5
809-2207	F043C	W Socket Box, Frame*	115 VAC	40.00	34.00	32.00	28.0
809-2208	F043D	W/Skt. Box, Frame, Reset	24 VDC	43.00	36.55	34.40	30.1
809-2209	F043D	W/Skt. Box, Frame, Reset	115 VAC	53.00	45.05	42.40	37.1
809-2210	FA043	Basic Module*	24 VDC	55.00	46.75	44.00	38.5
809-2211	FA043	Basic Module*	115 VAC	59.00	50.15	47.20	41.3
809-2212	FA043A	W/Socket Box*	24 VDC	59.00	50.15	47.20	41.3
809-2213	FA043A	W/Socket Box*	115 VAC	63.00	53.55	50.40	44.1
809-2214	FA043B	W/Socket Box, Reset	24 VDC	67.00	56.95	53.60	46.9
809-2215	FA043B	W/Socket Box, Reset	115 VAC	76.00	64.60	60.80	53.2
809-2216	FA043C	W/Socket Box, Frame*	24 VDC	61.00	51.85	48.80	42.7
809-2217	FA043C	W/Socket Box, Frame*	115 VAC	65.00	55.25	52.00	45.5
809-2218	FA043D	W/Skt. Box, Reset, Frame	24 VDC	69.00	58.65	55.20	48.3
809-2219	FA043D	W/Skt. Box, Reset, Frame	115 VAC	78.00	66.30	62.40	54.6

ENGLER TIMERS, STOP CLOCKS AND COUNTERS

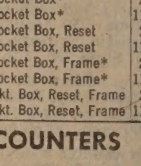
ELECTRIC STOP CLOCK

Timer (for 115-volt AC) totalizes and gives split second registering of elapsed time. Instantaneous start-stop feather-touch push button. Immediately resettable. Heavy-duty metal cased instrument never needs servicing. Model CS60 reads in seconds and tenths, Model CS24 in minutes and hundreds. Specify model desired.

789-6730. Model CS60. 789-6720. Model CS24.
1-9.....Ea. 40.00 10-24.....Ea. 30.50 25-49.....Ea. 28.50
50-99.....Ea. 27.00 100-149.....Ea. 25.00 150-Up.....Ea. 22.50

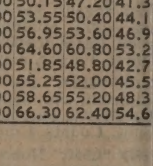


STOP CLOCK



FLUSH MOUNT

"SOS" STD. MTG.



ELAPSED-TIME METERS

Large numeral dial readout. No overruns. Ideal on mobile equipment where mileage does not give adequate maintenance data. Withstands shock, vibration and temperature environment. Sealed to meet MIL specs. Case dia. 2.135". 110 V, 60 Hz AC. 440-550 V, 60 Hz AC units available on Special Order. Av. wt. 1 lb.

Standard Mtg.	AC METERS				Flush Mtg.	
Stock No.	Mfr's Type	Minimum Reading	Maximum Reading	Reset	Stock No.	Mfr's Type
789-6825	10NL2	1/10 hr.	10,000 hrs.	Non	789-6824	10NL0
789-6821	10FL2	1/10 hr.	10,000 hrs.	Front	789-6820	10FL0
789-6841	13FL2	1/10 min.	10,000 min.	Front	789-6840	13FL0
789-6829	10SL2	1/10 hr.	10,000 hrs.	Side	789-6828	10SL0

NON-RESET. 1-9...Ea. 17.00 10-24...Ea. 15.30 25-49...Ea. 14.50
50-99.....Ea. 13.70 100-149.....Ea. 12.75 150-Up.....Ea. 9.35
RESET. 1-9....Ea. 24.00 10-24....Ea. 21.60 25-49....Ea. 20.40
50-99....Ea. 19.20 100-149....Ea. 18.00 150-Up....Ea. 13.20

Standard Mtg.	DC METERS (1/10,000 HRS.)				Flush Mtg.
Stock No.	Type	Volts	Reset	Stock No.	Type
789-6740	J12NG	12	Non	789-6741	J12NO

STANDARD MOUNTING DC METERS (Cont'd)

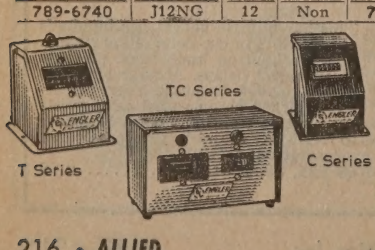
NON-RESET. 1-9.....Ea. 20.75 10-24.....Ea. 18.70
25-49. Ea. 17.70 50-99. Ea. 16.65 100-149. Ea. 15.15 150-Up. Ea. 11.40
RESET. 1-4.....Ea. 28.00 5-9.....Ea. 26.60 10-24.....Ea. 25.20
789-6739. Mounting Bracket.....1.10

"S-O-S" HOUR METERS

"Service-on-Signal" hour meters can be programmed at machine, or set up easily for remote control operation. Meters light up when maintenance is due. All have metal case; standard 3-hole 2 1 3/32 diameter bolt circle. Shpg. wt. 12 oz. NOTE: Available preset from 10 90 hours (in 10 hour increments); and from 100-1000 hours (in 100 hour increments): Specify.

Stock No.	Mfr's Type	Range in Hours	Volts	EACH	
				1-9	10-Up
789C6752	SOS10N-L2	10-90	115 VAC	36.50	32.75
789C6753	SOS10N-L2	100-1000	115 VAC	36.50	32.75
789C6756	SOSJ12N-2	10-90	12 VDC	39.50	35.50
789C6757	SOSJ12N-2	100-1000	12 VDC	39.50	35.50
789C6768	SOSJ24N-2	10-90	24 VDC	39.50	35.50
789C6769	SOSJ24N-2	100-1000	24 VDC	39.50	35.50

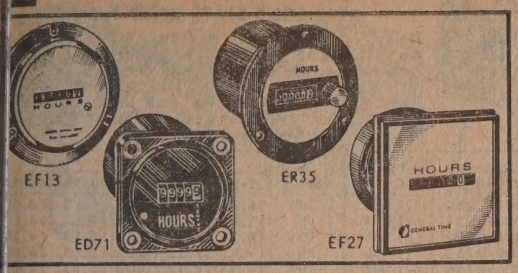
MC SERIES MASTER CONTROLLERS



Model 1T has built-in time delay. Model 3T meter without time delay. Model 3C counter designed for high speed operation—up to 2400 cpm. Model 1TC, combination of meter 1T and counter 3C, simultaneously records elapsed time and counts-per-minute. Model 3TC, combination of meter 3T and counter 3C, operates similar to Model 1TC, but has no DC time delay relay. All meters and counter for use with 110 VAC. All time meters are available in 1/10 hr. and 1/100 hr. increments; specify when ordering. 1T, 3T 3C 4 lbs.; 1TC and 3TC 8 lbs.

Stock No.	Mfr's Type	EACH		
		1-9	10-24	25-Up
789-6800	1T	57.00	54.00	51.25
789-6804	3T	29.50	28.00	26.50
789-6803	3C	100.00	95.00	90.00
789-6801	1TC	146.00	138.50	131.00
789-6805	3TC	120.00	114.00	108.00

GENERAL TIME Timers and Elapsed Time Indicators



ELAPSED TIME INDICATORS

le variety of meters for use where accurate time readings are ired. All are synchronous-motor driven. Round, square bezel, el mount and rear mount available. Resetable or non-resetable, dout is digital with a range of five figures plus tenths; in hrs. tenths or minutes and tenths. All units 120 VAC, 60 Hz. rating temp., −12°C to +55°C, Registers hours, tenths, unless erwise noted. ■U.L. Recognized. NR types: non-reset; R: reset.

Model No.	Bezel	Depth	Dia. of Unit	Max. Motor Rating, W	Leads or Terminals
F13 NR	2 7/8" rd.	1 51/64"	2 17/64"	2.5	6" leads
F27 NR	2 3/8" sq.	1 23/32"	2.077"	5.0	6" leads
D71 NR	1 3/4" sq.	2 37/64"	1 17/32"	2.5	11 1/4" leads
D72 NR	1 3/4" sq.	2 37/64"	1 17/32"	2.5	Solder
N30 NR	3" sq.	3 5/16"	2 22/32"	3.7	8-32 studs
R30 R	3" sq.	3 5/16"	2 22/32"	3.7	8-32 studs
R35 R	3 1/2" rd.	3 5/16"	2 22/32"	3.7	8-32 studs
N35 NR	3 1/2" rd.	3 5/16"	2 22/32"	3.7	8-32 studs

120 VOLTS AC

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
00-0110	EF1333†	9.56	8.61	8.13	7.65	6.69
00-0112	EF1335	9.56	8.61	8.13	7.65	6.69
00-0118	EF2733†	11.26	10.24	9.57	9.01	7.88
00-0120	EF2735	11.26	10.24	9.57	9.01	7.88
00-0108	ED7112	22.31	20.08	18.97	17.85	15.62
00-0122	EN3010†	17.00	15.30	14.45	13.60	11.90
00-0124	EN-3012	17.00	15.30	14.45	13.60	11.90
00-0130	ER3020†	24.65	22.19	20.95	19.72	16.27
00-0132	ER3022	24.65	22.19	20.95	19.72	17.26
00-0134	ER3520†	24.65	22.19	20.95	19.72	17.26
00-0136	ER3522	24.65	22.19	20.95	19.72	17.26

240 VOLTS AC

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
00-0111	EF1333	10.41	9.37	8.85	8.33	7.81
00-0113	EF1335	10.41	9.37	8.85	8.33	7.81
00-0119	EF2733	12.11	10.90	10.30	9.69	9.08
00-0121	EF2735	12.11	10.90	10.30	9.69	9.08
00-0109	ED7112	23.16	20.85	19.69	18.53	17.37
00-0131	ER3020†	25.50	22.95	21.68	20.40	19.13
00-0125	EN3012	17.85	16.07	15.17	14.28	13.39
00-0133	ER3022	25.50	22.95	21.68	20.40	19.13
00-0135	ER3520†	25.50	22.95	21.68	20.40	19.13
00-0137	ER3522	25.50	22.95	21.68	20.40	10.13

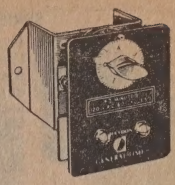
egisters minutes and tenths.

HERMETICALLY-SEALED MILITARY-TYPE INDICATOR

PE 7010-004. MS28053-5. Registers hours and ths up to 9,999.9. Synchronous hysteresis mo-. For operation from 115 VAC, 400 Hz. Oper-ng temp., −55°C to +85°C. 1 3/4" square bezel, /4" deep. Barrel dia., 1 1/2". 4 mounting holes on 6" ctrs. Shock: 50 g, 11 ms. Vibration to 1000 cles at 10 g. Dielectric strength, 500 v rms, 60 for one minute. Meets MIL-M-7793C and MIL-272C spec. MIL STD MS-28053-5 solder terminals. pg. wt., 3/4 lb.

Stock No.	EACH 1-9	10-24	25-49	50-99	100-Up
00-0385	37.40	33.66	31.79	29.92	28.05

TYPE DA TIME-DELAY TIMERS



TYPE DA1103. SPDT, 20-amp switch, 125 VAC or 250 VAC, resistive. For a wide variety of applications in electrical equipment control. Internal clutch—engages and disengages when motor is energized and de-energized. Convenient knob adjustment. Measures 3 3/8 x 2 11/16 x 3 1/8". ■U.L. Recognized. Type DA2100. Same as above unit, but has lock-nut adjustment. Shpg. wt. 1 1/2 lbs.

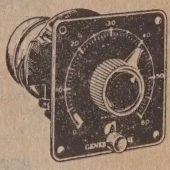
120 VOLTS AC

Stock No.	Type DA-	Time Range	EACH 1-9	10-24	25-49	50-99	100-Up
800-0050	11031	0-14 sec.	16.79	15.11	14.27	13.43	12.59
800-0052	11032	0-57 sec.	16.79	15.11	14.27	13.43	12.59
800-0054	11033	0-4.5 min.	16.79	15.11	14.27	13.43	12.59
800-0062	21001	0-14 sec.	16.79	15.11	14.27	13.43	12.59
800-0064	21002	0-57 sec.	16.79	15.11	14.27	13.43	12.59
800-0066	21003	0-4.5 min.	16.79	15.11	14.27	13.43	12.59
800-0068	21004	0-9.5 min.	16.79	15.11	14.27	13.43	12.59

240 VOLTS AC

800-0051	11031	0-14 sec.	17.64	15.87	14.99	14.11	13.23
800-0053	11032	0-57 sec.	17.64	15.87	14.99	14.11	13.23
800-0055	11033	0-4.5 min.	17.64	15.87	14.99	14.11	13.23
800-0063	21001	0-14 sec.	17.64	15.87	14.99	14.11	13.23
800-0067	21003	0-4.5 min.	17.64	15.87	14.99	14.11	13.23
800-0069	21004	0-9.5 min.	17.64	15.87	14.99	14.11	13.23

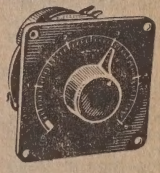
TYPE BJ12 PUSHBUTTON INTERVAL TIMER



Panel-mount pushbutton timer with read-out. For control of electrical equipment such as copying machines, mixers, ovens, tumbling, etc. Automatically resets to preset interval. SPDT 15-amp, 120 or 240-volt AC switch ■U.L. Recognized and C.S.A. Listed. Faceplate. 3 5/16 x 3 5/16". For 120 volts, 60 Hz AC. Specify time range: 15 sec., 30 sec., 60 sec., 5 min., or 1 hr. 1 1/2 lbs.

Stock No.	EACH 1-9	10-24	25-49	50-99	100-Up
800C0015	19.13	17.21	16.26	15.30	14.34

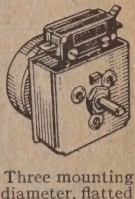
PANEL MOUNTING RESET TIMER



TYPE DP 11. Provides delay or interval timing. Timing motor has internal clutching mechanism. Time ranges set by external control knob. Available in ranges from 15 sec. to 5 min. Standard readout. SPDT snap-action switch rated 10 amps, 120 or 240 volt AC resistive switch. Installs with screw type terminals. Dial size, 3 5/16 x 3 5/16". Requires 3 3/32" behind dial. 120 V, 60 Hz. Specify time range: 15, 30, 60, 120 sec, or 5 min. 1 lb.

Stock No.	EACH 1-9	10-24	25-49	50-99	100-Up
800C0090	20.40	18.36	17.34	16.32	15.30

TYPE AB51 HANDSET INTERVAL TIMER



Hand set interval timer consisting of synchronous motor, appliance type SPDT switch and setting shaft with gearing. For appliances, amusement devices, vending machines, medical equipment, production machinery, battery charging equipment, other applications. Rotation of shaft energizes motor and load. Upon completion of cycle, load switch opens. Setting can be changed while motor is energized. Switch rated 25 A, 3/4 hp at 120 VAC. Motor rated 5 W, 60 Hz; 3.4 W, 50 Hz. Three mounting holes on .562 radius tapped 8-32. Setting shaft 1/4" diameter, flatted to 5/32" for 1/2". 3 15/16 x 2 1/2 x 2 3/8" behind panel. Less knob and dial. For 120 VAC. Specify time range: 1 minute, 15 minutes, 60 minutes, 120 minutes, 8 hours, 24 hours. ■U.L. Recognized. Shpg. wt., 3/4 lbs.

Stock No.	EACH 1-9	10-24	25-49	50-99	100-Up
800C0011	7.65	6.89	6.50	6.12	5.74

TYPE RG21 REPEATING-CYCLE TIMERS

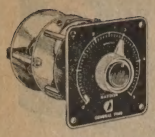
Repeat cycle timers are designed to run continuously, repeating a set cycle of make-break switching operations as long as the motor is energized. This unit may be applied to operations requiring only a single time cycle. Wireable through contacts for 1-cycle limit. Adjustable timing-cycle cam. SPDT, 20-amp switch. 5 or 250 VAC, resistive, 50-60 Hz. 1/4" shaft. 120 VAC. Size 3 1/4 x 6 x 2 9/32". ■U.L. Recognized. Shpg. wt., 1 lb.

Stock No.	Type RG-	Time Range	EACH 1-9	10-24	25-49	50-99	100-Up
800-0312	21093	1 min.	12.96	11.67	11.02	10.37	9.72
800-0313	21094	5 min.	12.96	11.67	11.02	10.37	9.72
800-0315	21096	15 min.	12.96	11.67	11.02	10.37	9.72
800-0316	21097	30 min.	12.96	11.67	11.02	10.37	9.72
800-0317	21098	60 min.	12.96	11.67	11.02	10.38	9.72

Recognized Under the Component Program of Underwriter's Laboratories, Inc.

Time Switches and Timers by General Time

SERIES BN ADJUSTABLE RESET TIMERS



Panel or rear mounting; interval or delay timing. Built-in relay, adjustable time range. Apply to all operations requiring a compact, dependable unit for direct control of electrical loads.

BN41 (INTERVAL) AND BN42 (DELAY) PANEL MOUNT. Dial and setting knob with readout of elapsed time by pointer in center of knob. SPDT relay rated 10 amps at 125 or 250 VAC. Timing motor rated 5 watts max. at 120 VAC, 60 Hz. Repeat accuracy, ±¾ of 1% of total time range. Screw terminal block, 3 5/16 sq. x 4⅜" behind panel. Requires 3⅜" diameter mounting hole. ■U.L. Recognized.

BN25 (INTERVAL) AND BN22 (DELAY) REAR MOUNT. Same specifications as BN41 and BN42 except have chassis or back panel mount. ■U.L. Recognized. Measures 3.375" width, x 4.202" height, x 3.750" depth.

PANEL MOUNTING (DELAY)

Stock No.	Mfr's Type	Time Setting Max.	Time Setting Min.	Maximum Reset Time	Dial Grades Major	Dial Grades Minor
800-0043	BN42-001	6 sec.	.3 sec.	.5 sec.	1 sec.	.1 sec.
800-0044	BN42-003	15 sec.	.8 sec.	1.0 sec.	1 sec.	.2 sec.
800-0045	BN42-004	30 sec.	1.5 sec.	1.5 sec.	5 sec.	.5 sec.
800-0046	BN42-005	60 sec.	3.0 sec.	1.5 sec.	10 sec.	1.0 sec.
800-0047	BN42-006	120 sec.	6.0 sec.	10 sec.	20 sec.	2.0 sec.
800-0048	BN42-007	5 min.	.2 min.	15 sec.	1 min.	.1 min.
800-0049	BN42-008	10 min.	.4 min.	120 sec.	1 min.	.2 min.

PANEL MOUNTING (INTERVAL)

Stock No.	Mfr's Type	Time Setting Max.	Time Setting Min.	Maximum Reset Time	Dial Grades Major	Dial Grades Minor
800-0034	BN41-001	6 sec.	.3 sec.	.5 sec.	1 sec.	.1 sec.
800-0036	BN41-003	15 sec.	.8 sec.	1.0 sec.	1 sec.	.2 sec.
800-0037	BN41-004	30 sec.	1.5 sec.	1.5 sec.	5 sec.	.5 sec.
800-0038	BN41-005	60 sec.	3.0 sec.	1.5 sec.	10 sec.	1.0 sec.
800-0039	BN41-006	120 sec.	6.0 sec.	10 sec.	20 sec.	2.0 sec.
800-0040	BN41-007	5 min.	.2 min.	15 sec.	1 min.	.1 min.
800-0041	BN41-008	10 min.	.4 min.	120 sec.	1 min.	.2 min.

REAR MOUNTING (DELAY)

Stock No.	Mfr's Type	Time Setting Max.	Time Setting Min.	Max. Reset Time	Dial Grade Major	Dial Grade Minor.
800-0023	BN22-006	5.4 sec.	.3 sec.	.5 sec.	1 sec.	.1 sec.
800-0018	BN22-001	13.5 sec.	.7 sec.	.5 sec.	1 sec.	.5 sec.
800-0019	BN22-002	54 sec.	3.0 sec.	1.5 sec.	5 sec.	1.0 sec.
800-0022	BN22-005	108 sec.	6.0 sec.	2.5 sec.	10 sec.	1.0 sec.
800-0020	BN22-003	4.5 min.	15 sec.	5.0 sec.	1 min.	5.0 sec.
800-0021	BN22-004	9.5 min.	30 sec.	120 sec.	1 min.	5.0 sec.

REAR MOUNTING (INTERVAL)

800-0031	BN25-006	5.4 sec.	.3 sec.	.5 sec.	1 sec.	.1 sec.
800-0026	BN25-001	13.5 sec.	.7 sec.	.5 sec.	1 sec.	.5 sec.
800-0027	BN25-002	54 sec.	3.0 sec.	1.5 sec.	5 sec.	1.0 sec.
800-0030	BN25-005	108 sec.	6.0 sec.	2.5 sec.	10 sec.	1.0 sec.
800-0028	BN25-003	4.5 min.	15 sec.	5.0 sec.	1 min.	5.0 sec.
800-0029	BN25-004	9.5 min.	30 sec.	120 sec.	1 min.	5.0 sec.

Mounting Type	NET EACH, LOTS OF 1-9	10-24	25-49	50-99	100-Up
Panel	28.69	25.82	24 38	22.95	21.52
Rear	23.80	21.42	20.23	19.04	17.85

QT21 SOLID-STATE RESET TIMERS

Delay, interval, repeat cycle use. SPDT relay amps. 125 VAC resistive. PC board; rear-mounti cadmium-plated frame. Repeat accuracy, ±2% set value. −10° to +55°C. Dial accuracy, ±10 Reset time, 130 mS max. ¼" male lugs, two 3/16x3/ slotted holes, 2⅞" ctrs. 117 V, 50-60 Hz. 1 *Specify Time Range and Type No.

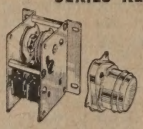
Stock No.	Type QT-	* (Sec.)	EACH 1-9	10-24	25-49	50-99	100-U
800-0250	21-003	3	18.91	17.02	16.08	15.13	14.1
800-0251	21-004	5	18.91	17.02	16.08	15.13	14.1
800-0252	21-005	10	18.91	17.02	16.08	15.13	14.1
800-0253	21-006	15	18.91	17.02	16.08	15.13	14.1
800-0254	21-007	30	18.91	17.02	16.08	15.13	14.1
800-0255	21-008	60	18.91	17.02	16.08	15.13	14.1

52 SOLID-STATE TIMERS

Plug-in timers with adjustable periods. DPDT contac 10 amps, 125 VAC resistive. Used as delay, relay en gizes at end of period; interval timing, relay energiz through time period, applies power to external loa Same specifications as QT21 types above. Octal plu 4⅜x3 3/16x2⅛". AC. Wt. 1 lb.

Stock No.	Type QT-	* (Sec.)	EACH 1-9	10-24	25-49	50-99	100-U
800-0260	52-003	3	20.61	18.55	17.52	16.49	15.4
800-0261	52-004	5	20.61	18.55	17.52	16.49	15.4
800-0262	52-005	10	20.61	18.55	17.52	16.49	15.4
800-0263	52-006	15	20.61	18.55	17.52	16.49	15.4
800-0264	52-007	30	20.61	18.55	17.52	16.49	15.4
800-0265	52-008	60	20.61	18.55	17.52	16.49	15.4

SERIES RE62 REPEAT CYCLE MULTI-CAM TIMERS



Same specifications as RG21 (page 217), exce 2 to 6 switches may be actuated during cyc Requires one motor, one or more switch stack Two-switch unit size, 2 5/16x3 5/32x3 3/16"; add 1 1/ to depth for each additional switch. U. Recognized. Specify switch stack, model numb drive motor type number, voltage and frequenc

SWITCH STACKS

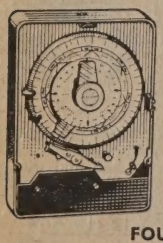
Stock No.	Mfr's Type	No. of Switches	EACH 1-9	10-24	25-49	50-99	100-U
800-0276	62-091	2	12.03	10.83	10.22	9.62	9.0
800-0278	63-092	3	16.06	14.66	13.66	12.85	12.0
800-0280	64-093	4	20.10	18.10	17.09	16.08	15.0
800-0282	65-094	5	24.56	22.11	20.88	19.65	18.4
800-0284	66-095	6	28.60	25.75	24.31	22.88	21.4

DRIVE MOTOR SPECIFICATIONS

Order one with switch stacks for complete unit. *Cam shaft spe for one revolution. Prices below.

Stock No.	Mfr's Type	Time Range (*)	Stock No.	Mfr's Type	Time Range (*
800-0150	MP10-390	7.5 sec.	800-0154	MP10-394	5 min.
800-0160	MP10-400	10 sec.	800-0155	MP10-395	10 min.
800-0151	MP10-391	15 sec.	800-0156	MP10-396	15 min.
800-0152	MP10-392	30 sec.	800-0157	MP10-397	30 min.
800-0153	MP10-393	1 min.	800-0158	MP10-398	60 min.
800-0161	MP10-401	2 min.	800-0159	MP10-399	4 hrs.

1-9	10-24	25-49	50-99	100-249
6.25	5.62	5.31	5.00	4.69



NEW! PARAGON 7-DAY PROGRAM CONTROL FOR COMPLETE TIMING USES

- Camera Surveillance Systems
- Security Systems
- Closed Circuit TV
- Many Other Applications

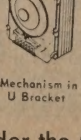
Newly developed programmer, exclusively built and specially de signed for security systems. 7-day dial allows automatic "ON-OFF operation at different hours each day of the week if desired. Pe fect for applications in plants, offices, banks, for camera survei lance systems, security systems, closed circuit TV and all associate uses. Timer cuts down on high costs resulting from continuous running video tape. Any day or days of the week can be omitte without disrupting the weekly schedule. Specially engineere vernier dial arrangement provides high accuracy time setting "ON" settings can be set as short as one hour. Available in fou different mountings: mechanism in steel case; mechanism in flus case; mechanism in U bracket. Switch capacity, 5 amps. Pilot duty 125 VA. Timing motor, 120 V, 60 Hz AC.

FOUR DIFFERENT MOUNTINGS

Mechanism in Steel Case

Mechanism Only—Panel Mount

Mechanism in Flush Case

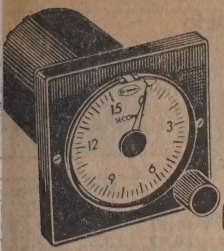


Mechanism in U Bracket

Stock No.	Mfr's Type	Description	EACH 1-9	10-U
882-0065	27000-1	Indoor Type Case	65.30	52.5
882-0125	27001-0M	Movement Only, for Panel Mount	64.00	51.5
882-0134	27031-0	Flush Mounted Case	86.50	69.5
882-0122	27001-0B	Bracket Mounted	65.30	52.5

■Recognized Under the Component Program of Underwriter's Laboratories Inc

Cramer Timers and Elapsed Time Indicators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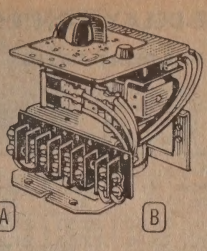
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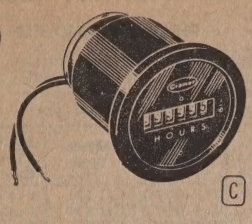
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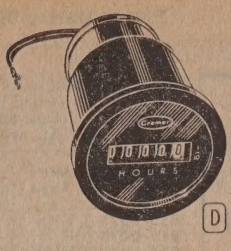
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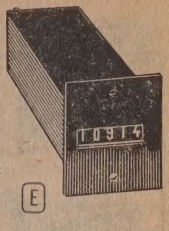

E

A MODEL 400S PLUG-IN RESET TIMERS. Setting pointer holds at set point, progress pointer shows time remaining. Momentary or sustained contact, interval or delay timing. Reset time, 300 msec, 10 amps resistive. 3 1/16" dia. x 4 5/32". 115 V, 60 Hz AC. Wt., 2 lbs.

Stock No.	Mfr's Type	Time Range	EACH 1-9	10-24	25-49	50-Up
65-0068	400S-60S	60 seconds	48.25	38.12	36.67	35.22
65-0066	400S-5M	5 minutes	48.25	38.12	36.67	35.22
65-0067	400S-60M	60 minutes	50.25	39.70	38.19	36.68
65-0065	400S-5H	5 hours	50.25	39.70	38.19	36.68

B MODEL 472 SURFACE-MOUNT AUTOMATIC RESET TIMERS. Synchronous motor driven with two cam-actuated switches, one solenoid-actuated. Differential clutch. For momentary or sustained contact, interval or delay timing. Repeat accuracy better than 1%. 2 1/32x3 25/32x2 7/8". U.L. Listed. 115 V, 60 Hz AC, *220 V. 1¼ lbs.

65-0083	472A-E15S	15 seconds	32.00	25.28	24.32	23.36
65-0086	472A-E30S	30 seconds	32.00	25.28	24.32	23.36
65-0088	472A-E60S	60 seconds	32.00	25.28	24.32	23.36
65-0080	472A-E5M	5 minutes	32.00	25.28	24.32	23.36
65-0082	472A-E15M	15 minutes	32.00	25.28	24.32	23.36
65-0085	472A-E30M	30 minutes	32.00	25.28	24.32	23.36
65-0087	472A-E60M	60 minutes	32.00	25.28	24.32	23.36
65-0079	472A-E5H	5 hours	34.20	27.02	25.89	24.97
65-0084	472A-E24H	24 hours	34.20	27.02	25.99	24.97
65-0081	472A-E5M	5 minutes*	33.00	26.07	25.08	24.09

C MODEL 635G NON-RESET ELAPSED TIME INDICATORS. Ideal for measuring running time or downtime of machines or processes. High accuracy inductor motor; large numerals on 1" wheels for excellent readability. 6-digit register. Mounts in 2.22" dia. panel hole; 2 23/32" deep; 2.69" dia. bezel. U.L. Listed. 115 V, 60 Hz AC. ¾ lb.

Stock No.	Mfr's Type	Total Count	EACH 1-9	10-24	25-49	50-Up
765-0115	635GL100	99,999.9 minutes	11.75	9.99	8.93	8.39
765-0116	635GM100	999,999 minutes	11.75	9.99	8.93	8.39
765-0117	635GS100	99,999.9 hours	11.75	9.99	8.93	8.39
765-0118	635GT100	999,999 hours	11.75	9.99	8.93	8.39

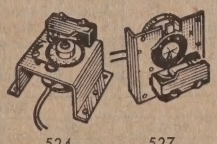
D MODEL 636 RESET ELAPSED TIME INDICATORS. As above, with pushbutton mechanism for instant reset to zero. 5-digit. Mounts in 2.22" dia. hole; 3 7/32" deep. 115 V, 60 Hz AC. Wt., ¾ lb.

765-0120	636XE100	9999.9 seconds	28.25	22.32	21.47	20.62
765-0121	636XK100	999.99 minutes	28.25	22.32	21.47	20.62
765-0122	636XL100	9999.9 minutes	28.25	22.32	21.47	20.62
765-0123	636XS100	9999.9 hours	28.25	22.32	21.47	20.62

E MODEL 767E IMPULSE COUNTER. Miniature counter provides record of events in response to input pulses. 5-digit, non-reset. Operates quietly at rates to 1000 counts/minute. Mounts in 1.12x91" rectangular hole; 4.38" deep; 1.18x1.38" bezel. For 24 VDC. From Yugoslavia. Shpg. wt., 6 oz.

765-0130	767E	99999 units	10.75			

SINGLE POLE CYCLE TIMERS


524 527

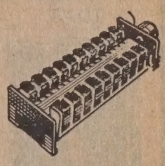
524 SERIES. Chassis only for single circuit repeat cycle control. Cam adjusts for operation over 2-98% of time cycle. SPDT switch rated 20 amps non-inductive at 125, 250 or 480 VAC. Repeat accuracy, ±0.9°. Order motor and gear separately. UL recog. 115 VAC. 2 3/4x3 5/16x2 17/32". 765-0095. Shpg. wt. 1½ lbs. Each 10.00

527 SERIES. Complete timer for continuous repeat cycle. SPDT switch, adjustable cam, synchronous motor. Rated 20 amps as above. 2 11/16x3x2 11/32". Specify time cycle: 60 sec., 5, 30 or 60 min. 765 C 0098. Shpg. wt. 1 lb. ..... Each 14.25

HOW TO ORDER MODELS 524 AND 540

Choose basic chassis, either Model 524 single-pole or 540 multi-pole. Then select time cycle from chart below, and order appropriate motor and gear rack. **Example:** For 6-pole with 60-sec. cycle, order 6-pole chassis Model 540-6, motor 3MBO, gear rack B2-2926-7.

MULTI-POLE CYCLE TIMERS



540 SERIES. Versatile multi-pole cycle timer on controls 2 to 10 independent circuits. Cams are individually adjustable over approximately 2 to 98% of total cycle; can provide any desired sequence or program. Chassis incorporates baseplate, cams and switches. SPDT switches rated 15 amps non-inductive at 115 VAC. Repeat accuracy, ±1.8°. UL recognized. For 115 V, 60 Hz AC. Order motor and gear rack separately from table at bottom of page. Av. shpg. wt. 4 lbs.

Stock No.	Mfr's Type	Circuit	Overall Length	EACH
765-0101	540-2	2-pole	4 9/16"	18.50
765-0103	540-4	4-pole	5 9/16"	28.00
765-0105	540-6	6-pole	6 9/16"	38.50
765-0107	540-8	8-pole	7 9/16"	49.25
765-0109	540-10	10-pole	8 9/16"	61.75

MOTOR AND GEAR RACK SELECTION CHART FOR MODEL 524 AND 540 CYCLE TIMERS

Motor Speed	40 rpm	20 rpm	10 rpm	8 rpm	4 rpm	1⅓ rpm	⅔ rpm	⅙ rpm	1/18 rpm	1/45 rpm	⅔ rph	⅙ rph
Motor Number (for Model 524)	1DK6	1KK6	3BK6	3DK6	3MK6	4NK6	5DK6	6JK6	7NK6	8MK6	8RK6	9MK6
Motor Number (for Model 540)	1DB0	1KB0	3BB0	3DB0	3MBO	4NBO	5DB0	6JBO	7NBO	8MB0	8RB0	9MB0

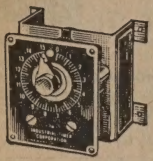
Cycle Time Gear Rack Number, for Model 524	Model 540	Sec.	Sec.	Sec.	Sec.	Sec.	Min.	Min.	Min.	Min.	Hours	Hours	Hours
B2-4804-1	B2-2926-1	3.0	6.0	12.0	15.0	30.0	1.5	3.0	12.0	36.0	1.5	3.0	12.0
B2-4804-2	B2-2926-2	3.5	7.0	14.0	17.5	35.0	1.75	3.5	14.0	42.0	1.75	3.5	14.0
B2-4804-3	B2-2926-3	4.0	8.0	16.0	20.0	40.0	2.0	4.0	16.0	48.0	2.0	4.0	16.0
B2-4804-4	B2-2926-4	4.5	9.0	18.0	22.5	45 0	2.25	4.5	18.0	54.0	2.25	4.5	18.0
B2-4804-5	B2-2926-5	5.0	10.0	20.0	25.0	50.0	2.5	5.0	20.0	60.0	2.5	5.0	20.0
B2-4804-6	B2-2926-6	5.5	11.0	22.0	27.5	55.0	2.75	5.5	22.0	66.0	2.75	5.5	22.0
B2-4804-7	B2-2926-7	6.0	12.0	24.0	30.0	60.0	3.0	6.0	24.0	72.0	3.0	6.0	24.0
B2-4804-8	B2-2926-8	6.5	13.0	26.0	32.5	65.0	3.25	6.5	26.0	78.0	3.25	6.5	26.0
B2-4804-9	B2-2926-9	7.0	14.0	28.0	35.0	70 0	3.5	7.0	28.0	84.0	3.5	7.0	28.0
B2-4804-10	B2-2926-10	7.5	15.0	30.0	37.5	75.0	3.75	7.5	30.0	90.0	3.75	7.5	30.0
B2-4804-11	B2-2926-11	8.0	16.0	32.0	40.0	80.0	4.0	8.0	32.0	96.0	4.0	8.0	32.0
B2-4804-12	B2-2926-12	8.5	17.0	34.0	42.5	85.0	4.25	8.5	34.0	102.0	4.25	8.5	34.0
B2-4804-13	B2-2926-13	9.0	18.0	36.0	45.0	90.0	4.5	9.0	36.0	108.0	4.5	9.0	36.0
B2-4804-14	B2-2926-14	9.5	19.0	38.0	47.5	95.0	4.75	9.5	38.0	114.0	4.75	9.5	38.0
B2-4804-15	B2-2926-15	10.0	20.0	40.0	50.0	100.0	5.0	10.0	40.0	120.0	5.0	10.0	40.0
B2-4804-16	B2-2926-16	10.5	21.0	42.0	52.5	105.0	5.25	10.5	42.0	126.0	5.25	10.5	42.0

765C0040. Model 524 Motor. Specify type. ½ lb. 7.00
765C0052. Model 540 Motor. Specify type. ½ lb. 7.00
765C0021. Model 524 Gear Rack. Specify type. ⅛ lb. 2.75
765C0005. Model 540 Gear Rack. Specify type. ⅛ lb. 2.75

Timing Equipment by Industrial Timer

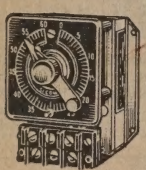
HIGH-ACCURACY TIME-DELAY CONTROLS

CH



CSF

CTD



TDAB

TDAF

SERIES 90

SERIES CH AND CSF TIME-DELAY TIMERS

Automatic reset units. For use where fixed or adjustable delay is needed between closing one circuit and opening or closing another. SPDT switch rated 10 amps at 115 VAC, with non-inductive load. All types have external clutch. CH for front-panel mounting; CSF for back-panel mtg.; all have 4-screw mtg. holes. Overall size: CH, 3 7/16x3 9/16x3 7/8"; CSF, 2 3/4x3 1/16x2 31/32". 110-120 V, 60 Hz AC. ■U.L. Recog. 1½ lbs.

Stock No.	Mfr's Type	Max. Time Cycle	Stock No.	Mfr's Type	Max. Time Cycle	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
815-0075	CH-6S	6 sec.	815-0070	CH-1M	1 min.	26.50	22.53	21.20	19.87	18.55	17.23
815-0076	CH-15S	15 sec.	815-0072	CH-3M	3 min.	26.50	22.53	21.20	19.87	18.55	17.23
815-0077	CH-30S	30 sec.	815-0074	CH-5M	5 min.	26.50	22.53	21.20	19.87	18.55	17.23
815-0109	CSF-6S	6 sec.	815-0103	CSF-1M	1 min.	23.00	19.55	18.40	17.25	16.10	14.95
815-0110	CSF-15S	15 sec.	815-0105	CSF-3M	3 min.	23.00	19.55	18.40	17.25	16.10	14.95
815-0111	CSF-30S	30 sec.	815-0107	CSF-5M	5 min.	23.00	19.55	18.40	17.25	16.10	14.95

SERIES CTD TIME-DELAY TIMERS

Synchronous-motor-driven. Clutch engages and drives gear train when motor is energized—when de-energized, it returns to reset position. All have 60 dial divisions. For front-panel mounting in 3" diameter hole. Bakelite case has terminals at rear. SPDT contacts rated at 10 amps. Flange dia., 3 3/16". Depth behind panel: 4 5/32". For 110-120 V, 60 Hz AC. ■U.L. Recog. Shpg. wt., 1½ lbs.

815-0124	CTD-6S	6 sec.	815-0118	CTD-1M	1 min.	30.50	25.93	24.40	22.88	21.35	19.83
815-0125	CTD-15S	15 sec.	815-0120	CTD-3M	3 min.	30.50	25.93	24.40	22.88	21.35	19.83
815-0126	CTD-30S	30 sec.	815-0122	CTD-5M	5 min.	30.50	25.93	24.40	22.88	21.35	19.83

SERIES TDAB AND TDAF TIME-DELAY TIMERS

Series TDAB (back-mounted) and Series TDAF (panel-mounted) timers for circuit controls where adjustable or fixed time-delay is required between the closing or opening of one circuit and the closing or opening of another circuit. For applications requiring high repetitive accuracy, fast reset, and heavy usage. Automatic reset of timing/switching movement in less than 0.2 second. Ideal for plastic molding equipment, packaging machinery, graphic arts equipment and other uses. Snap-action switches (SPDT) rated 10 amps. Sizes: TDAB, 4 9/16x3 11/32x4 1/8"; TDAF, 4 1/2x3 5/8x3 3/8". For 110-120 volts, 60 Hz AC. Shpg. wt., 4 lbs.

Max. Time Cycle	Dial Div.	BACK MOUNT Stock No.	BACK MOUNT Type TDAB-	PANEL MOUNT Stock No.	PANEL MOUNT Type TDAF-	Max. Time Cycle	Dial Div.	BACK MOUNT Stock No.	BACK MOUNT Type TDAB-	PANEL MOUNT Stock No.	PANEL MOUNT Type TDAF-
1 sec.	1/60 sec.	.....	.....	815-0540	1S	3 min.	3 sec.	815-0511	3M	815-0542	3M
3 sec.	1/20 sec.	.....	.....	815-0543	3S	5 min.	5 sec.	815-0513	5M	815-0544	5M
6 sec.	1/10 sec.	.....	.....	815-0545	6S	15 min.	15 sec.	815-0515	15M	815-0546	15M
15 sec.	¼ sec.	815-0516	15S	815-0547	15S	30 min.	30 sec.	815-0517	30M	815-0548	30M
30 sec.	½ sec.	.....	.....	815-0549	30S	60 min.	60 sec.	815-0519	60M	815-0550	60M
60 sec.	1 sec.	815-0520	60S	815-0551	60S	3 hrs.	3 min.	815-0510	3H	815-0541	3H

Type	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
Any TDAB or TDAF	43.00	36.55	34.40	32.25	30.10	27.95

SERIES 90 TIME-DELAY TIMERS

Rugged, compact timer for use in applications where the time-delay cycle is infrequently changed, or permanently fixed. Excellent for use in photocopy equipment, induction heating units, transmitters, etc. Changes in time delay cycle are made by loosening set screw and offsetting one cam arm in relation to the other. Totally enclosed, snap-action SPDT switch contacts are rated at 10 amps at 115-230 volts AC. Overall size (HWD): 2 5/8x2 1/4x2 1/4". For 115 V, 60 Hz AC. ■U.L. Recognized. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Settings Min.	Settings Max.	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
815-0601	90-6S	½ sec.	6 sec.	17.00	14.45	13.60	12.75	11.90	11.05
815-0602	90-15S	1½ sec.	15 sec.	17.00	14.45	13.60	12.75	11.90	11.05
815-0603	90-30S	3 sec.	30 sec.	17.00	14.45	13.60	12.75	11.90	11.05
815-0604	90-60S	6 sec.	1 min.	17.00	14.45	13.60	12.75	11.90	11.05
815-0605	90-90S	9 sec.	1½ min.	17.00	14.45	13.60	12.75	11.90	11.05

SERIES MTD TIME-DELAY TIMERS

MTD

- Match Modern Panel-Instruments
- Plastic Face Protects Indicators
- Mounts Through 3" Hole in Panel

Designed to match panel-instruments commonly found on modern automatic machines. Provides a predetermined timed delay between the closing of one load circuit and the operation of the timer's isolated load switch. Load contacts are rated 10 amps, are SPDT snap-action, and are brought out to snap-on terminals at the rear of the timer. A rugged plastic face protects the setting and progress indicators from dust and damage. Mounts through a 3-inch hole in panel and is firmly secured by a bracket screwed to the rear of timer case. For 115 V, 60 Hz AC. Specify range: 6 seconds, 15 seconds, 30 seconds, 60 seconds, 5 minutes, 15 minutes, 30 minutes, 1 hour, 3 hours. Shpg. wt., 2½ lbs.

815C0276. 1-9.....Each 30.50
10-24.....Each 25.92
25-49.....Each 24.40 50-99.....Each 22.87
100-249.....Each 21.35
250-Up.....Each 19.82

SERIES GTD TIME-DELAY TIMERS

- Synchronous Motor SPDT Load Switch
- Dial Calibrated in 60 Increments
- Time Adjusted with Knob on Dial Face

Designed for use in circuit-controls requiring an adjustable time-delay between the opening of one circuit and the closing or opening of another circuit. Features instant automatic reset—as soon as clutch is disengaged, an internal spring returns actuating arm to its reset position in a fraction of a second. SPDT load-switch is rated 10 amps non-inductive. Requires 3" mounting hole. No screw holes needed—a single screw under flange of timer tightens bracket against edge of panel. 4x4 3/8" flange, 4 23/32" behind panel. Equipped with screw terminals. For 115 volts, 60 Hz AC. Specify range: 15 seconds, 30 seconds, 5 minutes, 15 minutes, 30 minutes, 60 minutes. Shpg. wt., 2 lbs.

815C0167. 1-9.....Each 39.50
10-24.....Each 33.58
25-49.....Each 31.60 50-99.....Each 29.63
100-249.....Each 27.65
250-Up.....Each 25.68

■Recognized Under the Component Program of Underwriters' Laboratories, Inc.

Industrial Timer Corporation Timing Controls

Series P

Series PAB

INTERVAL TIMERS

SERIES P AUTOMATIC RESET TIMERS

Multi-purpose interval timer with automatic reset. Provided with receptacle for remote starter, and standard AC receptacle for load. Load-switch contacts are rated at 15 amps. Built-in toggle switch is provided for manually operating the load circuit permanently when timed operation is not required. Completely portable, unit is supplied with AC cord and is housed in metal case with keyhole slots in back for wall mounting. Overall size, 5x5x3". For 110-120 V, 60 Hz AC. Shpg. wt., 3 lbs.

Stock No.	Mfr's Type	Max. Time Cycle	Dial Division
15-0304	P-4R	15 seconds	¼ second
15-0302	P-2R	30 seconds	½ second
15-0301	P-1M	1 minute	1 second
15-0303	P-3M	3 minutes	3 seconds
15-0305	P-5M	5 minutes	5 seconds

1-9 ..... Ea. 33.00
10-24 ..... Ea. 28.05
25-49 ..... Ea. 26.40 50-99 ... Ea. 24.75
100-249 ..... Ea. 23.10 250-Up ... Ea. 21.45

SERIES PAB INSTANT-RESET TIMERS

Extremely accurate, instant-reset, automatic timers designed for heavy-duty use in industrial control applications. Features instant reset adjustment. Electrically operated clutch drives actuating arm to dial setting selected, and automatically releases. Spiral spring resets arm in split second. Output terminals can be wired for circuit transfer applications. Switch contacts rated 15 amps at 115 volts AC with non-inductive load. Metal enclosure has ½" knockouts for use with rigid or flexible conduit. 7⅛x5⅛x4¼". For 110-120 volts, 60 Hz AC. Shpg. wt., 4 lbs.

Stock No.	Mfr's Type	Max. Time Cycle	Dial Division
15-0316	PAB-15S	15 seconds	¼ second
15-0317	PAB-30S	30 seconds	½ second
15-0319	PAB-60S	60 seconds	1 second
15-0315	PAB-15M	15 minutes	15 seconds
15-0318	PAB-60M	60 minutes	1 minute

1-9 ..... Ea. 55.00
10-24 ..... Ea. 46.75
25-49 ..... Ea. 44.00 50-99 ..... Ea. 41.25
100-249 ... Ea. 38.50 250-Up ... Ea. 35.75

SERIES "S" SIGNALING TIMERS

The Series "S" signaling timer is a motor-driven, manual-set, multipurpose process timer that provides an audible signal at the end of either a time-interval or a time-delay. Two color-coded receptacles are provided on the side of case: a black receptacle that operates load or remote signal at the end of cycle, a red receptacle that operates load circuit during time cycle. Setting timer for any part of time cycle lights lamp and powers red receptacle. On completion of cycle, lamp is turned off, buzzer sounds, and switch transfers power to black receptacle. Buzzer sounds until manually turned off, or until timing cycle is started again. Snap-action SPDT contacts rated 10 amps. With metal case, AC cord. For 110 volts, 60 Hz AC. Shpg. wt., 3 lbs.

Specify Time Range

Type	Max. Cycle	Type	Max. Cycle
S-5M	5 min.	S-1H	1 hour
S-15M	15 min.	S-3H	3 hours
S-30M	30 min.		

815 C 0425. 1-9 ..... Each 29.00
10-24 ..... Each 24.65
25-49 ..... Each 23.20
50-99 ... Each 21.75 100-249 ... Each 20.30
250-Up ..... Each 18.85

NON-RESET RUNNING-TIME METERS

MODEL C2. Provides an accurate account of machine running-time—easy to compute production costs from elapsed time shown, or determine time to replace components with a predetermined life expectancy, thus preventing costly "down-time." Equipped with non-resettable counters that mark every 1/10 hour; total time-range of 10,000 hours. Units are completely enclosed and resistant to dust and moisture. In 3½" round bakelite meter case; require 2⅞" panel mounting hole. With stud-type terminals. For 115 V, 60 Hz AC. Shpg. wt., 2 lbs. See table below.

MODEL C4. Same as Model C2 above, but has open-type construction. For any application not requiring a cased panel unit, such as direct mounting on machinery. 2½" dia. mtg. flange; overall depth is 2³⁄₁₆". Wt., 2 lbs. See table below.

RESET TIME TOTALIZERS

MODEL C5. Same as units described above, but equipped with special reset counters, making it possible to reset totalizer back to zero at any time. Completely enclosed in baked, black finished steel housing 2⅞" in diameter, 3¼" long. Has heavy steel mounting flange measuring 3¼"x3¼". Screw terminals on back of unit. For operation from 115 V, 60 Hz AC. Shpg. wt., 2 lbs. See table below.

MODEL C7. Same as Model C5 described above, but employing open-type construction. Has large, edge-knurled dial in front of meter for convenient resetting of digit counters. Size, 2¾x2½x3". Shpg. wt., 2 lbs. See table below.

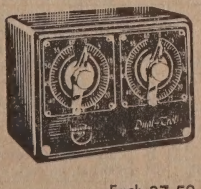
Stock No.	Mfr's Type	EACH					
		1-9	10-24	25-49	50-99	100-249	250-Up
815-0050	C-2	20.00	17.00	16.00	15.00	14.00	13.00
815-0052	C-4	16.50	14.03	13.20	12.38	11.55	10.73
815-0053	C-5	42.50	36.13	34.00	31.88	29.75	27.63
815-0054	C-7	34.50	29.33	27.60	25.88	24.15	22.43

AC AND DC RUNNING-TIME METERS

MODEL C-8, C-9. For AC or DC applications. Equipped with non-resettable counters that mark every 1/10 hour; total time range of 10,000 hours. In electrical apparatus, meter is wired in parallel with the main ON-OFF switch; on non-electrical equipment, wired between the ground and primary of ignition coil; on diesel-powered equipment, connected to starting battery. C-8, DC types powered by solenoid clock movement. C-9, AC type powered by synchronous motor. Mount with 4 screws in 2³⁄₁₆" cutout. Require 3⅝" behind panel.*Universal from 12 to 32 volts DC. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Volts	EACH					
			1-9	10-24	25-49	50-99	100-249	250-Up
815-0040	C-8	6 DC	19.25	16.36	15.40	14.44	13.48	12.51
815-0041	C-8	* DC	19.25	16.36	15.40	14.44	13.48	12.51
815-0042	C-9	115 AC	19.25	16.36	15.40	14.44	13.48	12.51

DUAL-TROL TIMING MODULES



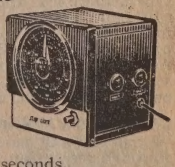
- Two Sequences
- Choice of Cycles
- Plug-in Modules
- Recycling

Two adjustable on/off sequencing switch closures. Modules can be combined to give any combinations of cycles listed. 10-amp; SPDT. Specify timing modules desired: 6 seconds, 15 seconds, 30 seconds, 60 seconds, 3 minutes, 5 minutes, 15 minutes, 30 minutes, 60 minutes, 3 hours. Order housing for modules separately. 2 lbs.

815C0461. 1-9 ..... Each 27.50
10-24 ..... Each 23.38
25-49 ..... Each 22.00 50-99 ..... Each 20.63

MODULE HOUSING. Each housing holds two modules. Shpg. wt. 1½ lbs.
815C0460. 1-9 ..... Each 22.50
10-24 ..... Each 19.13
25-49 ..... Each 18.00
50-Up ..... Each 16.87

ELECTRIC STOP CLOCKS



Measure time intervals for process and production controls, time and motion studies, other uses. Synchronous motor, cone clutch 360° engagement, automatic wear compensation. Remote start-stop and reset receptacles on side of case. Front-panel reset button. Reset time, .010 seconds. 5x5x4²⁵⁄₃₂". For 115 V, 60 Hz AC only. Shpg. wt., 5 lbs.

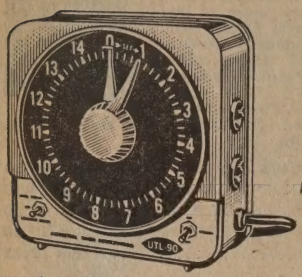
MODEL SC-100. Measures 1/100 second to 60 seconds.
815-0435. 1-9 ..... Each 68.50
10-24 ..... Each 58.23 25-49 ..... Each 54.80
50-99 ... Each 51.38 100-259 ... Each 47.95 250-Up ... Each 44.53

MODEL SC-60. Measures 1 second to 60 minutes.
815-0432.1-9 ..... Each 68.50
10-24 ..... Each 58.23
25-49 ..... Each 54.80
50-99 ..... Each 51.38
100-249 ..... Each 47.95
250-Up ..... Each 44.53

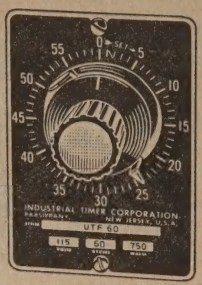
Timers and Clocks

INDUSTRIAL TIMER TIMERS AND CLOCKS

ENCLOSED AND PANEL MOUNT UTILITY TIMERS



UTL Enclosed



UTF Panel Mount

Both UTL and UTF models are manual set synchronous motor driven interval timers. UTL series features large 7″ diameter dial with luminous numerals for easy reading, even in poorly lit areas. Can be used to control a circuit both during and after the timed interval. Toggle-switch controlled buzzer enables use as signalling timer or count-down clock. UTF series offer extreme accuracy in compact size. Have concentric knob and hand dial. SPDT switching. UTL series have receptacle terminals, UTF has terminal strip. Both have 10-ampere contact ratings at 115 V, 60 Hz AC. Av. shpg. wt. 1½ lbs.

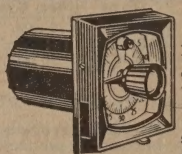
Stock No.	Mfr's Type	Max. Time Cycle	Dial Division	EACH
815-0070	UTL-15M	15 Min.	¼ Sec.	37.00
815-0074	UTL-60M	60 Min.	1 Sec.	30.00
815-0072	UTL-15H	15 Hour	15 Min.	37.00
815-0076	UTL-60H	60 Hour	1 Hour	30.00
815-0062	UTF-15M	15 Min.	¼ Sec.	26.00
815-0063	UTF-60M	60 Min.	1 Sec.	24.00
815-0064	UTF-15H	15 Hour	15 Min.	26.00
815-0068	UTF-60H	60 Hour	1 Hour	26.00

PBM SERIES TIMER

Pressing pushbutton closes load switch for d ration of preset timed interval. Timer automa ically resets and begins new interval when bu ton is depressed. SPDT contacts rated 25 am non-inductive at 115 V, 60 Hz AC. Specify tir ranges: 6 sec.; 15 sec.; 30 sec.; 60 sec.; 5 min.; min.; 30 min.; 1 hour; 3 hours. Shpg. wt., 3 lbs.

815C0021. 1-9.....Each 19.
10-24.....Each 16.36 25-49.....Each 15.
50-99...Each 14.44 100-249..Each 13.47 250-Up...Each 12.

GP PLUG-IN INTERVAL TIMER



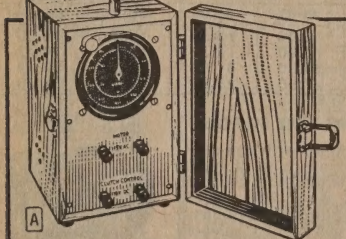
Automatic reset, synchronous motor driv timing control using two sets of instanta eous and two sets of delayed contacts. Co tacts rated 10 amps at 115V, 60Hz AC. Ne pilot light indicates timer motor is receivi power. Specify time ranges: 3 sec; 15 sec; sec; 5 min; 60 min. Overall size, 4x4.35x4.07 Shpg. wt. 2 lbs. 7 oz.

815C0066. 1-9.....Each 48.
10-24.....Each 41.23 25-49.....Each 38.
50-99...Each 36.38 100-249...Each 33.95 250-Up....Each 31.

SETH-THOMAS ACROTYNE COMMERCIAL WALL CLOCK

Cordless—operates about a year on one "D" flashlight cell. Features accurate, silent transistorized movement with electronic circuit tuning fork and magnetic coupling. Adjustable within ±2 seconds per day. White convex dial; black numerals, hands; red sweep second hand. Steel case. 14½″ dia. 2¾″ depth. 12″ dial.
949-2710. No. 612 Bronze. 4½ lbs. 32.50
949-2711. No. 613 Chrome. 4½ lbs. 35.00

PRECISION ELECTRIC TIMERS AND CLOCKS By STANDARD ELECTRIC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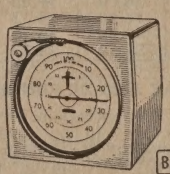
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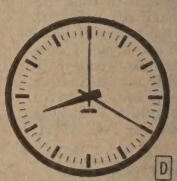

D

E

A **Model AC-1 Cycle Counter.** Portable. Total count, 60 seconds with 1/100 second scale and cycle divisions. Accuracy, ±.01 second. 115 V, 60 Hz AC. Walnut-grain formica case, 8¾x5¾x7½″. Carry handle. 8 lbs.

B **"S" Series Elapsed-Time Timers.** Supplied in 5x5x4¼″ Kralastic case. Panel mount types require 4⅜″ square hole. Pendant switch start/stop control on 3-foot cord on portable units; terminals on panel units. 5-foot power cord. Dial, 3⅛″ dia. 115 V, 60 Hz AC. Accuracy: S-1, ±.01 second; S-10, ±.02 second; S-6, ±.0002 minute; S-60, ±.1 second; SM-60, ±.002 min. Av. wt., 5 lbs.

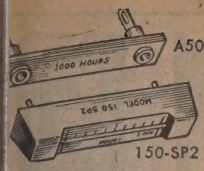
C **Model SW-1 and SS-60 10″ Dial Timers.** Surface wall mounting with local start, stop and reset. Can be wired remote. SS-60 totalizes 60 minutes with 0.1 second accuracy; SW-1 totalized 60 seconds with .01 second accuracy. 115 V, 60 Hz AC. Other mounting styles on special order. 17 lbs.

D E **Synchronous Clocks.** Surface wall mounting. Black numerals or markers, hour and minute hands. Red sweep second hand. 12″ dial, round case. Senate, white dial, black case. Tempo, Apollo, white dial, aluminum case. Forum, satin bronze finish dial, bronze case. 115 V, 60 Hz AC. Shpg. wt. 9 lbs.

Stock No.	Mfr's Type	Fig.	Description	Time Range	Scale Div.	EAC
949-8342	S-1	B	Portable manual-reset timer	60 sec.	1/100 sec.	99.0
949-8343	S-1-ER	B	S-1 with electric reset	60 sec.	1/100 sec.	128.0
949-8344	S-1-P	B	Panel-mt. manual-reset timer	60 sec.	1/100 sec.	103.0
949-8345	S-1-P-ER	B	S-1-P with electric reset	60 sec.	1/100 sec.	132.0
949-8346	S-1-3H-10-P	B	S-1-P, with 3rd hand to totalize 10 minutes	60 sec.	1/100 sec.	156.0
949-8355	S-10	B	Portable manual-reset timer	1000 sec.	1/10 sec.	77.0
949-8356	S-10-ER	B	S-10 with electric reset	1000 sec.	1/10 sec.	106.0
949-8357	S-10-P	B	Panel-mt. manual-reset timer	1000 sec.	1/10 sec.	81.0
949-8358	S-10-P-ER	B	S-10-P; electric reset	1000 sec.	1/10 sec.	110.0
949-8350	S-6	B	Portable manual-reset timer	10 min.	1/1000 min.	92.0
949-8352	S-6-P	B	Panel-mt. manual-reset timer	10 min.	1/1000 min.	100.0
949-8361	S-60	B	Portable manual-reset timer	60 min.	1/5 sec.	73.0
949-8362	S-60-ER	B	S-60 with electric reset	60 min.	1/5 sec.	101.0
949-8363	S-60-P	B	Panel-mt. manual reset timer	60 min.	1/5 sec.	74.0
949-8364	S-60-P-ER	B	S-60-P; electric reset	60 min.	1/5 sec.	101.0
949-8322	SM-60	B	Portable manual-reset timer	60 min.	1/100 min.	77.0
949-8323	SM-60-P	B	Panel-mt. manual-reset timer	60 min.	1/100 min.	81.0
949-8311	AC-1	A	Cycle counter	60 sec.	1/100 sec.	176.0
949-8335	SW-1	C	10″ wall-mount timer	60 sec.	1/100 sec.	160.0
949-8333	SS-60	C	10″ wall-mount timer	60 min.	1/5 sec.	130.0
949-8307	Senate	D	12-inch Clock (No numerals)	.....	.....	17.8
949-8309	Tempo	D	Above, Arabic Numerals	.....	.....	17.8
949-8305	Forum	D	Above, Roman Numerals	.....	.....	22.0
949-8302	Apollo	E	Above, Roman Numerals	.....	.....	17.8

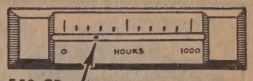
Make Allied Electronics Your Headquarters for Industrial Electronic

Elapsed Time Meters and Counters



CURTIS INSTRUMENTS, INC. ELAPSED-TIME METERS

Permit test equipment calibration by actual hours of use. Provides time-to-failure data. Indicates time elapse of klystrons, magnatrons, vidicon tubes, recording heads, electrical or combustion, amp.-hours of batteries.



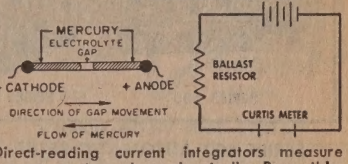
550-CP Actual Size

Elapsed Time is Read by Position of Gap on Meter (see below).

550-CP METER. 115 VAC. With 150-SP2, (see ght), for 600, 1000 or 3000 hours; mtg. cket; zener-diode inverter power supply. se R-6 Autosetter to reset meter. Socket, 3/16x3/8x1/2". Power Supply, 1 1/8x3 3/16x3/8". pg. wt., 2 oz.

120-PC METER. Microminiature. For recording mean time-to-failure data on individual PC boards. Works from any stable DC voltage. Can be scaled for any time period by proper resistor. Clear epoxy sealed. Leads on 0.9" centers. 1.11x.22x.18". 1 oz. 759-0016. 1-49...Ea. 7.50 50-Up..Ea. 5.78

150-SP2 METER. Meter element in a high-impact case. One-in., 10-division scale. Range: 2-10,000 hours. Typical DC requirements: 100 hours @ 104 μA; 500 @ 20.8 μA; 1000 @ 10.4 μA. Unmarked scale, desired hour scale determines current. Uses .080" and .050"-dia. polarized pins, requires A501 socket. 1 13/16" long, 3/8" wide. 2 oz. 759-0023. 1-49..Ea. 8.00 | 50-Up..Ea. 6.35



Direct-reading current integrators measure current vs. time electrochemically. Reversible, reusable. Mount, read in any position.

Full-Scale Hours	Microamps
100	41.6
500	8.34
1000	4.16
2000	2.08
3000	1.38

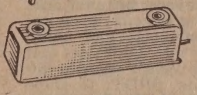
Stock No.	Type 550-	Hours	EACH 1-9	10-49	50-Up
59-0034	CP/600	600	15.30	12.95	10.50
59-0035	CP/1000	1000	15.30	12.95	10.50
59-0036	CP/3000	3000	15.30	12.95	10.50

501 Socket. For 150-SP2 meter at right. 59-0042. 1-24...Ea. .50 25-Up..Ea. .45

501 Lens. Fits 150-SP2, 550-CP. Molded rylic. Magnifies, protects capillary. 1 oz. 59-0076. 1-24...Ea. .50 25-Up..Ea. .45

759-8505. R-6 Autosetter. Automatic. Resets 550-SP2, meter in 3 hrs. or less. Takes 5 meters. 4x7x4". 115 V, 60 Hz. 4 lbs...59.50

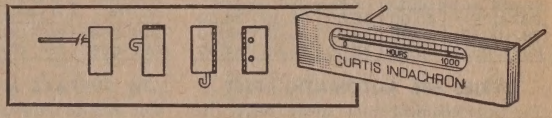
550-CP-2 ADHESIVE-MOUNT ELAPSED TIME METER



Small Size for Fitting Most Anywhere
Base Unit Houses Zener Diode Power Supply
Has Readability Accuracy of ±1%
Easy-to-read Scale Measures to 1000 Hrs

valuable for measurement of equipment age. Ideal for determining accurately e need for maintenance and recalibra-on. Easy to install (has adhesive back-g) on any flat surface within the equipment housing or on the face nel. Can be connected to any 115 VAC load terminals. This unit comprised of two parts, base unit houses the unique zener diode wer supply which regulates and rectifies the line AC. The second ement is the 150-SP2 indicating meter, a polarized unit which ugs into the base. Easily removed for resetting with R-6 Autoset-r. Elapsed time is indicated by the black electrolyte gap in the ercury column on the meter unit which moves down the scale as a nction of time. Two 8" leads connect to 110-140 V, 60-400 Hz AC. an also, be adapted for 220 VAC operation. Reads 0-1000 hours a 1" scale. Current: 2 mA maximum. Readability accuracy is 1%. Overall accuracy is ±3%. 1 23/32x1 7/16x7/16". Other scales avail-le. Wt., ½ oz.

59-0065. 1-9.....15.50 10-49.....Each 12.95
-Up.....Each 10.50



"INDACHRON" ELAPSED TIME METERS

- Maintains Continuous Record of Hours of Equipment Use
- Easily Installed in Office Machines, Appliances, Tools
- Choice of Models for Adhesive or PC Card Mounting

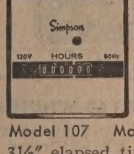
"L" Series. For warranty "metering" and service logging applications. Compact, easily installed. 520L for 115 VAC, includes zener diode power supply. 120L uses DC current in parent equipment to provided desired time constant. Current for 1000 hr. is 6.41 μA; 10,000 hr., .641 μA. 1.63" long. Wt., 1 oz. Specify 1000 or 10,000 Hours.

Stock No.	Mfr's Type	Terminals	Mounting	Voltage	EACH 1-99	100-Up
759C0011	120LC	Leads	Flat PC Card	DC	6.00	4.30
759C0012	120LT2	Hook	Back/adhesive	DC	6.25	4.47
759C0010	120LA	8" leads	Adhesive	DC	6.25	4.47
759C0053	520LT	Hook	Edge/adhesive	115 AC	8.75	6.37
759C0054	520LT2	Hook	Back/adhesive	115 AC	8.75	6.37
759C0052	520LA	8" leads	Adhesive	115 AC	8.75	6.37

SIMPSON ELAPSED TIME METERS AND COUNTERS

ELAPSED TIME METERS

odel 106 2½"



Model 107

Model 55ET 3½"

Model 57ET 3½"

ugged 2½" and 3½" elapsed time panel meters give accurate adout even under adverse vibration, temperature, and voltage nditions. Stop positively without error-causing over-runs. dicate to 99999.9, then recycle. *Voltage adapters for Model 106. odel 106 from West Germany. 2 9/16" deep. Shpg. wt. 12 oz.

Stock No.	Model No.	Type No.	Voltage	EACH 1-4	5-9	10-24	25-Up
918-1011	106	13530	6 VDC	22.00	20.00	18.00	17.00
918-1012	*	13535	12 VDC	1.10	1.00	.90	.85
918-1013	*	13538	24 VDC	1.10	1.00	.90	.85
918-1014	107	13521	120 VAC	16.50	15.00	13.50	12.75
918-1015	107	13526	240 VAC	16.50	15.00	13.50	12.75
918-0791	55ET	3580	120 VAC	27.88	25.35	22.81	21.55
918-0793	57ET	3590	120 VAC	27.88	25.35	22.81	21.55
918-0792	55ET	3600	240 VAC	28.22	25.65	23.08	21.80
918-0794	57ET	3610	240 VAC	28.22	25.65	23.08	21.80

HOUR METERS

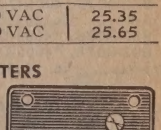
Wide-Vue Elapsed Time Meters. 3½" meters read elapsed time to 99,999.9 hours. Perform with high level of accuracy even under the most severe or disruptive conditions. Bezel is constructed of top-quality thermosetting materials which are sturdy enough to withstand extremely high impact. Black matte finish. Black numbers on white background. Overall size is 3.25x3.25x3". Av. shpg. wt. 12 oz.

Stock No.	Model No.	Type No.	Voltage	EACH
918-3698	1357 ET	03595	120 VAC	25.35
918-3699	1357 ET	03615	240 VAC	25.65

Century Series Elapsed Time Meters. 3½" meters read elapsed time to 99,999.9 hours. Rugged glass and phenolic construction plus modern clean cut design. Black numbers on white background. Overall size is 3x3x3". Av. shpg. wt. 12 oz.

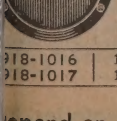
918-5290	2153 ET	17720	120 VAC	25.35
918-5291	2153 ET	17721	240 VAC	25.65

ELECTROMECHANICAL COUNTERS



Precision counters offer instant number change and wide angle visibility. Count to 9,999. 100 ms per count, (600 counts per minute.) White on black numerals, 0.2" high, 0.15" wide. Bezel with black matte finish; steel frame, formed aluminum cover. Size, 2.25x1.84x2.25". Av. shpg. wt., 12 oz.

Stock No.	Model No.	Type No.	Voltage	EACH 1-4	5-9	10-24	25-49
918-1005	103	12643	120 VAC	17.55	15.95	13.56	12.76
918-1007	104	12641	6 VDC	17.55	15.95	13.56	12.76
918-1008	104	12642	12 VDC	17.55	15.95	13.56	12.76



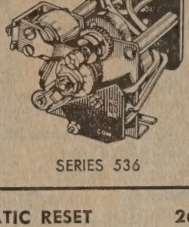
SEALED TIME LAPSE INDICATOR

2½" meters read elapsed time to 9999.9, then recycle. Sealed construction makes Model 108 suitable in presence of corrosive fumes, dust, or high humidity. Black, magnetically shielded case, solder lug terminals. 3.32" deep. Shpg. wt. 12 oz.

918-1016	108	03585	120 VAC	32.94	29.95	26.45	25.46
918-1017	108	03605	240 VAC	33.16	30.15	27.13	25.65

Paragon Time Switches and Timers

SERIES 500


SERIES 536

SERIES 2600

SERIES JW

SERIES 1015

SERIES 4000SZ

SERIES 500 AUTOMATIC RESET

For staggered compressor starts, short cycle protection. Sub-panel mounting. Type *500-102-0 "on" delay, †501-102-0 interval, ‡502-102-0 "off" delay. 2-SPDT switches rated at 720 VA per pole. 0-60 sec., 1 sec. div. 4⅝x4¼x4³⁄₁₆". ■U.L. Recog., C.S.A. Listed. 110-120 V, 60 Hz AC. Wt., 2½ lbs.

Stock No.	EACH			
	1-3	4-5	6-11	12-24
882-0051*	40.00	38.00	36.00	34.00
882-0052†	40.00	38.00	36.00	34.00
882-0053‡	40.00	38.00	36.00	34.00

SERIES 536 AUTOMATIC RESET

Electromechanical time delay relays for plant process control. Ideal for use as staggered load start timers. *Type 536-021-0 "on" delay or †Type 536-121-0 "off" delay. Sub-panel mounting. 10 amps noninductive. SPST. 60 sec. time range, 6 sec. divisions. Other types available with ranges from 15 sec. to 3 hrs. 3¾x2¾x3". For 110-120 V, 60 Hz AC. Shpg. wt., 1¼ lbs.

Stock No.	EACH			
	1-3	4-5	6-11	12-24
882-0054*	22.00	20.90	19.80	18 70
882-0055†	22.00	20.90	19.80	18.70

2600 MANUAL PRESET INTERVAL

Ideal for control of heating and air conditioning systems, amusement rides, pumps, motor control. Panel mounting. Hold position energizes a load without timing—must be manually terminated. SPDT. 10 amps non-inductive. *15 min. time range, 15 sec. div.; †60 min. time range, 60 sec. div. 4½x3¹³⁄₁₆x3½". 110-120 V, 60 Hz AC. 1¾ lbs.

Stock No.	Mfr's Type	EACH			
		1-3	4-5	6-11	12-24
882-0062	2605-0*	15.00	14.25	13.50	12.75
882-0063	2607-0†	15.00	14.25	13.50	12.75

JW SURFACE MOUNT PERCENTAGE

For electric industrial ovens, infrared heat control, farm ventilation systems, chemical feed systems, farm machinery and pump control, etc. "On" time adj. 2-100% of dial range. Fully "on", fully "off". Range: *10 min.; †30 min.; ‡60 min. SPDT. 15 amps nonind. (½ hp). 5¹¹⁄₃₂x3⅜x2³¹⁄₃₂". 110-120 V, 60 Hz AC. Shpg. wt., 1¼ lbs.

Stock No.	Mfr's Type	EACH			
		1-3	4-5	6-11	12-24
882-0033	JW10M-0*	21.45	20.38	19.31	18.23
882-0034	JW30M-0†	21.45	20.38	19.31	18.23
882-0035	JW60M-0‡	21.45	20.38	19.31	18.23

SERIES 1015 ON-OFF, SKIP-A-DA

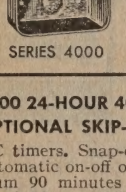
Ideal for operation of traffic signals, mu systems, commercial heating and ventil ing. 24-hour dial equipped with 96 s retaining trippers. Operation for any min. period per 24 hrs. obtained by slid the tripper in or out with the fingers. Sk A-Day dial permits skipping pre-selec days of the week. Suitable for indoor-o door applications. One control for t voltages. SPDT. 15 amps. 10x5½x4". ■U Recog., C.S.A. Listed. For 120/240 60 Hz AC. Shpg. wt., 8 lbs.

882-0056. Type 1015-CRS.....28.

4000SZ ASTRO® DIAL SKIP-A-DA

Astro Dial allows the time control to op ate in relation to the setting of the su It can be set to come "on" at sunset a "off" at sunrise, or "off" at any other p selected time between 9:30 pm and 2 am. Resetting the time control with seas al changes is unnecessary. The Skip-A-D allows elimination of operations on p selected days of the week. T-rated at amps. With indoor case. 7³⁄₁₆x4¹⁄₈x2¹⁵⁄ ■U.L. Recog. and C.S.A. Listed. For 1 120 V, 60 Hz AC. Wt., 3½ lbs.

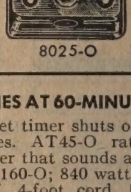
882-0077. Type 4003-0SZ. DPST....23.
882-0079. Type 4005-0SZ. SPDT....23.

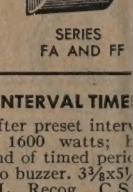

SERIES 4000

23001-OS

SERIES 7000

SERIES AT


8025-O



SERIES FA AND FF

4000 24-HOUR 40-AMP TIME SWITCHES OPTIONAL SKIP-A-DAY, CARRY-OVER

AC timers. Snap-out movement. Up to 7 automatic on-off operations per day. Minimum 90 minutes between operations. T-rated 40 amps. 120 V. DP types switch 9600 watts on 3-wire divided load. *Skip-A-Day omits operation on selected day(s). Set of on-off trippers. 7¹³⁄₁₆x4¹⁄₈x2¹⁵⁄₁₆". ■U.L. Recog. and C.S.A. Listed. 2½ lbs.

882-0075. 4001-O. SPST.
1-9.....Ea. 11.30 10-Up.....Ea. 10.69
882-0076. *4003-OS. DPST.
882-0078. *4005-OS. SPDT.
1-9.....Ea. 16.50 10-Up.....Ea. 15.24

EXTRA TRIPPERS

Stock No.	Type	Set of	For
882-0045	X-2772	On-Off Trippers	4000
882-0046	X-3495	6 Cutout (Skip-A-Day) Pins	4000S
882-0048	X-4299	On-Off Trippers	7000
882-0047	X-3596	5 On-Off Dial Pins	8035
882-0049	X-4444	6 Regular Trippers, Skip, or Prewarn	23000
882-0050	X-4445	6 Half Trippers for Main Signal	23000

Per Set.....50

23001-OS PROGRAMMER WITH SKIP-A-DAY, PREWARNING/MAIN SIGNALS

Prewarning rings 1-3 minutes before main signal. Timed signals adjustable 4-60 secs. 24-hour dial in 5-minute increments. Skip-A-Day—signals can be omitted for any 12 or 24-hour period. Also has manual operation. SPST, 15 amps, 120 V. Nine regular trippers for Skip-A-Day, 4 regular sets for prewarning, 12 sets half-trippers for main signals. 10⅞x7⅜x3⅝". ■U.L. Recog. and C.S.A. Listed. For 110-120 V, 60 Hz AC. Shpg. wt., 8½ lbs.

882-0111.....72.37

7000 7-DAY SKIP-A-DAY TIME SWITCHES—OPTIONAL CARRY-OVER

Allows up to 4 automatic on-off operations per day or 28 per week. Any day or days can be omitted. Make settings week in advance. 3 hrs. minimum between operations. 7-day dial. With 7 sets of trippers. ■U.L. Recog., C.S.A. Listed. 110-120 V, 60 Hz AC.

WITH 7-DAY DIAL. 7007-0, 4PST, N.O., 40-amp, T-rated. 7008-0, 4P, 2 N.O., 2 N.C., 40 amp. 10⅞x7⅜x3⅝". 6½ lbs.
882-0090. 7007-0. 882-0091. 7008-0.
1-9.....Ea. 26.00 10-Up.....Ea. 24.02

SERIES AT 60-MINUTE INTERVAL TIME

Preset timer shuts off after preset interv lapses. AT45-O rated 1600 watts; buzzer that sounds at end of timed peri AT3160-O; 840 watts, no buzzer. 3⅝x5½ 2⅞". 4-foot cord. ■U.L. Recog., C.S. Listed. 110-120 V, 60 Hz AC. 1½ lbs.

882-0010. Type AT45-0.
1-9.....Ea. 13.30 10-Up.....Ea. 10.
882-0013. Type AT3160-0.
1-9.....Ea. 9.15 10-Up.....Ea. 7.

ALL-PURPOSE 8025-O TIME SWITCH

1-12 automatic on-off operations per d (adjustable 30 seconds to 27½ minute 2 hours min. between each. Rated 40 am (1 hp), 120V. With 4 sets of on-off tripp ■U.L. Recog. C.S.A. Listed. Size, 7⅜x4 x4". For 110-120 V, 60 Hz AC. 3½ lbs.

882-0105. 1-9 Ea.21.30 10-Up....Ea. 19.

SERIES FA AND FF INTERVAL TIME

Manually preset timer. Fits flush in out box. 13.8 amps, 120 V, nonind. 4½x2³ 1³⁄₁₆". Ivory plate, gold color dial. ■U. Recog., C.S.A. 110-120 V, 60 Hz AC. ¾

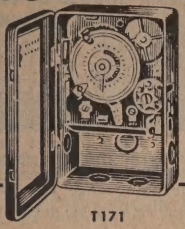
882-0021. FF15-O. 0-15 min. 1-min. div.
882-0022. FF51-O. 0-60 min. 1-min. div.
882-0020. FA51-O. 0-20 hrs. 30-min. di
1-9.....Ea. 7.90 10-Up.....Ea. 7.

■Recognized Under the Component Program of Underwriter's Laboratories, In

Time Switches and Timers

Intermatic

T101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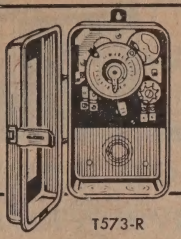
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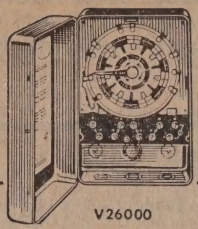
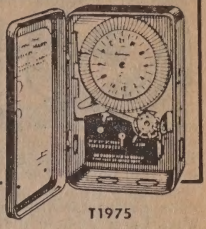
T185


V26000


T1975

or dependable automatic control of lighting, signs, process control, heating and cooling, etc. Most have "Alloy-T" tungsten rated contacts that handle surges up to 8 times rating. Large, easy-to-read dials. Heavy gauge steel cases with hinged cover, padlock hasp. ■U.L. Recog.; C.S.A. Listed.

TYPE T101 24-HOUR TIME SWITCH

SPST switch provides 1 to 12 "on-off" operations per day. Minimum setting, one hour. Rated 40 amps inductive, 4375 watts; 2 hp motor. 5x3x7⅞". 125 V, 60 Hz AC. 3 lbs.
818-1417. 1-9.Ea. 11.20 10-Up.Ea. 9.72
TYPE T103. As above, except DPST.
818-1420. 1-9.Ea. 12.80 10-Up.Ea. 11.02
TYPE T104. Above, except DPST, for 250 V.
818-1421. 1-9.Ea. 13.50 10-Up.Ea. 11.67
TYPE P101. Same as T101 except portable, with 2-prong cord set, receptacle. 10 amps.
818-1413. 1-9.Ea. 12.80 10-Up.Ea. 11.02

TYPE T171 "SKIPPER". Same as T101 but permits omitting selected days of week cycle.
818-1450. 1-9.Ea. 15.00 10-Up.Ea. 12.97
TYPE T173. Same as T171, except DPST.
818-1452. 1-9.Ea. 16.50 10-Up.Ea. 14.27
TYPE T174. Same except DPST, for 250 V.
818-1453. 1-9.Ea. 17.25 10-Up.Ea. 14.92
TYPE T175. Same as T171, except SPDT.
818-1454. 1-9.Ea. 16.50 10-Up.Ea. 14.27

T573-R HEAVY-DUTY TIME SWITCH

Rugged switch for indoor or outdoor mounting. Has 24-hour dial and skipper feature that omits selected days of week from time cycle. DPST contacts rated 55 amps inductive, 6875 watts, per pole; 2 hp motor load. Raintight case, 5½x3⅜x9⅝". Rated for 125 V, 60 HZ AC. Wt., 4 lbs.
818-1520. 1-9.Ea. 28.00 10-Up.Ea. 24.02

TYPE T185 DELUXE TIME SWITCH

Provides up to 12 independently controlled "on-off" cycles. Adjustable from 5-60 minutes. Minimum interval, 2 hours. Can be used as SPST-NO; SPST-NC; or SPDT, alternate open and closed. Rated 40 amps (4375 watts, tungsten) at 125 VAC. With 3 triggers (1 for each cycle); up to 12 can be used. Tungsten rated for incandescent light loads with a surge more than 8 times normal. 7¾x5x3". U.L. Listed. For 110-120 V, 60 Hz. 3 lbs.
818-1465. 1-9.Ea. 15.70 10-Up.Ea. 13.62

V26000 7-DAY TIME SWITCH

With 7 sets of trippers to set a different On-Off program each day of the week. For heating, pumps, other single to three-phase loads. Up to 4 operations per day; 3-hour minimum interval. 40 amps tungsten per pole; 690 VA pilot duty; 1 hp. 10⅞x7⅜x3⅝". ■U.L. Recog. 125 V, 60 Hz. 6¼ lbs.
818-1570. V26001SC. 4PST.
818-1572. V26003SC. 4P: 2N.O.-S N.C.
1-9.....Each 27.30 10-Up.....Each 22.39

T1975 "SKIPPER" PROGRAM TIMER

"Supervisor" with 96 trippers for 48 "on" and 48 "off" operations every 24 hours. Min. interval, 15 minutes. For full-time control of heating, air conditioning, etc." Skipper" feature omits selected days. Has 7-day Skipper wheel with handy push-pull tabs. SPDT switch rated 20 amps at 125 V, 60 Hz AC. Synchronous, self-start motor, snap-out mechanism. ■U.L. Recog. 3¾ lbs.
818-1550. 1-9.Ea. 28.00 10-Up.Ea. 24.34

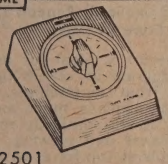
TRIPPERS

TYPE 107T19GR ON-CUTOFF TRIPPER. For "Skipper" types only. Wt., 3 oz.
818-1595.....Each .41
TYPE 79T8A SKIPPING SCREWS. For "Skipper" types only. Shpg. wt., 8 oz.
818-1585. Pkg. of 2..... Per Set .17

EXTRA TRIPPER. For T185 only. Cam can be set for duration of "on-off" cycle.
818-1466. Wt. 4 oz.....Each 1.65
TYPE 107T8A "ON AND OFF" TRIPPERS. For all Intermatic switches (except T185).
818-1590. Wt. 2 oz.....Per Set .41

MARK-TIME AUTOMATIC TIMER AND TIME SWITCHES

MARK TIME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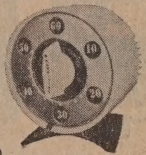

2130

MODEL 22501 "CLOCK WATCHER II" BELL TIMER

Times intervals up to 60 minutes with loud bell tones. Spring-driven. Ideal for office or lab. Stands on table or mounts on wall. Beige plastic finish. Size, 5½x4x2". Shpg. wt., 10 oz.
859-1241. 1-11.....Each 4.23 12-Up.....Each 3.81

SERIES 78100 PROFESSIONAL TIME SWITCHES

AC receptacle turns off devices after preset time. 10 amps, 125 VAC. *Designed for timing developers, enlargers, etc.; adjustable stop for repeat settings; "hold" feature. ■U.L. Recog., C.S.A. Listed. 3⅜x3¾x3½". 110-120 V, 60 Hz AC. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Maximum Setting	EACH 1-11	EACH 12-Up
859-1261	78174*	60 Seconds	7.46	6.63
859-1258	78104	30 Minutes	7.13	6.33
859-1259	78105	60 Minutes	7.13	6.33
859-1260	78126	12 Hours	7.13	6.33

PHOTOGRAPHIC TIMER

Not illustrated; styled like 78105; non-electric. Adjustable stop for easy dark room settings. Up to 30 minutes. Shpg. wt., 1 lb.
859-1251. Type 56407. 1-11.....Each 5.44 12-Up...Each 4.83

STANDARD BUILT-IN TIME SWITCHES

SPDT switches easily set for "off-type" or "on-type" use, 2⅜x1⅛". Rated 20 amps at 125-240 VAC. For panel or 4" octagon switch box. Satin-chrome dial, black knob. ■U.L. Recog. 9 oz.
859-1254. Type 74701. For up to 15-minute intervals.
859-1255. Type 74702. For up to 30-minute intervals.
859-1256. Type 74703. For up to 60-minute intervals.
1-11.....Each 6.38 12-99.....Each 5.67

MODEL 2130 TWO-SPEED BELL TIMER

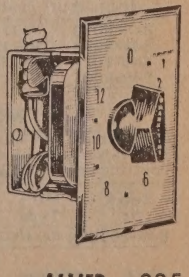
- Special Timing Switch Gives Two Timing Positions
- Times in Seconds up to 6 minutes or in minutes up to 60
- Flexibility Allows Timing of Virtually Any Home Activity

Here's a unit that's two timers in one. A flick of a switch gives short or long timings. No more guessing as to how long something has been working—no more costly and disappointing mistakes. You know for sure when what you are timing is ready, when it's finished to perfection. Times in seconds up to six minutes or in minutes up to 60 minutes. Use short-timing position for cake mixing, photography, telephone use, etc. Use long-timing for cooking, sun lamps, exercising. Bell-tone signals when time is up. Spring-powered. Upright case on non-tip pedestal. 4" dia., 2½" deep.
859-1230. Shpg. wt. 2 lbs. 1-11....Each 6.95 12-Up....Each 5.17

WALL-BOX TIME SWITCHES

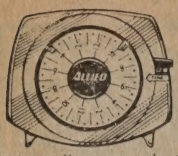
Fit std. wallbox. Automatically turn off devices after preset time. 20 amps, 125V. *"Hold" feature for continuous use. ■U.L. Recognized, C.S.A. Listed. 110-120 V, 60 Hz AC. Wt., 9 oz.

Stock No.	Mfr's Type	Max. Setting	EACH 1-11	EACH 12-Up
859-1266	90004	5 Minutes	5.57	5.00
859-1267	90005	15 Minutes	5.57	5.00
859-1268	90006	30 Minutes	5.57	5.00
859-1271	90021*	3 Minutes	5.57	5.00
859-1272	90024*	60 Minutes	5.57	5.00
859-1270	90015*	12 Hours	5.57	5.00



■Recognized Under the Component Program of Underwriter's Laboratories, Inc.

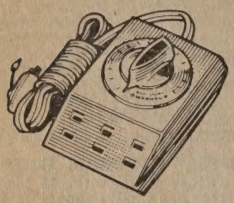
Micronta 24-Hour Timers for Dependable Control



MODEL 63-857 ALL-PURPOSE TIMER HANDLES A VARIETY OF EQUIPMENT

Extremely versatile timer has hundreds of uses around the plant, office, store, or home. Turns lights or appliances ON and OFF at preset times. Programed control of lights discourages prowlers by giving your property a "someone is there" look while you're away. Operation is repeated automatically every 24 hours; time never needs resetting. Easy to use—lights or appliances plug into timer, then timer plugs into wall outlet. Turns appliances ON at the desired time, turns them OFF from 15 minutes to 23½ hours later. Operates on 125 volts and handles 1875 watts total power. Has 6-ft. line cord with plug. Large 24-hour dial has one ON and OFF control. Size, 5x4x 2½". Complete with instructions. U.L. Listed. AC.

910-0005. Shpg. wt. 2 lbs. 7.95

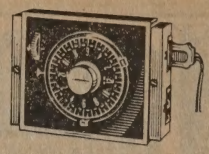


MODEL 63-633 4-HOUR TIMED APPLIANCE EXTENSION CORD

- Use As Time Switch, Extension Cord, 3-Way AC Outlet
- Control Up to 3 Appliances

Times small appliances or lights and turns them off at a preset time up to four hours. Simply insert plug into any wall outlet, plug up to 3 devices into 3-way outlet, and set knob for desired time cycle. It is also an extension cord to bring power to an area of the room having no outlet. When used like this, the timing feature still performs to turn off appliances or lights at a preset time. Or knob can be set at manual position for use as an ordinary extension cord without timing. Operation of timing feature is easy: just turn knob to desired shutoff time and automatic switch turns appliances off. SPST switch, 10 amps, 125 VAC. Cream base with brass-finished dial plate. 5½-ft. rubberized cord with plug. U.L. Listed. AC.

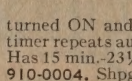
910-0006. Shpg. wt. 1 lb. 6.95



MODEL 63-860 24-HOUR TIMER REPLACES WALL-SWITCH, OUTLET

Offers built-in convenience. Insta easily and quickly in electrical bo replacing wall-switch or baseboard ou let. Has two receptacles: one for aut matic time control, one continuously for regular electric service. Appliances a lights plugged into the timed outlet a turned ON and OFF at the times you preset on the control di timer repeats automatically each 24 hours without manual resettin Has 15 min.-23½ hour timing range. 125V, 1875W. U.L. Listed. A

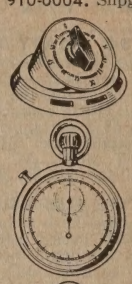
910-0004. Shpg. wt. 2 lbs. 9.9



MODEL 63-620 CLOCK WATCHER TIMER

Times intervals up to 60 minutes with bell to Spring driven, requires no AC power. Great f appliances, lighting displays, etc. Handsome styled with white enamel finish. Protective, n mar base won't tip. Inclined dial.

910-0003. Shpg. wt. 12 oz. 2.9



POPULAR SWISS JEWELED STOPWATCHES FOR TIMING ANY EVENT OR OPERATIO

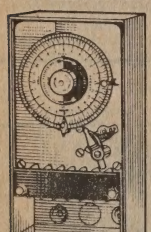
SPORTS MODEL 63-635. Accurate stopwatch for a sports events. Measures split-second finis time accurately and easily. Measurements a 1/10 second. Outer dial registers up to 30 second Small hand counts up to 15 minutes. START STOP, CONTINUE controls work from crow Side-button for return to zero. One jewel.

910-0002. Shpg. wt. 1 lb. 9.9

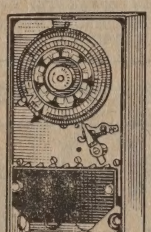
1/5 SECOND TIME-OUT MODEL 63-611. Inner di registers up to 30 minutes. START, STOP, CON TINUE controls work from crown. Side-butto for return to zero. Easy to read and use. One jewe

910-0001. Shpg. wt. 1 lb. 9.9

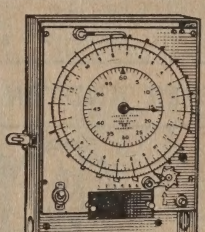
LUMENITE AUTOMATIC TIME SWITCHES



Model LW



Model W



Model SLPC

MODEL LW TIME SWITCHES

24-hour operation, 20-amp load. 4" dial calibrated in 15-minute intervals. Surface mounting. Gray hammertone finish. 10x4⅞x4". Model LW-112 for 115V, 60 Hz AC; LW-112-A.9 same as LW-112, but also has 20-hour spring-power should AC fail. Wt. 1 lb.

Stock No.	Mfr's Type	Contact Action	EACH 1-5	6-11	12-Up
849-8020	LW-112	SPDT	27.50	24.25	21.25
849-8022	LW-112-A.9	SPDT	68.00	61.00	48.50
849-8027	LW-122	DPDT	31.50	28.50	22.50
849-8031	LW-122-A.9	DPDT	72.00	65.00	49.50

MODEL W TIME SWITCHES

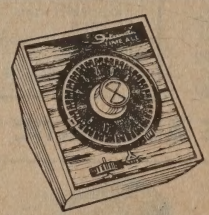
Similar to Model LW above except has weekly operation instead of 24-hour; dial marked days of week, AM, PM; operations as close as two hours apart instead of thrity minutes. Shpg. wt. 1 lb.

849-8070	W-112	SPDT	31.50	28.50	22.50
849-8072	W-112-A.9	SPDT	72.00	65.00	49.50
849-8077	W-122	DPDT	32.00	29.00	23.00
849-8081	W-122-A.9	DPDT	76.00	68.00	52.50

MODEL SLPC TIME SWITCH

Operates for 5-60 seconds at predetermined times during 24 hours. Intervals can be as close as 5 minutes apart. Sunday and holiday omitting device. 220V, 60 Hz AC. Gray crackle. 12x8x4". Wt. 1 lb.

Stock No.	Mfr's Type	Amps	Watts	Circuits	EACH 1-5	6-11	12-Up
849-8052	SLPC-1003	10	1000	1	95.00	85.50	60.00



INTERMATIC "TIME-ALL"

MODLE E911 24-HOUR TIMER

- Offers Dependable Control of All Appliances and Lights
- Easy-to-Read Face with 24-Hour AM and PM Divisions
- Automatically Repeats Time Cycle Every 24 Hours

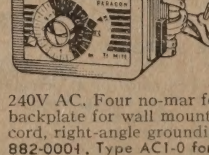
Compact, automatic timing device is ideal for use at home place of business. Lets you program an on/off light pattern simulate occupancy while away from the premises, turn air cond tioners on or off, control lighting displays, much more. The E91 once set, can be forgotten, for it automatically repeats every hours. Angled face for easy access and viewing, time-arrow dial to show actual time, controls at top for easy access. Dial h AM and PM divisions for full 24-hour period. Single direction on off switch and push-pull activation/deactivation knob. Minimu on time, 15 minutes, maximum off time, 23 hours, 45 minute Durable one-piece case, color-coded on-off trippers. 3¾x4½x3½ 5-ft. cord. 120 VAC, 15 A, 1875 W. U.L. Listed.

818-1000. Shpg. wt. 2 lbs. 9.7

MODEL E1010 WALL-SWITCH TYPE TIMER

No need to hide your timer—mounts in any stan ard wall-switch box and replaces the switch to gi you full 24-hour ON/OFF control of lights appliances. Override switch allows manual co trol. Great for stores or in homes. Discourag prowlers by normal on/off programing of light Turns on at time programed, turns off from minutes to 23¾ hours later. For 2x3x2" box. 5½ 3 1/16x2¼". 120 VAC, 15A, 1875W. U.L. Listed.

818-1001. Shpg. wt. 1½ lbs. 7.9



PARAGON AIR-CONDITIONE TIMERS FOR 24-HOUR CONTRO

Turns air conditioners ON and OFF times you select. Has 24-hour di for full 24-hour control. Minimu time between ON and OFF settings 2 hours. Rated 12 amps at 120V a 240V AC. Four no-mar feet for desk use of timer, two holes in t backplate for wall mounting. Beige case, 2⅝x4⅛x2⅜". With 5-f cord, right-angle grounding plug, 3-wire receptacle.

882-0001. Type AC1-0 for 120 Volts. Shpg.wt. 1¾ lbs. 10.8

882-0002. Type AC4-20 for 208-240 Volts. Wt. 1¾ lbs. 11.8

RELAYS and MOTORS

Take Advantage of the Fastest Service in the Industry!

AVAILABLE IN QUANTITY FROM ALLIED AT FACTORY OEM PRICES . . . WORLDS LARGEST INVENTORY FOR PROMPT SHIPMENT

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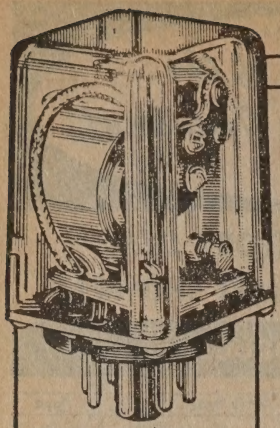
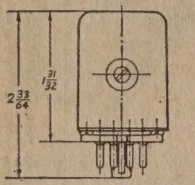
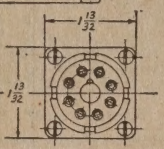
ALLIED General-Purpose Relays







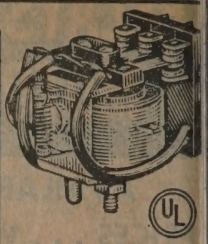
ALLIED'S OWN RELAYS AT LOW PRICES

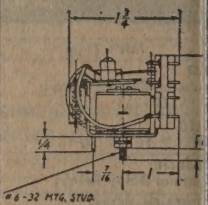
- Color-Coding for Voltage and AC, DC, or Plate Circuit Helps on Production Line and Shows Inventory at a Glance
- Open Types U.L. Component Program Recognized
- Special Price Quotations on Larger-Quantity Requirements

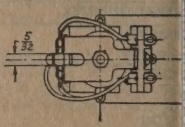
Volume purchasing permits Allied to offer these dependable, long-life relays at low cost. Compare specifications and prices. These relays provide highest performance in light-duty power control circuits. They are equally at home in the control box of an elevator or in the heart of a modern computer. All have nylon bobbins, shock-resistant armature mounting and corrosion-resistant coil. Open types are ■U.L. Recog. The stationary and movable terminal blocks are molded phenolic with ample separation between opposite potentials. Plug-in types are for applications where an enclosed unit is needed to protect the relay from dust, oil and other foreign substances or where speedy connection and fool-proof replacement are desirable. *All units are color-coded for voltage and AC, DC or plate circuit by means of colored coil tape. Shpg. wt., open types, 2 oz.; enclosed types, 3 oz. **NOTE: All relays ordered in multiples of 50 will generally be shipped bulk in handy production-line packaging.** *Open type now available with Quick-Connect terminals. Order as SO-703, Type No., adding QC to end of number.*

SPECIFICATIONS

CONTACT RATINGS: 10 amperes at 115 VAC or 32 VDC, noninductive.
CONTACT MATERIAL: Silver alloy, gold-flashed.
COILS: AC or DC. Nylon bobbins, sealed with a fused wrap.
INSULATION: 1500 V rms between circuits and frame.
LIFE EXPECTANCY: Exceeds 5,000,000 operations.
MOUNTING: Open types—Single hole, tapped 6-32. Enclosed types—SPDT and DPDT, standard octal; 3PDT, 11-pin plug.
COLOR CODING: AC—12 V, red; 24 V, green; 115 V, white. DC—12 V, blue; 24 V, yellow; 110 V, black. PLATE CIRCUIT—Brown.







GENERAL-PURPOSE OPEN TYPE RELAYS

Stock No.	Allied Type No.	Coil Voltage /Imp.	Contact Action	Coil mA	Coil Ohms	Color Code*	EACH 1-24	25-49	50-99	100-249	250-499	500-999	1000-1499	1500-2499	25[illegible]
703-1000	KN100-1C- 12A	12 AC	SPDT	170	20	Red	3.38	2.92	2.60	2.28	2.11	1.95	1.87	1.79	1.
703-1001	KN100-1C- 24A	24 AC	SPDT	85	75	Green	3.38	2.92	2.60	2.28	2.11	1.95	1.87	1.79	1.
703-1002	KN100-1C-115A	120 AC	SPDT	35	1500	White	3.38	2.92	2.60	2.28	2.11	1.95	1.87	1.79	1.
703-1014	KN105-1C- 12D	12 DC	SPDT	80	150	Blue	3.22	2.79	2.48	2.17	2.02	1.86	1.78	1.71	1.
703-1015	KN105-1C- 24D	24 DC	SPDT	40	600	Yellow	3.22	2.79	2.48	2.17	2.02	1.86	1.78	1.71	1.
703-1005	KN100-2C- 12A	12 AC	DPDT	170	20	Red	3.95	3.42	3.04	2.66	2.47	2.28	2.18	2.09	2.
703-1006	KN100-2C- 24A	24 AC	DPDT	85	75	Green	3.95	3.42	3.04	2.66	2.47	2.28	2.18	2.09	2.
703-1007	KN100-2C-115A	120 AC	DPDT	35	1500	White	3.95	3.42	3.04	2.66	2.47	2.28	2.18	2.09	2.
703-1018	KN105-2C- 12D	12 DC	DPDT	80	150	Blue	3.58	3.10	2.76	2.42	2.24	2.07	1.98	1.90	1.
703-1019	KN105-2C- 24D	24 DC	DPDT	40	600	Yellow	3.58	3.10	2.76	2.42	2.24	2.07	1.98	1.90	1.
703-1020	KN105-2C-110D	110 DC	DPDT	11	10000	Black	4.21	3.64	3.24	2.84	2.63	2.43	2.33	2.23	2.
703-1011	KN100-3C-115A	120 AC	3PDT	35	1500	White	4.47	3.87	3.44	3.01	2.80	2.58	2.47	2.37	2.
703-1023	KN105-3C- 24D	24 DC	3PDT	40	600	Yellow	4.10	3.56	3.16	2.76	2.57	2.37	2.27	2.17	2.
GENERAL-PURPOSE ENCLOSED TYPE RELAYS															
703-1026	KN110-1C- 12A	12 AC	SPDT	170	20	Red	5.77	5.00	4.44	3.88	3.61	3.33	3.19	3.05	2.
703-1027	KN110-1C- 24A	24 AC	SPDT	85	75	Green	5.77	5.00	4.44	3.88	3.61	3.33	3.19	3.05	2.
703-1028	KN110-1C-115A	120 AC	SPDT	35	1500	White	5.77	5.00	4.44	3.88	3.61	3.33	3.19	3.05	2.
703-1039	KN115-1C- 12D	12 DC	SPDT	80	150	Blue	5.72	4.95	4.40	3.85	3.58	3.30	3.16	3.03	2.
703-1040	KN115-1C- 24D	24 DC	SPDT	40	600	Yellow	5.72	4.95	4.40	3.85	3.58	3.30	3.16	3.03	2.
703-1031	KN110-2C- 12A	12 AC	DPDT	170	20	Red	6.39	5.54	4.92	4.31	4.00	3.69	3.54	3.38	3.
703-1032	KN110-2C- 24A	24 AC	DPDT	85	75	Green	6.39	5.54	4.92	4.31	4.00	3.69	3.54	3.38	3.
703-1033	KN110-2C-115A	120 AC	DPDT	35	1500	White	6.39	5.54	4.92	4.31	4.00	3.69	3.54	3.38	3.
703-1043	KN115-2C- 12D	12 DC	DPDT	80	150	Blue	6.44	5.58	4.96	4.34	4.03	3.72	3.56	3.41	3.
703-1044	KN115-2C- 24D	24 DC	DPDT	40	600	Yellow	6.44	5.58	4.96	4.34	4.03	3.72	3.56	3.41	3.
703-1045	KN115-2C-110D	110 DC	DPDT	11	10000	Black	7.07	6 12	5.44	4.76	4.42	4.08	3.91	3.74	3.
703-1048	KN115-2C-2.5K	2500 Ohms	DPDT	10	2500	Brown	6.34	5.49	4.88	4.27	3.96	3.66	3.51	3.36	3.
703-1049	KN115-2C- 5K	5000 Ohms	DPDT	7	5000	Brown	6.44	5.58	4.96	4.34	4.03	3.72	3.56	3.41	3.
703-1050	KN115-2C- 10K	10000 Ohms	DPDT	5	10000	Brown	6.86	5.94	5.28	4.62	4.29	3.96	3.80	3.63	3.
703-1035	KN110-3C-115A	120 AC	3PDT	35	1500	White	7.90	6.84	6.08	5.32	4.94	4.56	4.37	4.18	3.
703-1053	KN115-3C- 24D	24 DC	3PDT	40	600	Yellow	7.85	6.80	6.04	5.29	4.91	4.53	4.34	4.15	3.

CROSS REFERENCE AND INTERCHANGEABILITY GUIDE

GENERAL-PURPOSE OPEN TYPE RELAYS

Allied	P & B	Guardian	Magnecraft	Phillips Advance	Comar	Line	Milwaukee	Omega	Ohmite
KN100	KA/KAG	IR-1200	W88AX	GHA, GHB	M	MK/MKO	100	200/250	GR
KN105	KA/KAG	IR-1205	W88X	GHA, GHB	M	MK/MKO	100	200/250	GR

GENERAL-PURPOSE ENCLOSED TYPE RELAYS

KN110	KRP/KRP-G	IR-1210	W88ACPX	GHP, GHH	M	MKH, MKP	105	200-PC	GRTP
KN115	KRP/KRP-G/KCP	IR-1215	W88CPX	GHP, GHH	M	MKH, MKP	105	200-PC	GRTP

■Recognized Under the Component Program of Underwriter's Laboratories, In

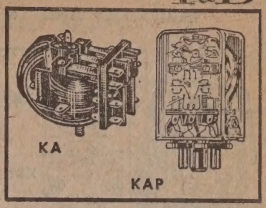
Potter & Brumfield General-Purpose Relays P&B

COIL DATA FOR KA, KAP AND KRP

DC COILS			AC COILS		
ts	Res., Ohms	mA	Volts	Res., Ohms	mA
5	32	188	6	6	335
2	120	100	12	21	168
4	472	51	24	75*	84
0	10k	11.5	120	2250	17.5
	.....	.....	240	9110	8.75

SERIES KA AND KAP

KA (open) and KAP (with plastic dust cover) relays for small motors, solenoids, other relays. Contacts: movable, gold-flashed silver; stationary, silver overlay. 10-amp relays have silver-cadmium-oxide movables. Type KA are ■ U.L. Recog., AC models C.S.A. Listed; KAP models with "Y" suffix are ■U.L. Recog. and C.S.A. Listed. KA mtg., 6-32 threaded stud and locating tab. Socket information, next page. KAP, SPDT and DPDT types have 8-pin plugs; 3PDT, 11-pin. Ask for prices in quantities of 750-Up. *In bulk packages of 50.



TYPE KA OPEN RELAYS (Av. shpg. wt., 4 oz.)

5 AMPERES

tock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up*
-0380	KA5AY	6 AC	SPDT	4.63	3.70	3.52	3.33	2.59	2.41
-0381	KA5AY	12 AC	SPDT	4.63	3.70	3.52	3.33	2.59	2.41
-0382	KA5AY	24 AC	SPDT	4.63	3.70	3.52	3.33	2.59	2.41
-0383	KA5AY	120 AC	SPDT	4.63	3.70	3.52	3.33	2.59	2.41
-0384	KA5AY	240 AC	SPDT	5.25	4.20	3.99	3.78	2.94	2.73
-0389	KA5DY	6 DC	SPDT	4.44	3.55	3.37	3.20	2.49	2.31
-0390	KA5DY	12 DC	SPDT	4.44	3.55	3.37	3.20	2.49	2.31
-0391	KA5DY	24 DC	SPDT	4.44	3.55	3.37	3.20	2.49	2.31
-0392	KA5DY	110 DC	SPDT	5.31	4.25	4.04	3.83	2.98	2.76
-0398	KA11AY	6 AC	DPDT	5.63	4.50	4.28	4.05	3.15	2.93
-0399	KA11AY	12 AC	DPDT	5.63	4.50	4.28	4.05	3.15	2.93
-0400	KA11AY	24 AC	DPDT	5.63	4.50	4.28	4.05	3.15	2.93
-0401	KA11AY	120 AC	DPDT	5.63	4.50	4.28	4.05	3.15	2.93
-0402	KA11AY	240 AC	DPDT	6.13	4.90	4.66	4.41	3.43	3.19
-0407	KA11DY	6 DC	DPDT	4.94	3.95	3.75	3.56	2.77	2.57
-0408	KA11DY	12 DC	DPDT	4.94	3.95	3.75	3.56	2.77	2.57
-0409	KA11DY	24 DC	DPDT	4.94	3.95	3.75	3.56	2.77	2.57
-0410	KA11DY	110 DC	DPDT	5.81	4.65	4.42	4.19	3.26	3.02
-0416	KA14AY	6 AC	3PDT	6.13	4.90	4.66	4.41	3.43	3.19
-0417	KA14AY	12 AC	3PDT	6.13	4.90	4.66	4.41	3.43	3.19
-0418	KA14AY	24 AC	3PDT	6.13	4.90	4.66	4.41	3.43	3.19
-0419	KA14AY	120 AC	3PDT	6.13	4.90	4.66	4.41	3.43	3.19
-0420	KA14AY	240 AC	3PDT	6.75	5.40	5.13	4.86	3.78	3.51
-0425	KA14DY	6 DC	3PDT	5.63	4.50	4.28	4.05	3.15	2.93
-0426	KA14DY	12 DC	3PDT	5.63	4.50	4.28	4.05	3.15	2.93
-0427	KA14DY	24 DC	3PDT	5.63	4.50	4.28	4.05	3.15	2.93
-0428	KA14DY	110 DC	3PDT	6.44	5.15	4.89	4.64	3.61	3.35

10 AMPERES

Stock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up*
886-0375	KA5AG	6 AC	SPDT	4.69	3.75	3.56	3.38	2.63	2.44
886-0376	KA5AG	12 AC	SPDT	4.69	3.75	3.56	3.38	2.63	2.44
886-0377	KA5AG	24 AC	SPDT	4.69	3.75	3.56	3.38	2.63	2.44
886-0378	KA5AG	120 AC	SPDT	4.69	3.75	3.56	3.38	2.63	2.44
886-0379	KA5AG	240 AC	SPDT	5.31	4.25	4.04	3.83	2.98	2.76
886-0385	KA5DG	6 DC	SPDT	4.50	3.60	3.42	3.24	2.52	2.34
886-0386	KA5DG	12 DC	SPDT	4.50	3.60	3.42	3.24	2.52	2.34
886-0387	KA5DG	24 DC	SPDT	4.50	3.60	3.42	3.24	2.52	2.34
886-0388	KA5DG	110 DC	SPDT	5.38	4.30	4.09	3.87	3.01	2.80
886-0393	KA11AG	6 AC	DPDT	5.75	4.60	4.37	4.14	3.22	2.99
886-0394	KA11AG	12 AC	DPDT	5.75	4.60	4.37	4.14	3.22	2.99
886-0395	KA11AG	24 AC	DPDT	5.75	4.60	4.37	4.14	3.22	2.99
886-0396	KA11AG	120 AC	DPDT	5.75	4.60	4.37	4.14	3.22	2.99
886-0397	KA11AG	240 AC	DPDT	6.25	5.00	4.75	4.50	3.50	3.25
886-0403	KA11DG	6 DC	DPDT	5.13	4.10	3.90	3.69	2.87	2.67
886-0404	KA11DG	12 DC	DPDT	5.13	4.10	3.90	3.69	2.87	2.67
886-0405	KA11DG	24 DC	DPDT	5.13	4.10	3.90	3.69	2.87	2.67
886-0406	KA11DG	110 DC	DPDT	6.00	4.80	4.56	4.32	3.36	3.12
886-0411	KA14AG	6 AC	3PDT	6.38	5.10	4.85	4.59	3.57	3.32
886-0412	KA14AG	12 AC	3PDT	6.38	5.10	4.85	4.59	3.57	3.32
886-0413	KA14AG	24 AC	3PDT	6.38	5.10	4.85	4.59	3.57	3.32
886-0414	KA14AG	120 AC	3PDT	6.38	5.10	4.85	4.59	3.57	3.32
886-0415	KA14AG	240 AC	3PDT	7.00	5.60	5.32	5.04	3.92	3.64
886-0421	KA14DG	6 DC	3PDT	5.81	4.65	4.42	4.19	3.26	3.02
886-0422	KA14DG	12 DC	3PDT	5.81	4.65	4.42	4.19	3.26	3.02
886-0423	KA14DG	24 DC	3PDT	5.81	4.65	4.42	4.19	3.26	3.02
886-0424	KA14DG	110 DC	3PDT	6.69	5.35	5.08	4.82	3.75	3.48

TYPE KAP ENCLOSED RELAYS (Av. shpg. wt., 5 oz.)

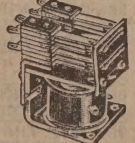
5 AMPERES

-0444	KAP11AY	24 AC	DPDT	8.81	7.05	6.70	6.35	4.94	4.58
-0445	KAP11AY	120 AC	DPDT	8.81	7.05	6.70	6.35	4.94	4.58
-0446	KAP11AY	240 AC	DPDT	9.31	7.45	7.08	6.71	5.22	4.84
-0454	KAP11DY	12 DC	DPDT	8.75	7.00	6.65	6.30	4.97	4.62
-0455	KAP11DY	24 DC	DPDT	8.75	7.00	6.65	6.30	4.97	4.62
-0456	KAP11DY	110 DC	DPDT	9.63	7.70	7.32	6.93	5.39	5.01
-0465	KAP14AY	120 AC	3PDT	10.88	8.70	8.27	7.83	6.09	5.66
-0466	KAP14AY	240 AC	3PDT	11.38	9.10	8.65	8.19	6.37	5.92
-0475	KAP14DY	12 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59
-0476	KAP14DY	24 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59
-0477	KAP14DY	110 DC	3PDT	11.63	9.30	8.84	8.37	6.51	6.05
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

10 AMPERES

886-0431	KAP5AG	24 AC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16
886-0432	KAP5AG	120 AC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16
886-0436	KAP5DG	24 DC	SPDT	7.88	6.30	5.99	5.67	4.41	4.10
886-0437	KAP5DG	110 DC	SPDT	8.75	7.00	6.65	6.30	4.97	4.62
886-0440	KAP11AG	6 AC	DPDT	8.94	7.15	6.79	6.44	5.01	4.65
886-0441	KAP11AG	24 AC	DPDT	8.94	7.15	6.79	6.44	5.01	4.65
886-0442	KAP11AG	120 AC	DPDT	8.94	7.15	6.79	6.44	5.01	4.65
886-0450	KAP11DG	24 DC	DPDT	8.88	7.10	6.75	6.39	4.97	4.62
886-0451	KAP11DG	110 DC	DPDT	9.75	7.80	7.41	7.02	5.46	5.07
886-0460	KAP14AG	24 AC	3PDT	11.06	8.85	8.41	7.97	6.20	5.75
886-0461	KAP14AG	120 AC	3PDT	11.06	8.85	8.41	7.97	6.20	5.75
886-0470	KAP14DG	24 DC	3PDT	11.00	8.80	8.36	7.92	6.15	5.72
886-0471	KAP14DG	110 DC	3PDT	11.88	9.50	9.03	8.55	6.65	6.18

ERIES GA MULTIPLE-CONTACT RELAYS



r remote power switching, general circuit and wer control uses. Withstand mobile shock and ration. Moisture resistant coil prevents damage m high humidity. 5A contacts. AC coils for /60 Hz. Power at 25°C: DC—2W nom-l, 6 W max.; AC—6 VA. Temp. range: —45°C; to ±45°C; DC to ±75°C. Pull-in: AC—85% less of nominal voltage; DC—75% or less. der terminals. Mounts with 8-32 screw. $1\frac{1}{16}$x$1\frac{23}{32}$x$1\frac{25}{32}$". 4 oz.

Stock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-Up
6-0180	GA11A	24 AC	DPDT	4.81	3.85	3.66	3.47	2.70
6-0181	GA11A	120 AC	DPDT	4.81	3.85	3.66	3.47	2.70
6-0182	GA11D	6 DC	DPDT	4.81	3.85	3.66	3.47	2.70
6-0183	GA11D	12 DC	DPDT	4.81	3.85	3.66	3.47	2.70
6-0184	GA11D	24 DC	DPDT	4.81	3.85	3.66	3.47	2.70
6-0185	GA11D	110 DC	DPDT	5.44	4.35	4.13	3.92	3.05
6-0187	GA14A	120 AC	3PDT	5.75	4.60	4.37	4.14	3.22
6-0189	GA17A	6 AC	4PDT	6.94	5.55	5.27	5.00	3.89
6-0190	GA17A	12 AC	4PDT	6.94	5.55	5.27	5.00	3.89
6-0191	GA17A	24 AC	4PDT	6.94	5.55	5.27	5.00	3.89
6-0192	GA17A	120 AC	4PDT	6.94	5.55	5.27	5.00	3.89
6-0193	GA17A	240 AC	4PDT	7.44	5.95	5.65	5.36	4.17
6-0194	GA17D	6 DC	4PDT	6.94	5.55	5.27	5.00	3.89
6-0195	GA17D	12 DC	4PDT	6.94	5.55	5.27	5.00	3.89
6-0196	GA17D	24 DC	4PDT	6.94	5.55	5.27	5.00	3.89
6-0197	GA17D	110 DC	4PDT	7.56	6.05	5.75	5.45	4.24

COIL DATA FOR SERIES GA AND GP RELAYS

DC COILS			AC COILS		
Volts	Resistance In Ohms	Av. Current Milliamps	Volts	Resistance In Ohms	Av. Current Milliamps
6	18	333	6	1.7	1000
12	72	167	12	6.8	500
24	288	83	24	24.0	260
110	6050	18	120	690	50
.....	.....	.....	240	2950	25

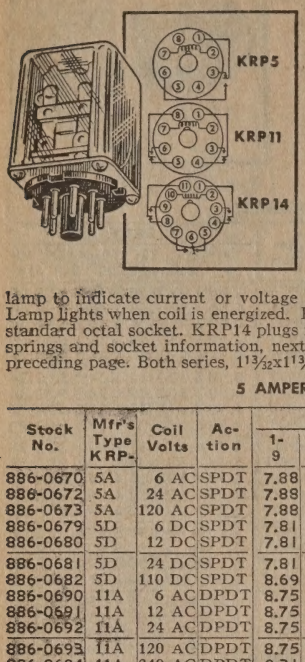
SERIES GP "PIC & BUILD" RELAYS

Order GPA or GPD coils and a switch, either GP11 or GP17. Combine to produce over 20 different relays that convert to alternative sensitivities or switching. Same size, specs as GA at left. 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-24	25-49	50-99	100-Up
886-0237	GPA	6 AC	2.44	1.95	1.85	1.76	1.37
886-0238	GPA	12 AC	2.44	1.95	1.85	1.76	1.37
886-0239	GPA	24 AC	2.44	1.95	1.85	1.76	1.37
886-0240	GPA	120 AC	2.44	1.95	1.85	1.76	1.37
886-0246	GPD	2500 Ohms	2.25	1.80	1.71	1.62	1.26
886-0248	GPD	10,000 Ohms	3.00	2.40	2.28	2.16	1.68
886-0243	GPD	6 DC	2.88	2.30	2.19	2.07	1.61
886-0244	GPD	12 DC	2.88	2.30	2.19	2.07	1.61
886-0245	GPD	24 DC	2.88	2.30	2.19	2.07	1.61
886-0235	GP11	DPDT Switch	2.50	2.00	1.90	1.80	1.40
886-0236	GP17	4PDT Switch	4.25	3.40	3.23	3.06	2.38

P&B Potter & Brumfield General-Purpose Relays

SERIES KRP AND KRP-N ENCLOSED RELAYS



General-purpose relays are enclosed in high-impact transparent, cellulose acetate case. Dust and weather proofed. Coil power at 25°C: DC—100 mW minimum, 4 watts maximum; AC—2 volt-amperes. Temperature range: −45°C minimum; AC to +70°C maximum; DC to +85°C maximum. Operate (approx.) 15 msec., release 10 msec. 10 million cycle life. 1000 megohm minimum insulation resistance. Breakdown, 500 V rms, 60 Hz. Shock, 30gs. *KRP-N Series includes a lamp to indicate current or voltage availability in power circuits. Lamp lights when coil is energized. KRP5 and KRP11 plug into standard octal socket. KRP14 plugs into 11-pin socket. Hold-down springs and socket information, next column. Coil Data Chart on preceding page. Both series, 1 13/32x1 13/32x2". Av. shpg. wt., 5 oz.

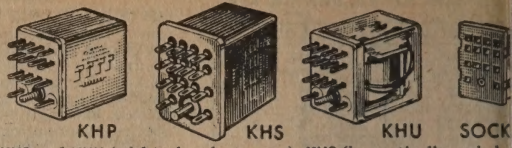
5 AMPERES

Stock No.	Mfr's Type KRP-	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-499	500-Up
886-0670	5A	6 AC	SPDT	7.88	6.30	5.99	5.67	4.41	4.10	3.62
886-0672	5A	24 AC	SPDT	7.88	6.30	5.99	5.67	4.41	4.10	3.62
886-0673	5A	120 AC	SPDT	7.88	6.30	5.99	5.67	4.41	4.10	3.62
886-0679	5D	6 DC	SPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0680	5D	12 DC	SPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0681	5D	24 DC	SPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0682	5D	110 DC	SPDT	8.69	6.95	6.60	6.26	4.87	4.52	4.00
886-0690	11A	6 AC	DPDT	8.75	7.00	6.65	6.30	4.90	4.55	4.03
886-0691	11A	12 AC	DPDT	8.75	7.00	6.65	6.30	4.90	4.55	4.03
886-0692	11A	24 AC	DPDT	8.75	7.00	6.65	6.30	4.90	4.55	4.03
886-0693	11A	120 AC	DPDT	8.75	7.00	6.65	6.30	4.90	4.55	4.03
886-0694	11A	240 AC	DPDT	9.31	7.45	7.08	6.71	5.22	4.84	4.28
886-0705	11D	6 DC	DPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0706	11D	12 DC	DPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0707	11D	24 DC	DPDT	7.81	6.25	5.94	5.63	4.38	4.06	3.59
886-0708	11D	110 DC	DPDT	9.56	7.65	7.27	6.89	5.36	4.97	4.40
886-0716	14A	6 AC	3PDT	10.88	8.70	8.27	7.83	6.09	5.66	5.00
886-0717	14A	12 AC	3PDT	10.88	8.70	8.27	7.83	6.09	5.66	5.00
886-0718	14A	24 AC	3PDT	10.88	8.70	8.27	7.83	6.09	5.66	5.00
886-0719	14A	120 AC	3PDT	10.88	8.70	8.27	7.83	6.09	5.66	5.00
886-0720	14A	240 AC	3PDT	11.44	9.15	8.69	8.24	6.41	5.95	5.26
886-0728	14D	6 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59	4.95
886-0729	14D	12 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59	4.95
886-0730	14D	24 DC	3PDT	10.75	8.60	8.17	7.74	6.02	5.59	4.95
886-0731	14D	110 DC	3PDT	11.63	9.30	8.84	8.37	6.51	6.05	5.35

10 AMPERES

886-0675	5AG	6 AC	SPDT	8.06	6.45	6.13	5.81	4.52	4.19	3.71
886-0676	5AG	24 AC	SPDT	8.06	6.45	6.13	5.81	4.52	4.19	3.71
886-0677	5AG	120 AC	SPDT	8.06	6.45	6.13	5.81	4.52	4.19	3.71
886-0685	5DG	6 DC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16	3.68
886-0686	5DG	12 DC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16	3.68
886-0687	5DG	24 DC	SPDT	8.00	6.40	6.08	5.76	4.48	4.16	3.68
886-0688	5DG	110 DC	SPDT	8.88	7.10	6.75	6.39	4.97	4.62	4.08
886-0695	11AG	6 AC	DPDT	9.06	7.25	6.89	6.53	5.08	4.71	4.17
886-0700	*11AN	6 AC	DPDT	10.38	8.30	7.89	7.47	5.81	5.40	4.77
886-0696	11AG	12 AC	DPDT	9.06	7.25	6.89	6.53	5.08	4.71	4.17
886-0701	*11AN	12 AC	DPDT	10.38	8.30	7.89	7.47	5.81	5.40	4.77
886-0697	11AG	24 AC	DPDT	9.06	7.25	6.89	6.53	5.08	4.71	4.17
886-0702	*11AN	24 AC	DPDT	10.38	8.30	7.89	7.47	5.81	5.40	4.77
886-0698	11AG	120 AC	DPDT	9.06	7.25	6.89	6.53	5.08	4.71	4.17
886-0703	*11AN	120 AC	DPDT	10.38	8.30	7.89	7.47	5.81	5.40	4.77
886-0699	11AG	240 AC	DPDT	9.63	7.70	7.32	6.93	5.39	5.01	4.43
886-0704	*11AN	240 AC	DPDT	10.94	8.75	8.31	7.88	6.12	5.69	5.03
886-0709	11DG	6 DC	DPDT	9.00	7.20	6.84	6.48	5.04	4.68	4.14
886-0710	11DG	12 DC	DPDT	9.00	7.20	6.84	6.48	5.04	4.68	4.14
886-0713	*11DN	12 DC	DPDT	10.25	8.20	7.79	7.38	5.74	5.33	4.72
886-0711	11DG	24 DC	DPDT	9.00	7.20	6.84	7.88	6.12	5.69	4.14
886-0714	*11DN	24 DC	DPDT	10.25	8.20	7.79	7.38	5.74	5.33	4.72
886-0712	11DG	110 DC	DPDT	9.86	7.90	7.51	7.11	5.53	5.14	4.54
886-0715	*11DN	110 DC	DPDT	11.19	8.95	8.50	8.06	6.27	5.82	5.15
886-0721	14AG	6 AC	3PDT	11.31	9.05	8.60	8.15	6.34	5.88	5.20
886-0722	14AG	12 AC	3PDT	11.31	9.05	8.60	8.15	6.34	5.88	5.20
886-0723	14AG	24 AC	3PDT	11.31	9.05	8.60	8.15	6.34	5.88	5.20
886-0724	14AG	120 AC	3PDT	11.31	9.05	8.60	8.15	6.34	5.88	5.20
886-0726	*14AN	120 AC	3PDT	12.63	10.10	9.60	9.09	7.07	6.57	5.81
886-0725	14AG	240 AC	3PDT	11.88	9.50	9.03	8.55	6.65	6.18	5.46
886-0727	*14AN	240 AC	3PDT	13.19	10.55	10.02	9.50	7.39	6.86	6.07
886-0735	14DG	6 DC	3PDT	11.19	8.95	8.50	8.06	6.27	5.82	5.15
886-0736	14DG	12 DC	3PDT	11.19	8.95	8.50	8.06	6.27	5.82	5.15
886-0737	14DG	24 DC	3PDT	11.19	8.95	8.50	8.06	6.27	5.82	5.15
886-0738	14DG	110 DC	3PDT	12.06	9.65	9.17	8.69	6.76	6.27	5.55

SERIES KH MINIATURE 4PDT RELAYS



KHP and KHU (with nylon dust cover), KHS (hermetically sealed w metal cover) relays for data processing, computer control, KHU, ▪ U.L. Recog. Gold-flashed silver contacts, rated 3 amp 30 VDC or 120 VAC resistive, except KHP and KHU types w suffix "12", silver-cadmium-oxide contacts. Coil power: DC, 0 watts; AC, 1.20 VA. Solder terminals. KHP has 3-48 mtg. s Fit sockets (below). Sizes: KHP and KHU, 1 17/64x1 7/64x53/64". K 29/32x1 5/32x2 9/32". Av. shpg. wt., 2 oz. Contact Allied for price quantities of 750-Up. Bulk packed in quantities over 250.

COIL DATA FOR SERIES KH RELAYS

DC COILS Volts	DC COILS Resistance In Ohms ±10% @25°C	DC COILS Inductance In H (approx.)	AC COILS Volts	AC COILS Resistance In Ohms ±10% @25°C	AC COILS Averag Curren Milliam
6	40	.08	6	10.5	200
12	160	.28	12	43	100
24	650	1.0	24	160	52
48	2600	4.5	120	3900	10.5
90	9000	13.5	...	.....	.....
110	11k	17.0	...	.....	.....

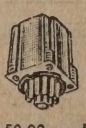
Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-249
886-0545	KHP17A11	6 AC	6.94	5.55	5.27	5.00	3.89
886-0546	KHP17A11	12 AC	6.94	5.55	5.27	5.00	3.89
886-0547	KHP17A11	24 AC	6.94	5.55	5.27	5.00	3.89
886-0548	KHP17A11	120 AC	7.56	6.05	5.75	5.45	4.24
886-0550	KHP17D11	6 DC	6.31	5.05	4.80	4.55	3.54
886-0551	KHP17D11	12 DC	6.31	5.05	4.80	4.55	3.54
886-0552	KHP17D11	24 DC	6.31	5.05	4.80	4.55	3.54
886-0553	KHP17D11	48 DC	6.56	5.25	4.99	4.73	3.68
886-0554	KHP17D11	90 DC	7.38	5.90	5.61	5.31	4.13
886-0555	KHP17D11	110 DC	7.38	5.90	5.61	5.31	4.13
886-0557	KHP17D12	24 DC	6.50	5.20	4.94	4.68	3.64
886-0558	KHP17D12	110 DC	7.56	6.05	5.75	5.45	4.24
886-0561	KHS17A11	6 AC	11.94	9.55	9.07	8.60	6.69
886-0563	KHS17A11	24 AC	11.94	9.55	9.07	8.60	6.69
886-0564	KHS17A11	120 AC	12.38	9.90	9.41	8.91	6.93
886-0566	KHS17D11	6 DC	10.69	8.55	8.12	7.70	5.99
886-0567	KHS17D11	12 DC	10.69	8.55	8.12	7.70	5.99
886-0568	KHS17D11	24 DC	10.69	8.55	8.12	7.70	5.99
886-0569	KHS17D11	110 DC	11.75	9.40	8.93	8.46	6.58
886-0575	KHU17A11	6 AC	6.94	5.55	5.27	5.00	3.89
886-0576	KHU17A11	12 AC	6.94	5.55	5.27	5.00	3.89
886-0577	KHU17A11	24 AC	6.94	5.55	5.27	5.00	3.89
886-0578	KHU17A11	120 AC	7.56	6.05	5.75	5.45	4.24
886-0580	KHU17D11	6 DC	6.31	5.05	4.80	4.55	3.54
886-0581	KHU17D11	12 DC	6.31	5.05	4.80	4.55	3.54
886-0582	KHU17D11	24 DC	6.31	5.05	4.80	4.55	3.54
886-0588	KHU17D12	24 DC	6.50	5.20	4.94	4.68	3.64
886-0583	KHU17D11	48 DC	6.56	5.25	4.99	4.73	3.68
886-0584	KHU17D11	90 DC	7.38	5.90	5.61	5.31	4.13
886-0585	KHU17D11	110 DC	7.38	5.90	5.61	5.31	4.13
886-0589	KHU17D12	110 DC	7.56	6.05	5.75	5.45	4.24

SOCKETS

886-1410	9KH1	Solder term.	.88	.70	.67	.63
886-1411	9KH2	PC terminal	.88	.70	.67	.63

886-1412. KHP Hold-Down Spring. Wt., 3 oz.....Box of 50 for

RELAY ACCESSORIES AND SOCKETS



8-Pin "P" Case. Type 35D070. Clear plastic case mounting rectifiers, capacitors, resistors. Octal b With four screws. 2x1 13/32x1 13/32". Av. wt., 1 oz.
886-1460 1-24....Each .65 25-49.....Each
50-99...Ea. .59 100-249...Ea. .46 250-Up....Ea.

11-Pin "P" Case. Type 35D072. As above, 11-pin b
886-1462 1-24.....Each .80 25-49...Each
50-99....Each .72 100-249.....Each .56 250-Up.....Each

KCP-KRP Hold-Down Spring. Type 9KR15. Two 5/32" holes. 3 o
886-1416.....Box of 50 for

SOCKETS FOR KCP, KRP, KRP-N, KAP, PW, SM RELA

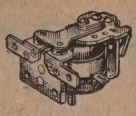
Amphenol Barrier Type Sockets. For KAP, KCP, KRP, and KR relays. For SP and DP types, order octal 713-5003, p. 328. 3-pole, order 11-pin 713-5017, p. 328.

Amphenol Standard Sockets. For KAP, KCP, KRP, KRP-N. SP and DP relays, order octal 713-2810. For 3-pole relays, o 11-pin 713-2815, p. 328. For PW and SM relays, order 7-pin T 78 A 7P. See page 328 for Series 77 relay socket.

General-Purpose & Sensitive Relays, Buzzers P&B

KR3, KRP3-H DOUBLE-BREAK HEAVY-DUTY RELAYS

ave copper alloy contact arms, sil-r-cadmium-oxide contacts. 20 hps, 120 VAC, 60 Hz res., or 28 DC; 1 hp 120/240 V, 60 Hz. PST-N.O.-DB (1 Form X). 1.6x 571x1.52". 6-32 stud mtg on .437" r. Same coil rating as KA Series, . 229. Wt., 2 oz. KRP3-H Series. bove, enclosed in clear plastic dust ver. Octal base. Shpg. wt., 3 oz.

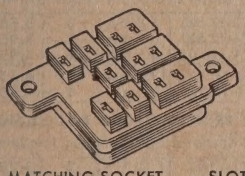

OPEN

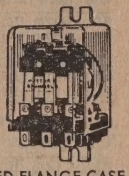
ENCLOSED

Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
86-0655	KR3AH	24 VAC	5.15	4.30	4.09	3.87	3.01
86-0656	KR3AH	120 VAC	5.15	4.30	4.09	3.87	3.01
86-0658	KR3DH	12 VDC	4.93	4.10	3.90	3.69	2.87
86-0659	KR3DH	24 VDC	4.93	4.10	3.90	3.69	2.87
86-0661	KRP3AH	120 VAC	8.40	7.00	6.65	6.30	4.90
86-0663	KRP3DH	12 VDC	8.10	6.75	6.41	6.08	4.73
86-0664	KRP3DH	24 VDC	8.10	6.75	6.41	6.08	4.73
86-0665	KRP3DH	110 VDC	8.92	7.45	7.08	6.71	5.22

KUP SERIES 10-AMPERE ENCLOSED RELAYS

PLAIN CASE


MATCHING SOCKET


SLOTTED FLANGE CASE

ain Case. Industrial control 10-ampere relays for continuous peration. Terminals .187" quick-connect/solder type. Silver-dmium-oxide contacts. Clear plastic dust cover. Matching 10-np sockets listed below. Slotted-Flange Case. For direct-to-chassis ounting only. Slot width, .156". 1.531x1.408x1.908". Wt. 3 oz.

Stock No.	Mfr's Type KUP-	Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
6-0770	5A15	6 AC	SPDT	4.69	3.90	3.71	3.51	2.73	2.54
6-0771	5A15	24 AC	SPDT	4.69	3.90	3.71	3.51	2.73	2.54
6-0772	5A15	120 AC	SPDT	4.69	3.90	3.71	3.51	2.73	2.54
6-0773	5A15	240 AC	SPDT	5.15	4.30	4.09	3.87	3.01	2.80
6-0774	5D15	6 DC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
6-0775	5D15	12 DC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
6-0776	5D15	24 DC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
6-0777	5D15	110 DC	SPDT	5.23	4.35	4.13	3.92	3.05	2.83
6-0778	11A15	6 AC	DPDT	5.70	4.75	4.51	4.28	3.33	3.09
6-0779	11A15	12 AC	DPDT	5.70	4.75	4.51	4.28	3.33	3.09
6-0780	11A15	24 AC	DPDT	5.70	4.75	4.51	4.28	3.33	3.09
6-0781	11A15	120 AC	DPDT	5.70	4.75	4.51	4.28	3.33	3.09
6-0782	11A15	240 AC	DPDT	6.20	5.15	4.89	4.64	3.61	3.35
6-0783	11D15	6 DC	DPDT	5.10	4.25	4.04	3.83	2.98	2.76
6-0784	11D15	12 DC	DPDT	5.10	4.25	4.04	3.83	2.98	2.76
6-0785	11D15	24 DC	DPDT	5.10	4.25	4.04	3.83	2.98	2.76
6-0786	11D15	110 DC	DPDT	5.90	4.90	4.66	4.41	3.43	3.19
6-0787	14A15	6 AC	3PDT	6.38	5.30	5.04	4.77	3.71	3.45
6-0788	14A15	120 AC	3PDT	6.38	5.30	5.04	4.77	3.71	3.45
6-0789	14A15	240 AC	3PDT	6.85	5.70	5.42	5.13	3.99	3.71
6-0790	14D15	6 DC	3PDT	5.90	4.90	4.66	4.41	3.43	3.19
6-0791	14D15	12 DC	3PDT	5.90	4.90	4.66	4.41	3.43	3.19
6-0792	14D15	24 DC	3PDT	5.90	4.90	4.66	4.41	3.43	3.19
6-0793	14D15	110 DC	3PDT	6.35	5.30	5.04	4.77	3.71	3.45
6-1420	9KU1	Sold. Term. Socket		.95	.79	.75	.71	.55	.51
6-1421	9KU2	PC Pin Term. Sock.		1.14	.95	.90	.86	.67	.62
6-1425	9KU6	Screw Term. Socket		Box of 4 for 14.00					
6-1422	9KU3	Hold-Down Springs. 3 oz.		Box of 50 for 5.25					

KUP SERIES WITH SLOTTED-FLANGE CASE

6-0800	14A55	6 AC	3PDT	6.37	5.30	5.04	4.77	3.71	3.45
6-0801	14A55	12 AC	3PDT	6.37	5.30	5.04	4.77	3.71	3.45
6-0802	14A55	24 AC	3PDT	6.37	5.30	5.04	4.77	3.71	3.45
6-0803	14A55	120 AC	3PDT	6.37	5.30	5.04	4.77	3.71	3.45
6-0804	14A55	240 AC	3PDT	6.85	5.70	5.42	5.13	3.99	3.71
6-0805	14D55	6 DC	3PDT	5.90	4.90	4.66	4.41	3.43	3.19
6-0806	14D55	12 DC	3PDT	5.90	4.90	4.66	4.41	3.43	3.19
6-0807	14D55	24 DC	3PDT	5.90	4.90	4.66	4.41	3.43	3.19
6-0808	14D55	110 DC	3PDT	6.37	5.30	5.04	4.77	3.71	3.45

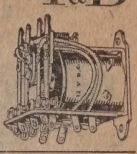
BU AC-OPERATED BUZZER

ring-steel armature buzzes when coil is energized. 2x1½x1⅜". Mtg., 6-32 tapped core. Shpg. wt., 2 oz.

Stock No.	Type	Volts	Ohms	Stock No.	Type	Volts	Ohms
6-0040	BU-6AC	6AC	2.75	886-0042	BU-24AC	24AC	50
6-0041	BU-12AC	12AC	13.75	886-0043	BU-120AC	120AC	1250

.....Each 2.34 10-24.....Each 1.95 25-49.....Each 1.85
-99.....Each 1.76 100-249.....Each 1.37 250-Up...Each 1.27

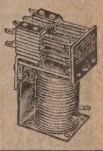
KL MULTIPLE-CONTACT MIDGET RELAYS



Widely used in industrial machine controls, elevator controls, communication equipment, etc. High dielectric phenolic insulation. Silver contacts rated at 5 amps at 120 V, 50-60 Hz AC resistive. AC coils are for 60 Hz. Two 6-32 tapped mtg. holes. 1²³⁄₃₂x2¹⁄₃₂x1¹⁵⁄₁₆". Wt., 5 oz.

Stock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-Up
886-0595	KL11A	120 AC	DPDT	6.37	5.30	5.04	4.77	3.71
886-0596	KL14A	120 AC	3PDT	7.10	5.90	5.61	5.31	4.13
886-0597	KL17A	120 AC	4PDT	8.40	7.00	6.65	6.30	4.90
886-0598	KL17D	24 DC	4PDT	7.95	6.60	6.27	5.94	4.62

GB SENSITIVE 5-AMPERE RELAYS



Medium-cost sensitive 5-amp relays. Sensitivity: 115 mW for single pole, and 275 mW for 4 pole. Silver contacts are designed for maximum self-cleaning action for minimized maintenance. (Pick-up is not adjustable.) Contacts are all rated at 5 amperes. Mounting: 8-32 tapped core and locating half-punch. Size, 2¹⁵⁄₃₂x1²³⁄₃₂x1¹⁄₁₆". Shpg. wt., 6 oz.

Stock No.	Mfr's Type	Coil mA	Coil Ohms	Action	EACH 1-9	10-24	25-49	50-99	100-Up
886-0206	GB5D	6.8	2500	SPDT	4.55	3.80	3.61	3.42	2.66
886-0205	GB5D	4.8	5000	SPDT	4.80	4.00	3.80	3.60	2.80
886-0209	GB11D	7.0	2500	DPDT	6.45	5.35	5.08	4.82	3.75
886-0208	GB11D	5.0	5000	DPDT	6.56	5.45	5.18	4.91	3.82
886-0207	GB11D	3.53	10,000	DPDT	7.35	6.10	5.80	5.49	4.27
886-0212	GB17D	10.5	2500	4PDT	7.70	6.40	6.08	5.76	4.48
886-0210	GB17D	5.25	10,000	4PDT	8.45	7.05	6.70	6.35	4.94

KCP ENCLOSED SENSITIVE 2-AMPERE RELAYS

Sensitive two-ampere relays in transparent, high-impact, weatherproof case. Sensitivity: 125 mW, single pole; 250 mW, double pole; 375 mW, 3 pole. KCP5 and KCP11 plug into a standard octal socket; KCP14 plugs into a standard 11-pin socket. ⅛" diameter gold-flashed silver contacts rated 2 amps. Size, 1¹³⁄₃₂x1¹³⁄₃₂x2" high. See pg. 230 for socket information. 4 oz.

Resistance (Ohms)	Single Pole Pull-in	Single Pole Sens.	Double Pole Pull-in	Double Pole Sens.	Three Pole Pull-in	Three Pole Sens.
2500	7.2 mA	125 mW	10.0 mA	250 mW	12.3 mA	375 mW
5000	5.0 mA	125 mW	7.2 mA	250 mW	8.7 mA	375 mW
10,000	3.6 mA	125 mW	5.0 mA	250 mW	6.1 mA	375 mW

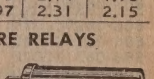
Stock No.	Mfr's Type	Coil Ohms	Action	EACH 1-9	10-24	25-49	50-99	100-Up
886-0525	KCP5	2500	SPDT	7.80	6.50	6.18	5.85	4.55
886-0526	KCP5	5000	SPDT	7.90	6.60	6.27	5.94	4.62
886-0527	KCP5	10,000	SPDT	8.45	7.05	6.70	6.35	4.94
886-0528	KCP11	2500	DPDT	8.35	6.95	6.60	6.26	4.87
886-0529	KCP11	5000	DPDT	8.45	7.05	6.70	6.35	4.94
886-0530	KCP11	10,000	DPDT	9.00	7.50	7.13	6.75	5.25
886-0531	KCP14	2500	3PDT	10.25	8.55	8.12	7.70	5.99
886-0532	KCP14	5000	3PDT	10.40	8.65	8.22	7.79	6.06
886-0533	KCP14	10,000	3PDT	10.90	9.10	8.65	8.19	6.37

LB-5 SENSITIVE 5-AMPERE RELAYS

Small, fast-acting units. For any circuit supplying as little as 200 milliwatts of DC. Breakdown, 500 V, rms. Silver contacts rated at 5 amps, 28 V, SPDT action. Adjusted by tail spring hook. For DC only. Mtg., two ⅜" holes on 2⁷⁄₃₂" ctrs. 3 oz.

Stock No.	Ohms	mA	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0815	2500	9	3.40	2.85	2.71	2.57	2.00	1.85
886-0816	5000	6.3	3.65	3.05	2.90	2.75	2.14	1.98
886-0817	10,000	4.5	3.96	3.30	3.14	2.97	2.31	2.15

PW HERMETICALLY SEALED 1-AMPERE RELAYS

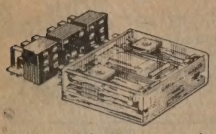


Precision, lightweight DC relays. Sealed in air-tight brass cans. Withstand 10g vibration to 500 Hz. DS suffix are voltage-actuated, LS current-actuated. Mount in standard 7-pin miniature socket. Silver contacts rated at 1 amp. Size 4⁹⁄₆₄" dia.; 1¹¹⁄₁₆" high (above socket). *Milliamps. For socket information see page 229. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Volts	Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
886-1020	PW5DS	6	202	14.00	11.85	11.26	10.67	8.30
886-1021	PW5DS	12	810	14.00	11.85	11.26	10.67	8.30
886-1022	PW5DS	24	3240	14.00	11.85	11.26	10.67	8.30
886-1025	PW5LS	2.8*	5000	14.50	12.25	11.64	11.03	8.58
886-1024	PW5LS	2.0*	10,000	15.30	12.70	12.07	11.43	8.89

P&B General-Purpose & Industrial Relays

R40 SERIES SLIMLINE® DC RELAYS



Flat, low-profile package 4PDT relays for printed circuit board use; permits 0.6" board mounting centers. Low power, approximately 100 mW/pole. Mechanical life: over 10 million operations. Electrical life: to 600,000 operations. High contact pressure: 15 grams minimum. Contacts: Four Form C. E1, solder terminals for plug-in mounting; E2, printed circuit terminals; E3, right-angle PC terminals. *Bifurcated low level contacts (100 mA). †Cross bar dry circuit contacts (500 μA). Size, 1.2x1.4x0.43" maximum. Shpg. wt. 1 oz.

Stock No.	Mfr's Type R40-	Coil Volts	Amps	EACH 1-9	10-49	50-99	100-Up
886-1180	E1-X4-V200	12	5	5.60	5.04	4.20	3.92
886-1181	E1-X4-V800	24	5	5.60	5.04	4.20	3.92
886-1189	E1-Y4-V200	12	2	5.35	4.82	4.01	3.75
886-1192	E1-Y4-V800	24	2	5.35	4.82	4.01	3.75
886-1196	E1-Z4-V200	12	*	5.85	5.27	4.39	4.10
886-1198	E1-Z4-V800	24	*	5.85	5.27	4.39	4.10
886-1175	E1-L4-V200	12	†	6.80	6.12	5.10	4.76
886-1176	E1-L4-V800	24	†	6.80	6.12	5.10	4.76
886-1210	E2-X4-V200	12	5	5.60	5.04	4.20	3.92
886-1211	E2-X4-V800	24	5	5.60	5.04	4.20	3.92
886-1215	E2-Y4-V800	24	2	5.35	4.82	4.01	3.75
886-1235	E3-X4-V200	12	5	5.60	5.04	4.20	3.92
886-1236	E3-X4-V800	24	5	5.60	5.04	4.20	3.92
886-1240	E3-Y4-V200	12	2	5.35	4.82	4.01	3.75
886-1241	E3-Y4-V800	24	2	5.35	4.82	4.01	3.75
886-1245	E3-Z4-V200	12	*	5.85	5.27	4.39	4.10
886-1246	E3-Z4-V800	24	*	5.85	5.27	4.39	4.10
886-1225	E3-L4-V200	12	†	6.80	6.12	5.10	4.76
886-1226	E3-L4-V800	24	†	6.80	6.12	5.10	4.76
886-1436	9XR40-1	E3 Socket		1.35	1.22	1.01	.945
886-1437	9XR40-2	E2 Socket		.95	.85	.71	.665
886-1438	9XR40-3	E1 Socket		1.00	.90	.75	.70

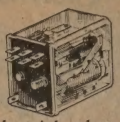
NEW KNP GENERAL PURPOSE RELAY

For AC or DC Electrical Control Applications

Small-size relay for general purpose applications where space is limited. Enclosed in clear polycarbonate dust cover. Silver-cadmium oxide contacts for SPDT, DPDT or 3PDT switching. Recognized under the Component Program of Underwriters Laboratories for ratings of 1/10 hp at 120 VAC, 3 amps. at 32 VDC, resistive, or 3 amps. at 240 VAC, 80% P.F. Relays have .110" quick connect/solder type terminals for easy connections. Mounts with No. 3-48 stud, or snap-in socket with solder or printed circuit terminals. Size, .98x1.00"x1.415" maximum. Actual wt., 1.4 oz. without socket.

Stock No.	Mfr's Type KNP-	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0617	5A21	6 AC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
886-0618	6A21	12 AC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
886-0619	5A21	24 AC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
886-0620	5A21	120 AC	SPDT	4.50	3.75	3.56	3.38	2.63	2.44
886-0621	5D21	6 DC	SPDT	4.30	3.60	3.42	3.24	2.52	2.34
886-0622	5D21	12 DC	SPDT	4.30	3.60	3.42	3.24	2.52	2.34
886-0623	5D21	24 DC	SPDT	4.30	3.60	3.42	3.24	2.52	2.34
886-0624	5D21	110 DC	SPDT	4.98	4.15	3.94	3.74	2.91	2.70
886-0625	11A21	6 AC	DPDT	5.35	4.45	4.23	4.01	3.12	2.89
886-0626	11A21	12 AC	DPDT	5.35	4.45	4.23	4.01	3.12	2.89
886-0627	11A21	24 AC	DPDT	5.35	4.45	4.23	4.01	3.12	2.89
886-0628	11A21	120 AC	DPDT	5.35	4.45	4.23	4.01	3.12	2.89
886-0629	11D21	6 DC	DPDT	4.80	4.00	3.80	3.60	2.80	2.60
886-0630	11D21	12 DC	DPDT	4.80	4.00	3.80	3.60	2.80	2.60
886-0631	11D21	24 DC	DPDT	4.80	4.00	3.80	3.60	2.80	2.60
886-0632	11D21	48 DC	DPDT	4.98	4.15	3.94	3.74	2.91	2.70
886-0633	11D21	110 DC	DPDT	5.60	4.65	4.42	4.19	3.26	3.02
886-0634	14A21	6 AC	3PDT	6.00	5.00	4.75	4.50	3.50	3.25
886-0635	14A21	12 AC	3PDT	6.00	5.00	4.75	4.50	3.50	3.25
886-0636	14A21	24 AC	3PDT	6.00	5.00	4.75	4.50	3.50	3.25
886-0637	14A21	120 AC	3PDT	6.00	5.00	4.75	4.50	3.50	3.25
886-0638	14D21	6 DC	3PDT	5.54	4.60	4.37	4.14	3.22	2.99
886-0639	14D21	12 DC	3PDT	5.54	4.60	4.37	4.14	3.22	2.99
886-0640	14D21	24 DC	3PDT	5.54	4.60	4.37	4.14	3.22	2.99
886-0641	14D21	48 DC	3PDT	5.70	4.75	4.51	4.28	3.33	3.09
886-0642	14D21	110 DC	3PDT	6.30	5.25	4.99	4.73	3.68	3.41
886-1413	9KN1	Sold. Term. Sockets		Mult. of 10 EA. 10 Up .70					
886-1414	9KN2	PC Pin Term. Sockets		Mult. of 10 EA. 10 Up .70					
886-1415	9KN3	Hold down Springs		Mult. of 50 EA. 50 Up .12					

PARELCO/P&B R10 SERIES DC RELAYS



- DPDT, 4 PDT and 6 PDT Contact Arrangements
- Standard Types Have Solde Plug-in Terminals, Stud
- Printed Circuit Types

DC operated industrial relays in transparent enclosure. So terminals, for stud or plug-in mounting (except printed cir type E2). Mechanical Life: 10 million operations. Contacts: T four or six Form C; fine silver, gold bonded. Contact Resista 50 milliohms max. initially; 200 milliohms after life. Oper. ter −55° to +72°C. 1.187x.735x1.375" maximum. Shpg. wt., 1½

WITH BIFURCATED LOW LEVEL CONTACTS

Stock No.	Mfr's Type R10-	Coil V or mA DC	Contacts	EACH 1-9	10-49	50-99	1
886-1105	E1-Z2-V700	24 V	2	3.65	3.29	2.74	2.
886-1115	E1-Z4-V700	24 V	4	4.10	3.69	3.08	2.
886-1120	E1-Z6-V430	24 V	6	5.30	4.77	3.98	3.

WITH SENSITIVE CURRENT ADJUSTMENT

Contacts rated 2 amps except Z4 types, low level bifurcated.

886-1070	E1-Y2-J2.5K	5.8 mA	2	3.55	3.20	2.66	2.
886-1071	E1-Y4-J2.5K	8.4 mA	4	3.95	3.56	2.96	2.
886-1072	E1-Y4-J10.0K	4.5 mA	4	4.85	4.37	3.64	3.
886-1110	E1-Z4-J1.0K	13.0 mA	4	4.45	4.01	3.34	3.
886-1111	E1-Z4-J5.0K	6.2 mA	4	4.05	3.65	3.04	2.

FOR PRINTED CIRCUIT BOARD MOUNTING

Contacts rated 2 amps except Z4 types, low level bifurcated.

886-1140	E2-Y2-V185	12 V	2	3.25	2.93	2.44	2.
886-1141	E2-Y2-V700	24 V	2	3.25	2.93	2.44	2.
886-1150	E2-Y4-V185	12 V	4	3.60	3.24	2.70	2.
886-1151	E2-Y4-V700	24 V	4	3.60	3.24	2.70	2.
886-1160	E2-Z4-V185	12 V	4	4.10	3.69	3.08	2.
886-1161	E2-Z4-V700	24 V	4	4.10	3.69	3.08	2.

R10 TELEPHONE TYPE RELAYS

Contact ratings: Y Series, 2A; X Series, 5A.

886-1075	E1-Y2-V185	12 V	2	3.25	2.93	2.44	2.
886-1076	E1-Y2-V700	24 V	2	3.25	2.93	2.44	2.
886-1077	E1-Y2-V15.0K	110 V	2	4.95	4.46	3.72	3.
886-1085	E1-Y4-V52	6 V	4	3.65	3.29	2.74	2.
886-1086	E1-Y4-V185	12 V	4	3.65	3.29	2.74	2.
886-1087	E1-Y4-V700	24 V	4	3.65	3.29	2.74	2.
886-1088	E1-Y4-V2.5K	48 V	4	3.65	3.29	2.74	2.
886-1089	E1-Y4-V15.0K	110 V	4	5.35	4.82	4.02	3.
886-1094	E1-Y6-V90	12 V	6	4.65	4.19	3.49	3.
886-1095	E1-Y6-V430	24 V	6	4.65	4.19	3.49	3.
886-1096	E1-Y6-V9.0K	110 V	6	5.55	5.00	4.17	3.
886-1050	E1-X2-V185	12 V	2	3.35	3.02	2.52	2.
886-1051	E1-X2-V700	24 V	2	3.35	3.02	2.52	2.
886-1052	E1-X4-V52	6 V	4	3.85	3.47	2.89	2.
886-1053	E1-X4-V185	12 V	4	3.85	3.47	2.89	2.
886-1054	E1-X4-V700	24 V	4	3.85	3.47	2.89	2.
886-1055	E1-X4-V25K	48 V	4	3.85	3.47	2.89	2.
886-1056	E1-X4-V15.0K	110 V	4	5.50	4.95	4.13	3.
886-1057	E1-X6-V430	24 V	4	5.00	4.50	3.75	3.
886-1430	9XR10-1	2PDT Socket, Spring, Ground Wire. Ea.					
886-1431	9XR10-2	4PDT Socket, Spring, Ground Wire. Ea.					
886-1432	9XR10-3	6PDT Socket, Spring, Ground Wire. Ea.					

KUL MAGNETIC LATCHING RELAYS

Continuous duty single coil types. Uses a perm nent magnet in parallel with normal magnetic cuit, requires only half the space of mechani interlock types. Continuous latch condition e during loss of power. Contacts rated 10 amps at VDC or 120 VAC, 80% power factor. −45° +75° C. All are DPDT, except *SPDT. See K listing, page 231, for sockets. 1.406x.531x2.15 Av. wt., 3½ oz.

Stock No.	Type KUL-	Coil V	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-
886-0758	5A15S*	120 AC	3700	7.58	6.30	5.99	5.67	4.4
886-0759	5D15S*	24 DC	472	6.55	5.45	5.18	4.91	3.8
886-0761	11A15S	12 AC	37	8.50	7.10	6.75	6.39	4.9
886-0762	11A15S	24 AC	176	8.50	7.10	6.75	6.39	4.9
886-0763	11A15S	120 AC	3700	8.50	7.10	6.75	6.39	4.9
886-0765	11D15S	12 DC	120	7.29	6.05	5.75	5.45	4.2
886-0766	11D15S	24 DC	472	7.29	6.05	5.75	5.45	4.2

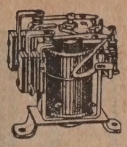
ATTENTION PURCHASING AGENTS

We can supply Potter & Brumfield relays in production quantities. For prices write or call our nearest branch office.

Power and Plate-Circuit Relays

P&B

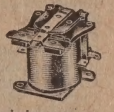
LM SENSITIVE 5-AMP RELAYS



mature spring-tension adjustment and adjust-
le residual screw permits settings for specific
ltages and currents. (LM5; 0.1 to .015 watts.
M11; 0.2 to 0.07 watts.) Silver contacts rated
5 amperes. LM5 is SPDT; LM11 is DPDT.
tg., two 6-32 holes on $1^{13}/_{16}$" centers. Sizes:
M5, $2^{5}/_{16}$x$1^{1}/_{4}$x$2^{7}/_{16}$"; LM11, $2^{3}/_{16}$x$2^{5}/_{32}$x$2^{1}/_{2}$". Av.
pg. wt., 6 oz.

Stock No.	Mfr's Type	Ohms	mA	EACH 1-9	10-24	25-49	50-99	100-Up
6-0820	LM5	2500	6.3	5.40	4.55	4.32	4.10	3.19
6-0821	LM5	5000	4.5	5.75	4.80	4.56	4.32	3.36
6-0822	LM5	10k	3.2	6.10	5.15	4.89	4.64	3.61
6-0823	LM11	2500	9.0	7.80	6.55	6.22	5.90	4.59
6-0824	LM11	5000	6.3	8.00	6.75	6.41	6.08	4.73
6-0825	LM11	10k	4.5	8.85	7.40	7.03	6.66	5.18

5D LIGHTWEIGHT SENSITIVE 2-AMP RELAYS



r radio-sonde, light-dimmer, model applications.
ltage and current-actuated types. Sensitivity, 60
W. Life expectancy, 10 million operations. Oper-
e, 25 ms; release, less than 5 ms. Bar palladium
PDT contracts rated at 2 amps. *6 VDC type, †12
DC. Molded phenolic insulation; 100 megohms minimum re-
stance. Mounting: two 4-40 tapped holes on $^{5}/_{8}$x$^{3}/_{4}$" diagonal
nters. Av. shpg. wt., 2 oz.

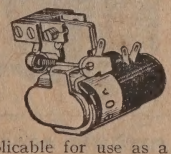
Stock No.	Ohms	mA	EACH 1-9	10-24	25-49	50-99	100-Up
86-1275	335	*	3.64	3.05	2.90	2.75	2.14
86-1276	1350	†	3.80	3.20	3.04	2.88	2.24
86-1277	2500	5.0	3.94	3.30	3.14	2.97	2.31
86-1278	5000	3.5	4.30	3.60	3.42	3.24	2.56
86-1279	10k	2.5	5.00	4.20	3.99	3.78	2.94

SM MIDGET SENSITIVE ¼-AMP RELAYS

ast-acting, subminiature sensitive relays for volt-
e or current-actuating applications. Ideal for low-
vel switching in computers, aircraft instruments,
c. Voltage actuated relays are designated SM-D.
urrent-operated relays are designated SM-L.
PDT contacts, rated ¼ amp. Stationary contacts gold-flashed
ver; movables, rhodium. Units are sealed hermetically in deep-
awn steel tubes. Standard 7-pin miniature tube-type bases. ¾"
a. $1^{1}/_{16}$" high above socket. Order sockets from page T-336. Shpg.
t., 2 oz.

Stock No.	Mfr's Type	VDC	Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
6-1370	SM5DS	6	80	7.95	7.65	7.27	6.89	5.36
6-1371	SM5DS	12	360	7.95	7.65	7.27	6.89	5.36
6-1372	SM5DS	24	900	7.95	7.65	7.27	6.89	5.36
6-1376	SM5LS	3.9 mA	5000	9.60	7.95	7.55	7.16	5.57
6-1375	SM5LS	2.7 mA	10k	10.56	8.50	8.08	7.65	5.95

SS5D DC SENSITIVE 2-AMP DUAL-COIL RELAY



n extremely sensitive, precision-built SPDT
lay that operates on as little as 2.5 milli-
tts and will withstand up to 4.75 watts
aximum. Because of its high sensitivity, the
5 is ideal for low-energy circuits such as in-
uments, bridge balancing, etc. Dual series-
nnected coils operate heavy-duty armature
pported by two jeweled needle bearings.
ual-coil construction makes this relay applicable for use as a
ferential relay by connecting each coil in a separate circuit. Coil
istance, 10k. Contacts rated 2 amps. Mounts by two 6-32 tapped
les on $2^{3}/_{32}$" centers. Size, $1^{11}/_{16}$x$1^{5}/_{16}$x$1^{3}/_{4}$". Shpg. wt., 4 oz.

6-1380. 1-9 ..... Each 19.50 10-24 ..... Each 16.05
49 .... Each 15.25 50-99 .... Each 14.45 100-Up .... Each 11.24

AB AND ABC HEAVY-DUTY 10-AMP POWER RELAYS

rminals fit snap-on connectors, or may be dip-sol-
red to printed circuit. Snap-on screw adapters in-
ded. DPDT silver contacts rated 10 amps. AC types
L. Component-Program Recognized. C.S.A. Listed.
pen type mounts by two 8-32 tapped holes on $1^{1}/_{4}$"
nters. Size, $1^{15}/_{16}$x$1^{13}/_{32}$x3". Shpg. wt., 6 oz. All others
ve dust covers, mount by one 8-32 stud $^{3}/_{8}$" long. Size,
$^{7}/_{64}$x$2^{3}/_{32}$x$2^{25}/_{32}$". Shpg. wt., 8 oz.

Stock No.	Mfr's Type	Coil Type	EACH 1-9	10-24	25-49	50-99	100-Up
6-0015	*AB11AY	120 AC	7.40	6.15	5.84	5.54	4.31
6-0018	ABC11AY	120 AC	8.90	7.40	7.03	6.66	5.18
6-0019	ABC11AY	240 AC	9.50	7.90	7.51	7.11	5.53
6-0021	ABC11D	12 DC	8.80	7.30	6.94	6.57	5.11
6-0022	ABC11D	24 DC	8.80	7.30	6.94	6.57	5.11

MR MEDIUM-DUTY POWER RELAYS

Medium-duty power relays for small motors, transmitters and other general-purpose applications. Contacts $^{7}/_{32}$" diameter silver, rated 8 amps, except *10 amps. SPST relays are normally open. Sizes: SP units, $1^{11}/_{16}$x$1^{11}/_{32}$x$2^{31}/_{32}$"; DP units, 2x$2^{3}/_{16}$x$2^{19}/_{32}$"; 3-pole, 2x$2^{3}/_{16}$x$2^{31}/_{32}$". Mounting: $^{5}/_{32}$" diameter holes on $2^{1}/_{4}$" centers for MR 3 and MR11, $2^{5}/_{8}$" centers for MR5 and MR14. Dust covers below. Wt., 5 oz.

SPST*

Stock No.	Mfr's Type	Coil Volts	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0885	MR3A	6 AC	2.75	4.95	4.50	4.28	4.05	3.15	2.93
886-0886	MR3A	24 AC	50.0	4.95	4.50	4.28	4.05	3.15	2.93
886-0887	MR3A	120 AC	1250.0	4.95	4.50	4.28	4.05	3.15	2.93
886-0889	MR3D	6 DC	24.0	4.51	4.10	3.90	3.69	2.87	2.67
886-0890	MR3D	12 DC	96.0	4.51	4.10	3.90	3.69	2.87	2.67
886-0891	MR3D	24 DC	360.0	4.51	4.10	3.90	3.69	2.87	2.67

SPDT

886-0895	MR5A	6 AC	2.75	4.45	4.05	3.85	3.65	2.84	2.63
886-0896	MR5A	12 AC	13.25	4.45	4.05	3.85	3.65	2.84	2.63
886-0897	MR5A	24 AC	50.0	4.45	4.05	3.85	3.65	2.84	2.63
886-0898	MR5A	120 AC	1250.0	4.45	4.05	3.85	3.65	2.84	2.63
886-0899	MR5A	240 AC	4600.0	4.95	4.50	4.28	4.05	3.15	2.93
886-0900	MR5D	6 DC	24.0	4.13	3.75	3.56	3.38	2.63	2.44
886-0901	MR5D	12 DC	96.0	4.13	3.75	3.56	3.38	2.63	2.44
886-0902	MR5D	24 DC	360.0	4.13	3.75	3.56	3.38	2.63	2.44
886-0903	MR5D	110 DC	8000.0	4.70	4.30	4.09	3.87	3.01	3.80

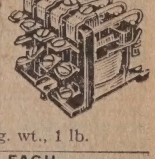
DPDT

886-0907	MR11A	6 AC	2.75	6.27	5.70	5.42	5.13	3.99	3.71
886-0908	MR11A	12 AC	13.25	6.27	5.70	5.42	5.13	3.99	3.71
886-0909	MR11A	24 AC	50.0	6.27	5.70	5.42	5.13	3.99	3.71
886-0910	MR11A	120 AC	1250.0	6.27	5.70	5.42	5.13	3.99	3.71
886-0911	MR11A	240 AC	4600.0	6.77	6.15	5.84	5.54	4.31	4.00
886-0912	MR11D	6 DC	24.0	5.95	5.40	5.13	4.86	3.78	3.51
886-0913	MR11D	12 DC	96.0	5.95	5.40	5.13	4.86	3.78	3.51
886-0914	MR11D	24 DC	360.0	5.95	5.40	5.13	4.86	3.78	3.51
886-0915	MR11D	110 DC	8000.0	6.55	5.95	5.65	5.36	4.17	3.87

3PDT

886-0917	MR14A	6 AC	2.75	7.48	6.80	6.46	6.12	4.76	4.42
886-0918	MR14A	12 AC	13.25	7.48	6.80	6.46	6.12	4.76	4.42
886-0919	MR14A	24 AC	50.0	7.48	6.80	6.46	6.12	4.76	4.42
886-0920	MR14A	120 AC	1250.0	7.48	6.80	6.46	6.12	4.76	4.42
886-0921	MR14A	240 AC	4600.0	7.98	7.25	6.89	6.53	5.08	4.71
886-0923	MR14D	12 DC	96.0	7.05	6.40	6.08	5.76	4.48	4.16
886-0924	MR14D	24 DC	360.0	7.05	6.40	6.08	5.76	4.48	4.16
886-0925	MR14D	110 DC	8000.0	7.65	6.95	6.60	6.26	4.87	4.52

PM17 4PDT 25-AMP POWER RELAYS



Compact. For polyphase and heavy-duty switching. 4PDT, Silver-cadmium-oxide contacts rated at 25 amps, 220 V, 50-60 Hz, non-inductive. 1 hp per movable arm at 120 or 240 V single-phase. U.L. Component-Program Recognized and C.S.A. Listed except 480 V. Mount by key-hole and 2 channels for 8-32 screws on 2x$2^{1}/_{2}$" triangular centers. Screw term. $2^{45}/_{64}$x$2^{31}/_{32}$x$3^{23}/_{64}$". Act. wt., 14 oz. Av. shpg. wt., 1 lb.

Stock No.	Type PM-	Coil Volts	Res. in Ohms	EACH 1-9	10-24	25-49	50-99	100-249
886-0950	17AY	12 AC	1.4	15.73	14.30	13.59	12.87	10.01
886-0951	17AY	24 AC	5.0	15.73	14.30	13.59	12.87	10.01
886-0952	17AY	120 AC	120	15.73	14.30	13.59	12.87	10.01
886-0953	17AY	240 AC	587	16.34	14.85	14.11	13.37	10.40
886-0954	17AY	480 AC	1790	17.33	15.75	14.96	14.18	11.03
886-0955	17DY	6 DC	8.2	15.02	13.65	12.97	12.29	9.56
886-0956	17DY	12 DC	33.0	15.02	13.65	12.97	12.29	9.56
886-0957	17DY	24 DC	132.0	15.02	13.65	12.97	12.29	9.56
886-0958	17DY	110 DC	2760.0	15.68	14.25	13.54	12.83	9.98

RELAY COVERS FOR PR, PM AND MR

TYPE 35D013. Has sheet steel base, knockouts for ½"-dia. conduit and aluminum cover with 2 screws. Gray enamel. $3^{1}/_{8}$x$3^{3}/_{8}$x$5^{5}/_{16}$". Mounts 3 No. 10 holes on $1^{7}/_{8}$x$4^{1}/_{8}$" centers. Wt., 1 lb.
TYPE 35D227. Size, $3^{13}/_{16}$x$3^{13}/_{16}$x$5^{1}/_{8}$". 1 lb.
TYPE 35D130. Size, $2^{19}/_{32}$x$2^{3}/_{8}$x$3^{5}/_{8}$". $8^{1}/_{2}$ oz.

PR/PM

MR

Stock No.	Mfr's Type	Use With	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-1455	35D013	PR	3.81	3.45	3.28	3.11	2.42	2.24
886-1480	35D227	PM	3.81	3.45	3.28	3.11	2.42	2.24
886-1470	35D130	MR	2.53	2.20	2.09	1.98	1.54	1.43

Special-Purpose and Power Relays

PR HEAVY-DUTY FAST-ACTING POWER RELAYS

Handle many industrial switching requirements. Silver contacts rated 25 amps except PR11AL5, 20 amps. With heavy screw-terminals *Indicates auxiliary 5-amp contacts. All are ■U.L. Recog. except PR11AL5. AC types also C.S.A. Listed. Nominal power: AC types, 9.8 VA at 50-60 Hz; DC types, 2 watts. Mtg.: two 3/16" holes, 1 7/8" ctrs. Sizes: all are 2 1/2" wide; PR3 and PR5, 2 7/32x2 1/2"; PR7, 2 1/2x2 7/16"; PR11, 2 1/2x3 3/8". Dust cover on page 229. 12 oz.

COIL DATA CHART FOR PR SERIES

DC COILS		AC COILS (50-60 Hz)	
Volts	Res. in Ohms	Volts	Res. in Ohms
6	18	6	.86
12	71	12	3.2
24	288	24	12
110	6050	120	290
...	....	240	1200
...	....	480	4500

Stock No.	Type PR-	Coil Volts	Contacts	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0970	3AY	6 AC	SPST	5.35	4.80	4.56	4.32	3.36	3.12
886-0971	3AY	12 AC	SPST	5.35	4.80	4.56	4.32	3.36	3.12
886-0972	3AY	24 AC	SPST	5.35	4.80	4.56	4.32	3.36	3.12
886-0973	3AY	120 AC	SPST	5.35	4.80	4.56	4.32	3.36	3.12
886-0974	3AY	240 AC	SPST	5.90	5.30	5.04	4.77	3.71	3.45
886-0976	3DY	12 DC	SPST	5.35	4.80	4.56	4.32	3.36	3.12
886-0977	3DY	24 DC	SPST	5.35	4.80	4.56	4.32	3.36	3.12
886-0978	3DY	110 DC	SPST	6.10	5.50	5.23	4.95	3.85	3.58
886-0979	5AY	6 AC	SPDT	5.62	5.05	4.80	4.55	3.54	3.28
886-0980	5AY	12 AC	SPDT	5.62	5.05	4.80	4.55	3.54	3.28
886-0981	5AY	24 AC	SPDT	5.62	5.05	4.80	4.55	3.54	3.28
886-0982	5AY	120 AC	SPDT	5.62	5.05	4.80	4.55	3.54	3.28
886-0983	5AY	240 AC	SPDT	6.10	5.50	5.23	4.95	3.85	3.58
886-0984	5DY	6 DC	SPDT	5.62	5.05	4.80	4.55	3.54	3.28
886-0985	5DY	12 DC	SPDT	5.62	5.05	4.80	4.55	3.54	3.28
886-0986	5DY	24 DC	SPDT	5.62	5.05	4.80	4.55	3.54	3.28
886-0987	5DY	110 DC	SPDT	6.40	5.75	5.46	5.18	4.03	3.74
886-0988	7AY	6 AC	DPST	6.30	5.65	5.37	5.09	3.96	3.67
886-0989	7AY	12 AC	DPST	6.30	5.65	5.37	5.09	3.96	3.67
886-0990	7AY	24 AC	DPST	6.30	5.65	5.37	5.09	3.96	3.67
886-0991	7AY	120 AC	DPST	6.30	5.65	5.37	5.09	3.96	3.67
886-0992	7AY	240 AC	DPST	6.80	6.15	5.84	5.54	4.31	4.00
886-0993	7DY	6 DC	DPST	6.30	5.65	5.37	5.09	3.96	3.67
886-0994	7DY	12 DC	DPST	6.30	5.65	5.37	5.09	3.96	3.67
886-0995	7DY	24 DC	DPST	6.30	5.65	5.37	5.09	3.96	3.67
886-0996	7DY	110 DC	DPST	7.10	6.40	6.08	5.76	4.48	4.16
886-1002	11AY	6 AC	DPDT	8.30	7.45	7.08	6.71	5.22	4.84
886-1003	11AY	12 AC	DPDT	8.30	7.45	7.08	6.71	5.22	4.84
886-1004	11AY	24 AC	DPDT	8.30	7.45	7.08	6.71	5.22	4.84
886-1005	11AY	120 AC	DPDT	8.30	7.45	7.08	6.71	5.22	4.84
886-1006	11AY	240 AC	DPDT	8.90	7.95	7.55	7.16	5.57	5.17
886-1007	11AY	480 AC	DPDT	10.00	9.05	8.60	8.15	6.34	5.88
886-0997	11AL5	6 AC	DPDT*	10.50	9.45	8.98	8.51	6.62	6.14
886-0998	11AL5	12 AC	DPDT*	10.50	9.45	8.98	8.51	6.62	6.14
886-0999	11AL5	24 AC	DPDT*	10.50	9.45	8.98	8.51	6.62	6.14
886-1000	11AL5	120 AC	DPDT*	10.50	9.45	8.98	8.51	6.62	6.14
886-1001	11AL5	240 AC	DPDT*	11.00	9.95	9.45	8.96	6.97	6.47
886-1008	11DY	6 DC	DPDT	8.30	7.45	7.08	6.71	5.22	4.84
886-1009	11DY	12 DC	DPDT	8.30	7.45	7.08	6.71	5.22	4.84
886-1010	11DY	24 DC	DPDT	8.30	7.45	7.08	6.71	5.22	4.84
886-1011	11DY	110 DC	DPDT	9.09	8.15	7.74	7.34	5.71	5.30

SERIES CH AND CD SOLID-STATE TIME-DELAY DEVICES AND RELAYS

Meet many time delay requirements. Reset within milliseco Adjustable over entire time range. Plastic enclosures. Series temp., —10° C to +55° C, acc., ±10%; reset, 100 msec; rep ability, ±2%. Series CD: temp., —40° C to +55° C; acc., ± reset, 60 msec; repeatability, ±1%. CHB/CDB38 and C CDD38 have internal DPDT 10-amp relay. Others are timer use with P & B relays: *KRP11AG or KRP14AG; †KRP5 KRP11DG, or KRP14DG; ‡KHP17D11 (CDH31 has 180-se fixed delay, adjustable from 1.8 to 120 sec. by using various va of ½-watt resistors); §PR11AY. CDB38-70012, CDD38-30 CHB38-70011, 70013, and CHD38-30011, 30013 provide delay release, others delay on operate. Wts.: CD21, 5 oz.; CD31, 3 CD38, 9 oz.; CD45, 7 oz.; CH38, 5 oz.

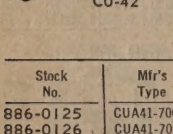
Stock No.	Mfr's Type	Input Volts	Delay Sec.	EACH 1-4	5-9	10-24	25
886-0080	CHB38-30001	24 AC	1.0-10	23.00	19.95	18.95	17
886-0081	CHB38-30003	24 AC	1.0-180	23.00	19.95	18.95	17
886-0090	CHB38-70001	120 AC	1.0-10	23.00	19.95	18.95	17
886-0091	CHB38-70003	120 AC	1.0-180	23.00	19.95	18.95	17
886-0085	CHD38-30001	24 DC	1.0-10	22.00	18.95	18.00	17
886-0086	CHD38-30003	24 DC	1.0-180	22.00	18.95	18.00	17
886-0082	CHB38-70011	120 AC	1.0-10	27.90	23.95	22.75	21
886-0083	CHB38-70013	120 AC	1.0-180	27.90	23.95	22.75	21
886-0087	CHD38-30011	24 DC	1.0-10	25.40	21.95	20.85	19
886-0088	CHD38-30013	24 DC	1.0-180	25.40	21.95	20.85	19
886-0053	CDB38-70003	120 AC	0.1-10	51.50	44.25	42.04	39
886-0054	CDB38-70004	120 AC	0.6-60	51.50	44.25	42.04	39
886-0055	CDB38-70005	120 AC	1.8-180	51.50	44.25	42.04	39
886-0069	CDD38-30003	24 DC	0.1-10	49.00	42.00	39.90	37
886-0070	CDD38-30004	24 DC	0.6-60	49.00	42.00	39.90	37
886-0071	CDD38-30005	24 DC	1.8-180	49.00	42.00	39.90	37
886-0051	CDB21-70003*	120 AC	0.1-10	49.00	39.15	37.19	35
886-0050	CDB21-70001*	120 AC	1.8-180	45.00	39.15	37.19	35
886-0067	CDD21-30003†	24 DC	0.1-10	45.00	38.80	36.86	34
886-0075	CDH31-30005‡	24 DC	180	45.50	39.35	37.38	35
886-0065	CDB45-70002§	120 AC	0.6-60	43.10	37.50	35.63	33
886-0057	CDB38-70012	120 AC	0.6-60	60.00	52.90	50.26	47
886-0072	CDD38-30012	24 DC	0.6-60	57.00	49.95	47.45	44

SA-1N-12A STEPPING RELAY

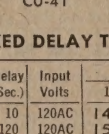
Twelve-position stepping relay for au level switching in TV remote con units, scoreboards and process contr Printed circuit strips handle up to 250 Armature-driven pawl operates rat wheel to drive movable contact in steps. Coil voltage, 120; resistance, ohms; power, 20 VA. Mounting: two holes on 1 13/16" centers. Shpg. wt., 5 oz.

886-1290. 1-24 . . . . . Each
25-49. . . Each 6.98 50-99. . . . . Each
100-249. . Each 5.15 250-Up. . . . Each

CU SERIES FIXED AND ADJUSTABLE TIME DELAY RELAYS



CU-42



CU-41

For applications where accurate time-delay values, fast reset time and excellent repeatability are required. Designed for delay-on-operate use, with fixed timing tolerance of ±5% and resistor adjustable tolerance of ±10%. Ideal for vending equipment, machine tool control or process controls. Each unit contains internally-mounted 10-amp DPDT relay.

Type CU-41 uses KUP series socket listed page T-240. Type CU-42 enclosures have flan cases for mounting directly to chassis. U with adjustable time delay require exte resistor for operation.* Resistances indic in table below are for maximum delay t Both types are enclosed in yellow Lexan Av. shpg. wt., 4¼ oz.

FIXED DELAY TYPES

Stock No.	Mfr's Type	Delay (Sec.)	Input Volts	EACH 1-9	10-24	25-49	50-Up
886-0125	CUA41-70010	10	120AC	14.20	13.49	12.78	11.36
886-0126	CUA41-70120	120	120AC	15.75	14.96	14.18	12.60
886-0133	CUC41-30010	10	24DC	14.20	13.49	12.78	11.36
886-0134	CUC41-30120	120	24DC	15.75	14.96	14.18	12.60
886-0124	CUA41-30010	10	24AC	14.20	13.49	12.78	11.36
886-0129	CUA42-70010	10	120AC	14.20	13.49	12.78	11.36
886-0130	CUA42-70120	120	120AC	15.75	14.96	14.18	12.60
886-0137	CUC42-30010	10	24DC	14.20	13.49	12.78	11.36
886-0138	CUC42-30120	120	24DC	15.75	14.96	14.18	12.60
886-0128	CUA42-30010	10	24AC	14.20	13.49	12.78	11.36

RESISTOR-ADJUSTABLE DELAY TYPES (LESS RESISTOR

Stock No.	Mfr's Type	Delay (Sec.)	Volts	Res.* (Ohms)	EACH 1-9	10-24	25-49	5
886-0148	CUF41-70010	1-10	120AC	200k	15.00	14.25	13.50	12
886-0149	CUF41-70120	1-120	120AC	2.4 meg	16.30	15.49	14.67	13
886-0157	CUH41-30010	1-10	24DC	160k	15.00	14.25	13.50	12
886-0158	CUH41-30120	1-120	24DC	2 meg	16.30	15.49	14.67	13
886-0144	CUF41-30010	1-10	24AC	200k	15.00	14.25	13.50	12
886-0153	CUF42-70010	1-10	120AC	200k	15.00	14.25	13.50	12
886-0154	CUF42-70120	1-120	120AC	2.4 meg	16.30	15.49	14.67	13
886-0161	CUH42-30010	1-10	24DC	160k	14.00	14.25	13.50	12
886-0162	CUH42-30120	1-120	24DC	2 meg	16.30	15.49	14.67	13
886-0151	CUF42-30010	1-10	24AC	200k	15.00	14.25	13.50	12

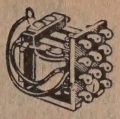
■Recognized Under the Component Program of Underwriter's Laboratories,

Potter & Brumfield Relays

P&B

SPECIAL-PURPOSE

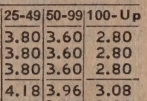
KM 2-AMP SUBMINIATURE RELAYS



multiple switching applications. Used extensively in small business machines, alarm systems, communications. Withstand 30g shock. Weight oz. 3/32" silver contacts rated at 2 amps. Solder inals. Mount by 2-56 tapped core and locating punch. Size: 1 1/8x55/64x35/64". Shpg. wt., 1 oz.

ock lo.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-Up
0605	KM5D	6 DC	SPDT	5.00	4.00	3.80	3.60	2.80
0606	KM5D	12 DC	SPDT	5.00	4.00	3.80	3.60	2.80
0607	KM5D	24 DC	SPDT	5.00	4.00	3.80	3.60	2.80
0609	KM11D	6 DC	DPDT	5.50	4.40	4.18	3.96	3.08
0610	KM11D	12 DC	DPDT	5.50	4.40	4.18	3.96	3.08
0611	KM11D	24 DC	DPDT	5.50	4.40	4.18	3.96	3.08
0613	KM14D	6 DC	3PDT	6.31	5.05	4.80	4.55	3.54
0614	KM14D	12 DC	3PDT	6.31	5.05	4.80	4.55	3.54
0615	KM14D	24 DC	3PDT	6.31	5.05	4.80	4.55	3.54

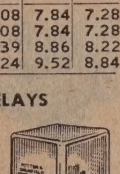
KB LATCHING RELAYS



coil actuates relay to set latch; second coil ases latch. 4PDT except *6PDT. Contacts, npere silver or 10-ampere silver cadmium- e movables. Mounting, two 5/32" holes on " centers. AC 5-ampere types are U.L. Com- ent Program Recognized and C.S.A. Listed. ix "G" is 10-amps, all other listings are nps. Size: 2 23/32x1 5/32x2 15/16". Be sure to specify stock no., mfr's , and coil volts when ordering. Shpg. wt., 7 oz.

ock lo.	Type KB	Coil Volts	Res. in Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
0485	17AY	6 AC	2.3	15.25	12.20	11.59	10.98	8.54	7.93
0486	17AY	12 AC	10	15.25	12.20	11.59	10.98	8.54	7.93
0487	17AY	24 AC	42	15.25	12.20	11.59	10.98	8.54	7.93
0488	17AY	120 AC	1030	15.50	12.20	11.59	10.98	8.54	7.93
0489	17AY	240 AC	4100	16.38	13.10	12.45	11.79	9.17	8.52
0490	17D	6 DC	13.1	13.69	10.95	10.40	9.86	7.67	7.12
0491	17D	12 DC	51.0	13.69	10.95	10.40	9.86	7.67	7.12
0492	17D	24 DC	230	13.69	10.95	10.40	9.86	7.67	7.12
0493	17D	110 DC	4560	15.50	12.40	11.78	11.16	8.68	8.06
0480	17AG	6 AC	2.3	15.38	12.30	11.69	11.07	8.61	8.00
0481	17AG	12 AC	10	15.38	12.30	11.69	11.07	8.61	8.00
0482	17AG	24 AC	42	15.38	12.30	11.69	11.07	8.61	8.00
0483	17AG	120 AC	1030	15.38	12.30	11.69	11.07	8.61	8.00
0484	17AG	240 AC	4100	16.50	13.20	12.54	11.88	9.24	8.58
0494	17DG	6 DC	13.1	14.00	11.20	10.64	10.08	7.84	7.28
0495	17DG	12 DC	52.0	14.00	11.20	10.64	10.08	7.84	7.28
0496	17DG	24 DC	230	14.00	11.20	10.64	10.08	7.84	7.28
0497	17DG	110 DC	4560	15.81	12.65	12.01	11.39	8.86	8.22
0499	23DG*	24 DC	230	17.00	13.60	12.92	12.24	9.52	8.84

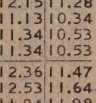
KBP ENCLOSED LATCHING PLUG-IN RELAYS



t acting, positive latching relay designed for rload or memory work. Available for 120 volts 12 volts DC and 24 volts DC. Momentary im- se to one of the coils operates relay to set latch. ond pulse to other coil releases it. Enclosed in slucent polypropylene cover for maximum pro- ion. Suffix G, 10 amps; others 5 amps. Has 20- octal type plug for socket mounting. All 4PDT, pt KBP20 which is 5PDT. Plug fits Amphenol et. Type 77MIP20. 3.50x1.781x1.56". Specify k No., Type, Coil Volts. Shpg. wt., 8 oz.

ock lo.	Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
0505	P17A	120 AC	21.44	17.15	16.29	15.44	12.01	11.15
0506	P17AG	120 AC	21.69	17.35	16.48	15.62	12.15	11.28
0510	P17D	24 DC	19.88	15.90	15.11	14.31	11.13	10.34
0512	P17DG	12 DC	20.25	16.20	15.39	14.58	11.34	10.53
0513	P17DG	24 DC	20.25	16.20	15.39	14.58	11.34	10.53
0516	P20A	120 AC	22.06	17.65	16.77	15.89	12.36	11.47
0517	P20AG	120 AC	22.38	17.90	17.01	16.11	12.53	11.64
0519	P20DG	12 DC	21.31	17.05	16.20	15.35	11.94	11.08
0520	P20DG	24 DC	21.31	17.05	16.20	15.35	11.94	11.08

DPDT 5-AMP ANTENNA-SWITCHING RELAYS

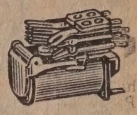


ful for switching antenna between transmitter and iver. Glass base insulation provides minimum loss F applications. For 300-ohm line. Mounts by one stud. Fine silver contacts are rated at 5 amps. : 1 1/4x1 5/8x1 11/16". Shpg. wt., 2 oz.

ock lo.	Mfr's Type	Coil Volts	Res., Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
0745	KT11A	6 AC	6.1	5.38	4.30	4.09	3.87	3.01
0746	KT11A	120 AC	2250	5.38	4.30	4.09	3.87	3.01
0747	KT11D	6 DC	32.1	5.38	4.30	4.09	3.87	3.01
0748	KT11D	12 DC	120	5.38	4.30	4.09	3.87	3.01

TELEPHONE-TYPE RELAYS

LS 4-AMP MEDIUM-COIL RELAYS



Short springs and lightweight armature for fast action. Stainless steel bearing for long life—100 million operations. Bifurcated palladium contacts: 4 amps at 120 V, 60 Hz, resistive; DC 4 amps, 150 watts. Nominal coil power, 1.8 watts. Tinned, pierced solder-type terminals. Two 6-32 tapped holes on 3/4" centers. 1 11/16x2 1/8x1 1/8". 5 oz.

Stock No.	Mfr's Type	Coil Volts	Ohms	Action	EACH 1-9	10-24	25-Up
886-0829	LS17D	24 DC	300	4PDT	8.13	6.50	5.50
886-0830	LS17D	48 DC	1300	4PDT	8.38	6.70	5.67
886-0831	LS23D	24 DC	300	6PDT	9.81	7.85	6.64

MB3D* 60-AMP MINIATURE DC POWER RELAYS

For very high current applications. Contact arms are heavy brass with large silver contacts. Solder terminals. Rated 60 amps @ 28 VDC, resistive. SPST, double break, normally open. 1 5/8x2 7/32x1 3/8". Mounting: Four 3-48 holes on 3/8x3/8" centers. *Both relays are type MB3D. Av. shpg. wt., 3 oz.

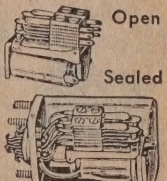
Stock No.	Coil Volts	Ohms	mA	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0835	12 DC	62.3	193	8.00	6.40	6.08	5.76	4.48	4.16
886-0836	24 DC	245.0	98	8.00	6.40	6.08	5.76	4.48	4.16

MG 2-AMP SUBMINIATURE DC RELAYS

Subminiature telephone-type relay that withstands shock and vibration of 10g from 55 to 500 Hz. Temperature range of —55° to +85° C. All are 4PDT, except *DPDT. Contacts are 3/32" dia. silver, gold-flashed; rated 2 amps @ 28 VDC or 120 VAC resistive. Mounting: 4 tapped No. 3-48 holes on 3/8" centers. Overall size (open) 1 1/16x1 1/16x1 1/4". †In table indicates coil VDC. Av. shpg. wt., 2 oz.

Stock No.	Type MG-	†	Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0855	11D*	12	90	7.50	6.00	5.70	5.40	4.20	3.90
886-0856	11D*	24	365	7.50	6.00	5.70	5.40	4.20	3.90
886-0857	17D	12	90	10.06	8.05	7.65	7.25	5.64	5.23
886-0858	17D	24	365	10.06	8.05	7.65	7.25	5.64	5.23

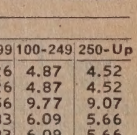
MH 5-AMP MINIATURE DC RELAYS



Save space and weight. 4PDT, except *6PDT. Two types: open, and hermetically sealed metal housing (denoted by suffix M). Contacts, 1/8" dia. gold-flashed silver, rated 5 amps. Sealed models have hook-end solder terminals. Mounting: Open types, four 3-48 tapped holes on 3/8x3/8" centers; sealed models, three 6-32 threaded studs on 1 1/4x 1/2" centers. Sizes: Open, 1 39/64x2 5/32x1 9/16"; sealed, 1 11/16x1 1/32x2 1/2". †Coil VDC. Wts.; open, 3 oz.; sealed, 6 oz.

Stock No.	Type MH-	†	Ohms	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0865	17D	12	96.0	8.69	6.95	6.60	6.26	4.87	4.52
886-0866	17D	24	365.0	8.69	6.95	6.60	6.26	4.87	4.52
886-0867	17DM	12	96.0	17.44	13.95	13.25	12.56	9.77	9.07
886-0868	23D*	12	62.3	10.88	8.70	8.27	7.83	6.09	5.66
886-0869	23D*	24	245.0	10.88	8.70	8.27	7.83	6.09	5.66

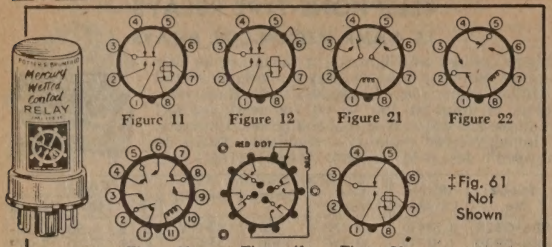
ML 3-AMP MINIATURE HIGH-SENSITIVITY DC RELAYS



Excellent sensitivity with outstanding switching capabilities. Type ML11D is DPDT; ML17D is 4PDT. Wide range of uses—ideal for transistorized computer networks, telephone systems. Single contact arms have 1/8" dia. gold-flashed contacts rated at 3 amps (120 V, 60 Hz, resistive) for an estimated mechanical life of 10,000,000 operations. Solder lug connections. Type of mounting: four 3-48 holes on 3/8" centers. Size, 1 19/32x3/4x 1 31/32". Av. shpg. wt., 3 oz.

Stock No.	Type ML-	Coil Ohms	Coil mA	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
886-0875	11D	2500	4.0	9.19	7.35	6.98	6.62	5.15	4.78
886-0876	11D	5000	2.83	9.38	7.50	7.13	6.75	5.25	4.88
886-0877	11D	10k	2.0	9.81	7.85	7.46	7.06	5.30	5.10
886-0878	17D	2500	5.65	10.88	8.70	8.27	7.83	6.09	5.66
886-0879	17D	5000	4.0	11.13	8.90	8.46	8.01	6.23	5.79
886-0880	17D	10k	2.83	11.56	9.25	8.79	8.33	6.48	6.01

P&B Potter & Brumfield Special-Purpose Relays



JM SERIES MERCURY-WETTED RELAYS WITH SEALED-IN-GLASS CONTACTS

Ultra-reliable high-speed relays with sealed-in-glass mercury contacts. Series JMF (module type) and JML have SPDT break-before-make (Form C), non-bridging contact arrangement. All other SPDT, make-before-break (Form D) bridging contact arrangement. Timing: JMF/JML, 200/sec.; JMP and JM1, 100/sec.; JM2, 3, and 4, 60/sec. Contact Rating: JMF/JML, 500V or 2A max., 100 max.; JMP and JM1 to 4, 500V, 5A max., 250VA max (with contact protection). Sensitivity (in amp-turns): JMF/JML, 27.3; JM70; JM1, 190; JM2 and 3, 250; JM4, 260. Shock: 30 g for 11 Vibration: to 10 g, 10-500 Hz. Temperature: 39°C mercury free 107°C potting softens. Vertical mounting. Have octal plugs ex termination 41 which is 14-pin and termination 31, 11-pin. S enclosures, JMP, JML SERIES: Permanent magnet biasing. *Sin side-stable. †Bi-stable. §Chopper. Last two digits of type nun indicate termination figure number. Av. shpg. wt., 10 oz.

JMP SERIES POLARIZED SPST SINGLE-COIL (3 7/64 x 1 5/16" dia.)

Stock No.	Type/ Fig.	Coil Ohms	Coil mA	Coil V	C. P. Clare Equivalent	EACH 1-9	EACH 10-24	EACH 25-Up
886-0328	*1160-11	1000	5.60	.....	HGP-1005	23.00	13.73	11.68
886-0329	*1200-11	4000	2.96	.....	HGP-1002	24.63	14.70	12.51
886-0330	†5200-11	4000	1.5	.....	HGP-1003	24.63	14.70	12.51
886-0331	§8120-12	500	.....	6.3	HGP-1028	24.63	14.70	12.51

JMF SERIES NON-BRIDGING SPDT PC MODULE (1 1/16 x 5/8" dia.)‡

886-0300	*1070-61	450	12.9	.....	.....	14.19	8.47	7.21
886-0301	*1080-61	675	11.6	.....	.....	14.19	8.47	7.21
886-0302	*1120-61	1425	8.4	.....	.....	14.19	8.47	7.21
886-0303	*1150-61	2400	7.8	.....	.....	14.19	8.47	7.21
886-0304	*1160-61	4000	4.0	.....	.....	14.88	8.88	7.56

JML SERIES NON-BRIDGING SPDT SINGLE-COIL (2 41/64 x 1 5/16" dia.)

886-0310	*1061-81	40	9.75	.....	HGS-5009	17.50	10.44	8.89
886-0311	*1110-81	350	3.56	.....	HGS-5011	17.50	10.44	8.89
886-0312	*1160-81	1000	2.21	.....	HGS-5015	17.50	10.44	8.89
886-0313	*1190-81	2500	1.43	.....	HGS-5003	18.69	11.15	9.49
886-0314	*1200-81	4000	1.25	.....	HGS-5008	18.69	11.15	9.49
886-0315	1240-81	11000	0.72	....	.....	18.69	11.15	9.49
886-0316	*1260-81	25k	0.52	.....	HGS-5016	18.69	11.15	9.49
886-0319	†5160-81	1000	1.24	.....	HGS-5006	17.38	10.84	10.15
886-0320	†5200-81	4000	0.53	.....	HGS-5004	18.69	11.15	9.49
886-0323	§8130-81	600	.....	6.3	HGS-5017	18.25	10.89	9.27

JM1 SERIES SPDT SINGLE-COIL (3 13/64 x 1 17/64" dia.)

Stock No.	Type/ Fig.	Coil Ohms	Coil mA	Coil V	C. P. Clare Equivalent	EACH 1-9	EACH 10-24	EACH 2
886-0270	109-12	130	38.8	16.1	HG1012-4	21.19	12.64	1
886-0271	112-11	500	20.1	31.6	HG1026-1	21.19	12.64	1
886-0272	114-11	700	20.0	37.4	HG1004-1	21.19	12.64	1
886-0273	114-12	700	20.0	37.4	HG1051-4	21.19	12.64	1
886-0275	118-11	2500	10.1	70.7	HG1001-1	21.56	12.87	1
886-0276	119-11	4000	8.1	89.5	HG1002-1	10.69	8.55	
886-0278	120-11	7000	6.0	117.0	HG1009-1	22.31	13.32	1
886-0279	121-11	11K	5.0	148.0	HG1011-1	22.31	13.32	1

JM2 SERIES DPDT SINGLE-COIL (3 13/32 x 1 17/32" dia.)

886-0280	104-22	50	110.0	12.25	HG2A-1008-2A2	34.38	20.52	1
886-0281	106-21	140	65.5	20.5	HG2A-1042-2A1	34.38	20.52	1
886-0282	109-22	315	44.0	30.7	HG2A-1003-2A2	34.38	20.52	1
886-0283	111-22	700	30.5	45.8	HG2A-1002-2A2	34.38	20.52	1
886-0284	112-22	1250	22.1	61.2	HG2A-1015-2A2	34.38	20.52	1
886-0285	115-21	5000	11.3	122.0	HG2A-1001-2A1	34.38	20.52	1
886-0286	115-22	5000	11.3	122.0	HG2A-1004-2A2	34.38	20.52	1
886-0287	110-22	500	34.8	38.7	HG2A-1017-2A2	34.38	20.52	1

JM3 SERIES 3PDT SINGLE-COIL (3 13/32 x 1 17/32" dia.)

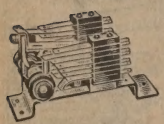
886-0290	109-31	315	44.0	30.7	HG3A-1004-3A1	44.50	26.56	2
886-0292	115-31	5000	11.3	122.0	HG3A-1003-3A1	44.50	26.56	2

JM4 SERIES 4PDT SINGLE-COIL (3 9/16 x 1 1/16" dia.)

886-0295	106-41	65	100.0	15.1	HG4A-1013-4A1	57.38	34.24	2
886-0296	110-41	390	42.0	37.0	HG4A-1011-4A1	57.38	34.24	2

IMPULSE AND SEQUENCING RELAYS

AP 5-AMP RATCHET IMPULSE RELAYS

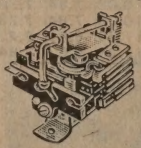


For applications requiring on-off or reversing action on alternate impulses. Gives positive operation on impulses as short as 60 ms. Stop mechanism. Intermittent duty. Contacts are 3/16" fine silver, rated 5 A at 120 V, 60 Hz. Coils are wound on molded bobbins. Has tinned solder terminals. Mtg: Three 5/32" dia. holes on 3 3/8 x 7/8" triangular cuts. AC types for 50-60 Hz. Size, 2 5/16 x 2 1/4 x 3 3/4". Av. shpg. wt., 9 oz.

ALL ARE DPDT EXCEPT *4PDT

Stock No.	Mfr's Type	Coil Volts	Ohms	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	EACH 100-Up
886-0027	AP11A	6 AC	0.6	12.69	10.15	9.64	9.14	7.11
886-0028	AP11A	12 AC	2.28	12.69	10.15	9.64	9.14	7.11
886-0029	AP11A	120 AC	240	12.69	10.15	9.64	9.14	7.11
886-0030	AP11A	240 AC	900	13.38	10.70	10.17	9.63	7.49
886-0031	AP11D	6 DC	4.0	12.69	10.15	9.64	9.14	7.11
886-0032	AP11D	24 DC	65.0	12.69	10.15	9.64	9.14	7.11
886-0033	AP11D	110 DC	1350	13.63	10.90	10.36	9.81	7.63
886-0035	AP17A*	120 AC	240	15.38	12.30	11.69	11.07	8.61
886-0036	AP17D*	12 DC	15.5	15.38	12.30	11.69	11.07	8.61
886-0037	AP17D*	24 DC	65.0	15.38	12.30	11.69	11.07	8.61

PC 7.5-AMP IMPULSE RELAYS



Armature and pusher assembly operate pher rocker switching from one contact pile to other on alternate pulses. For on-off or revers Pulses may be as short as 60 milli-seconds at 5 Gold-flashed silver cadmium-oxide contacts r 7.5 amps at 120 volts AC, resistive load. coils are for 50-60 Hz. Mtg., two 5/32" hole 2 5/8" ctrs. Size, 2 1/16 x 2 31/32 x 2 5/64". Shpg. wt., 5

ALL ARE DPDT EXCEPT *4PDT

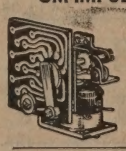
Stock No.	Mfr's Type	Coil Volts	Ohms	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	EACH 1(
886-0935	PC11A	6 AC	0.6	8.19	6.55	6.22	5.90	4.
886-0936	PC11A	12 AC	2.28	8.19	6.55	6.22	5.90	4.
886-0937	PC11A	24 AC	8.8	8.19	6.55	6.22	5.90	4.
886-0938	PC11A	120 AC	240.0	8.19	6.55	6.22	5.90	4.
886-0939	PC11D	6 DC	4.0	7.88	6.30	5.99	5.67	4.
886-0940	PC11D	12 DC	15.5	7.88	6.30	5.99	5.67	4.
886-0941	PC11D	24 DC	65.0	7.88	6.30	5.99	5.67	4.
886-0942	PC17A*	24 AC	8.8	11.25	9.00	8.55	8.10	6.
886-0943	PC17A*	120 AC	240.0	11.25	9.00	8.55	8.10	6.
886-0944	PC17D*	24 DC	65.0	11.00	8.80	8.36	7.92	6.

GM 3-AMP IMPULSE/SEQUENCING RELAYS

Single-coil latching relay. For uses requiring up to 6 operations per shaft revolution. Two Form C contacts (DPDT) switched indirectly and alternately by cams. *Additional two Form C contacts operate directly by armature. Contacts rated 3 amps. Mtg., 8-32 tapped core. †120 VAC, 425 ohms; ‡24 VDC, 120 ohms. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Action	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	EACH 100 Up
886-0026	GM11A	DPDT†	10.50	8.40	7.98	7.56	5.88
886-0027	*GM11AL11	DPDT†	14.94	11.95	11.35	10.76	8.37
886-0028	GM11D	DPDT‡	10.06	8.05	7.65	7.25	5.64

GM IMPULSE/SEQUENCING RELAYS WITH PC BOARDS



Uses design of GM series, left, with additio uni-directional printed circuit board with up t steps. The board is attached to an extension o ratchet shaft; the movable contact arm adva one position each time the armature drops *Coil volts 120 AC; 510 ohms. †24 DC; 144 o Contact rating, 1/4 watt. Size, 2.312 x 1.875 x 1.8 Av. shpg. wt., 5 oz.

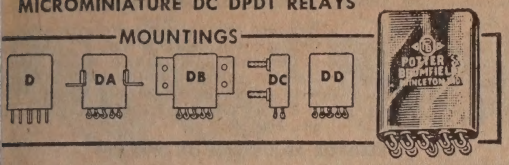
Stock No.	Mfr's Type	Action	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	EACH 100
886-0220	GM1N10A	10-step*	12.94	10.35	9.84	9.32	7.
886-0222	GM1N12A	12-step*	13.13	1.050	9.98	9.45	7.
886-0221	GM1N10D	10-step†	12.63	10.10	9.60	9.09	7.
886-0223	GM1N12D	12-step†	12.81	10.25	9.74	9.23	7.

For Larger-Quantity Prices, Contact Your Nearest Branch Of

Potter & Brumfield Special-Purpose Relays

P&B

SEALED SC SINGLE-COIL AND SL LATCHING MICROMINIATURE DC DPDT RELAYS



is single-coil permanent magnet relay, has polarized coil circuit. magnetic dual-coil latching relay—coils may be series-connected polar operation. Meet MIL-R-5757E, quality assurance std.—Q-9858A and MSPC SPEC 339 —65° to +125°C. Breakdown, 0 V rms between coil and case and between contact sets. Weigh oz. Contacts, 3 amps at 28 VDC; 1 amp at 120 V, 60 Hz, re- ive. SC11D 8-pin takes Cinch 54A20730 receptacle; SL11D oin takes Viking P/N VB10/3DV 1 receptacle. *Indicates y meets specifications of MIL-R-5757/10C. Size, .795x.359x.890". g. wt., 2 oz.

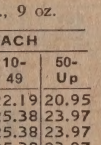
Stock No.	Mfr's Type	Ohms	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
6-1310	SC11D	35	6	22.90	19.60	18.62	17.64	13.72
6-1311	SC11D	135	12	22.90	19.60	18.62	17.64	13.72
6-1312	SC11D	550	24	22.90	19.60	18.62	17.64	13.72
6-1315	SC11DA	135	12	22.90	19.60	18.62	17.64	13.72
6-1316	SC11DA	550	24	22.90	19.60	18.62	17.64	13.72
6-1320	SC11DB	35	6	22.90	19.60	18.62	17.64	13.72
6-1321	SC11DB	135	12	22.90	19.60	18.62	17.64	13.72
6-1322	SC11DB	550	24	22.90	19.60	18.62	17.64	13.72
6-1327	SC11DC	550	24	22.90	19.60	18.62	17.64	13.72
6-1332	SC11DD	550	24	22.90	19.60	18.62	17.64	13.72
6-1336	SC7141*	.....	24	23.00	19.75	18.76	17.78	13.83
6-1340	SL11D	40	6	25.00	21.45	20.38	19.31	15.02
6-1341	SL11D	160	12	25.00	21.45	20.38	19.31	15.02
6-1342	SL11D	630	24	25.00	21.45	20.38	19.31	15.02
6-1350	SL11DA	160	12	25.00	21.45	20.38	19.31	15.02
6-1351	SL11DA	630	24	25.00	21.45	20.38	19.31	15.02
6-1355	SL11DB	40	6	25.00	21.45	20.38	19.31	15.02
6-1356	SL11DB	160	12	25.00	21.45	20.38	19.31	15.02
6-1357	SL11DB	630	24	25.00	21.45	20.38	19.31	15.02
6-1360	SL11DC	630	24	25.00	21.45	20.38	19.31	15.02
6-1364	SL11DD	630	24	25.00	21.45	20.38	19.31	15.02

ULTRA-SENSITIVE MDP POLARIZED HIGH-SPEED RELAYS

unce-Free action. Two types of contacts: Bi-stable —one form C contact arrangement, armature re- ins on last position; Center-stable (†)—one form ontact arrangement, armature remains on center- contacts open. Tungsten-Paliney contacts, rated: stable .01-.1 amp, 25-150 V; center-stable (sil-) 3 amps resistive @ 28 VDC. Ambient temp., 0° to +85° C. 1⅞6x1⅞6x1⅜6". Dust Cover. 8 or pin plugs. ‡Resistance per coil. §Barber-Colman iiv., AYLZ-, except #Sigma 72AOZ-TCP. Shpg. wt., 9 oz.

Stock No.	Type MDP-	Coils No.	Coils mA	Coils Res. ‡	§ AYLZ-	EACH 1-9	10-49	50-Up
6-0840	*300-1	2	1.5	150	#160TG	24.65	22.19	20.95
6-0841	†1006	1	0.32	330	7305-100	28.20	25.38	23.97
6-0842	†1007	1	0.27	480	7306-100	28.20	25.38	23.97
6-0843	†1011	1	0.10	3500	7310-100	28.20	25.38	23.97
6-0844	†1013	1	0.067	7200	7312-100	28.20	25.38	23.97
6-0845	†2009	2	0.32	1000	7358-100	28.20	25.38	23.97
6-0846	†2011	2	0.17	2300	7360-100	28.20	25.38	23.97

CS SERIES SOLID-STATE VOLTAGE SENSORS

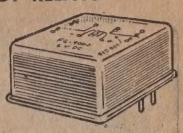


ries 30010, 70010 offer adj. pick-up, drop-out volt- es. *Series 31010, 71010 have fixed pick-up, adj. op-out voltages. Current drain: 3 mA (max.); after sing, 30 mA. Set-point accuracy: 1%. DC types ve reverse polarity protection. 2 Form C (DPDT) ntacts: 3 amps @ 28 VDC resistive; 120 VAC re- tive. Operating temp., —40°C to +55°C. 2⅞8x1¾x ⅜". AC types—50/60 Hz. Octal plug, nylon dust ver. Av. shpg. wt., 10 oz.

Stock No.	Type CSJ/L38	Pick-Up Range	Drop-Out Range	V	EACH 1-9	10-24	25-49	50-Up
6-0117	30010	20-30 V	18-28 V	AC	30.20	28.69	27.18	24.16
6-0118	70010	92-140 V	90-138 V	AC	32.95	31.30	29.66	26.36
6-0119	30010	20-30 V	18-28 V	DC	26.20	24.89	23.58	20.96
6-0120	71010	105 V*	90-103 V	AC	29.20	27.74	26.28	23.36
6-0121	31010	22 V*	16-20 V	DC	23.15	21.99	20.84	18.52

Write or Call for Larger Lot Quantities

MICROMINIATURE SEALED DPDT RELAYS



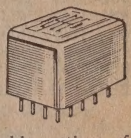
FC Series Relays. Conventional microminiature types. Mount flat on printed circuit boards. Plug into 0.2" grid. Hermetically sealed—meet all applicable specifications of MIL-R-5757E, quality assurance standard —MIL-Q-9858A, MSFC-SPEC-339. Have bifurcated contacts of silver-magnesium-nickel alloy rated 3 amps. Pick-up: 160 mW. Ambient temperature range: —65° to +125°C. Shock; 150g for 11 ms; linear acceleration, 400g; vibration, 30g from 55 to 2000 Hz. Size: .485x1.100". Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Ohms	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
886-0167	FC11D	60	6DC	21.34	19.40	18.43	17.46	13.58
886-0168	FC11D	210	12DC	21.34	19.40	18.43	17.46	13.58
886-0169	FC11D	900	24DC	21.34	19.40	18.43	17.46	13.58

FL Series Latching Relays. Similar to FC Series listed above, but employ dual-coil design. Remain firmly latched in either armature position without applied coil power. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Ohms	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
886-0172	FL11D	67.5	6DC	23.92	21.75	20.66	19.58	15.23
886-0173	FL11D	230	12DC	23.92	21.75	20.66	19.58	15.23
886-0174	FL11D	1000	24DC	23.92	21.75	20.66	19.58	15.23

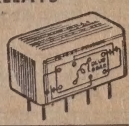
TL 4PDT LATCHING RELAYS



Microminiature 4PDT latching relay. Coils are encapsulated and hermetically sealed. Strong magnetic forces in the de-energized relay lock the gold-plated, silver-alloy contacts in the desired position, rendering them impervious to shock well beyond the specified range. Rated 3 amps, at 28 VDC resistive load. Temperature range, —65° to +125° C. Meet or exceed applicable sections of MIL-R-5757E and MSFC-SPEC-339. Mounting same as SC/SL types —see illustration above, at left. Overall size, 1½2x1¹³⁄64x¾ inches. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Ohms	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
886-1385	TL17D	600	24DC	31.75	30.16	28.58	22.23	20.64
886-1392	TL17DB	600	24DC	31.75	30.16	28.58	22.23	20.64
886-1398	TL17DA	600	24DC	31.75	30.16	28.58	22.23	20.64

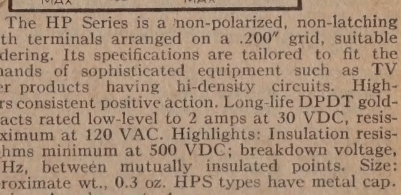
HC SERIES HALF-SIZE CRYSTAL CAN RELAYS



Micro-miniature. Meets MIL-R-5757E, complies with MSFC-SPEC-339. Bifurcated, gold-plated silver DPDT contacts (2 amps at 28 VDC). *Plug-in case; †solder terminals, shoulder bracket. Temp. —65° to +125°C. Size, .8x.4x .4". Av. shpg. wt., ½ oz.

Stock No.	Mfr's Type	Ohms	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-Up
886-0252	HC11D*	814	24	21.00	19.30	18.34	17.37	13.51
886-0253	HC11DA†	814	24	21.00	19.30	18.34	17.37	13.51

HP MICROMINIATURE RELAYS

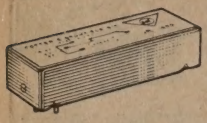


Designed for printed circuit board mounting where space is at a premium. Encased in black, hi-impact dust covers for maximum protection. The HP Series is a non-polarized, non-latching half-size relay with terminals arranged on a .200" grid, suitable for plug-in or soldering. Its specifications are tailored to fit the performance demands of sophisticated equipment such as TV cameras and other products having hi-density circuits. High-torque motor offers consistent positive action. Long-life DPDT gold-plated silver contacts rated low-level to 2 amps at 30 VDC, resistive; 0.5 amp maximum at 120 VAC. Highlights: Insulation resistance, 1000 megohms minimum at 500 VDC; breakdown voltage, 500 V rms, 60 Hz, between mutually insulated points. Size: .49x.88x.48". Approximate wt., 0.3 oz. HPS types have metal cap. *Socket/retainer ring. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	DC V	Coil Res., Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
886-0256	HP-11D	12	218	9.19	8.35	7.93	7.52	5.85
886-0257	HP-11D	24	870	9.19	8.35	7.93	7.52	5.85
886-0259	HPS-110	12	218	11.11	10.10	9.60	9.09	7.07
886-0260	HPS-110	24	870	11.11	10.10	9.60	9.09	7.07
886-1405	9 HP1 Socket*			.48	.47	.43	.34	.31

P&B Reed, Time Delay and Special Relays

JR SERIES DRY REED RELAYS



Insulated with glass supported nylon, acetate film and glass. Hermetically sealed. Printed circuit pin terminals. Form A, SPST-N.O. Form B, SPST-N.C.; *True Form C (uses reed switch with two stationary and one movable contact. N.C. until coil is energized causing an SPDT break before make). Operating time, 3 milliseconds. Operating temperature range: −50°C to +85°C. Breakdown: 500 V rms 60 Hz between insulated parts. Size, 2 1/16 x 1 9/32" dia. Av. shpg. wt. 2½ oz.

Stock No.	Type JR-	Coil		Contact Rating		EACH		
		VDC	Ohms	Form	Watts	1-9	10-24	25-Up
886-0340	1000	6	150	1A	15	3.20	2.39	2.03
886-0341	1001	6	100	2A	15	4.30	3.21	2.73
886-0351	1020	6	150	1A	50	4.50	3.36	2.86
886-0356	1040	6	150	1C*	10	8.05	6.01	5.11
886-0342	1005	12	600	1A	15	3.20	2.39	2.03
886-0343	1006	12	400	2A	15	4.30	3.21	2.73
886-0345	1008	12	150	4A	15	6.00	4.48	3.81
886-0363	1086	12	200	1A, 1B	15	5.30	3.95	3.37
886-0358	1045	12	600	1C*	10	8.05	6.01	5.11
886-0352	1025	12	600	1A	50	4.50	3.36	2.86
886-0347	1010	24	2400	1A	15	3.75	2.80	2.38
886-0348	1011	24	1600	2A	15	4.55	3.39	2.89
886-0350	1013	24	600	4A	15	6.30	4.70	4.00
886-0364	1088	24	800	1A, 1B	15	5.65	4.22	3.59
886-0360	1050	24	2400	1C*	10	8.40	6.27	5.33
886-0353	1030	24	2400	1A	50	4.85	3.62	3.08

JDT DUAL THIN-LINE REED RELAYS

Low profile reed relays ideal for high-density packaging applications. Hermetically sealed dry reed switches are epoxy encapsulated and feature dual in-line terminals on .100" centers. SPST contacts rated 10 watts minimum resistive (50 VDC and 0.5 A max. switching). Initial contact resistance: 200 milliohms max. Expected life: 20 million operations (resistive). Operate time: 4 msec max. at 25°C with contact bounce of 0.3 msec included. Release time: 2 msec max. Temperature range: −50° to +85° C. Size: 4100, 1.250x.800x .275" max.; 8100, 1.250x1.200x.275" max. Shpg. wt., 4100, ½ oz.; 8100, ¾ oz.

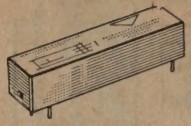
Stock No.	Type JDT-	Coil		Contact Rating		EACH		
		VDC	Ohms	Form	mW	1-9	10-24	25-Up
886-0262	4100	6	115	4A	310	7.65	5.71	4.86
886-0263	4105	12	480	4A	310	7.65	5.71	4.86
886-0264	4110	24	1850	4A	310	8.30	6.19	5.27
886-0265	8100	6	60	8A	600	12.95	9.66	8.22
886-0266	8105	12	260	8A	600	12.95	9.66	8.22
886-0267	8110	24	1050	8A	600	13.70	10.22	8.70

ITT CONTACT PROTECTORS

Reduce current surges. Effective protection for relay contacts controlling inductive circuits. Suppress arcing and RF transients. Consists of selenium rectifier cells back-to-back and in one conpact tubular unit. Negligible effect on circuit operation. Pigtail leads. For loads operating up to 40 times per second and drawing up to 600 mA operating current. Av. shpg. wt. 1 oz.

Stock No.	Voltage Range	Max. mA	Size	EACH			
				1-24	25-99	100-499	500-Up
821-1001	0-26 AC	200	25/64 x 5/8"	1.12	.72	.54	.45
821-1005	23-44 DC	250	25/64 x 5/8"	1.12	.72	.54	.45
821-1009	45-66 DC	250	25/64 x 3/4"	1.35	.87	.65	.54
821-1013	67-88 DC	250	25/64 x 3/4"	1.35	.87	.65	.54
821-1021	89-110 DC	250	25/64 x 3/4"	1.35	.87	.65	.54
821-1017	105-130 AC	200	25/64 x 15/16"	1.77	1.14	.85	.71
821-1025	111-132 DC	250	25/32 x 15/16"	1.57	1.01	.76	.63
821-1029	133-154 DC	250	25/32 x 15/16"	1.57	1.01	.76	.63
821-1051	0-26 AC	400	1/2 x 5/8"	1.17	.75	.56	.47
821-1055	23-44 DC	600	1/2 x 5/8"	1.17	.75	.56	.47
821-1059	45-66 DC	600	1/2 x 3/4"	1.42	.91	.68	.57
821-1067	89-110 DC	600	1/2 x 3/4"	1.42	.91	.68	.57
821-1063	105-130 AC	400	1/2 x 15/16"	1.97	1.27	.95	.79
821-1071	133-154 DC	600	1/2 x 15/16"	1.72	1.11	.83	.69

CJ SERIES TIME DELAY REED RELAYS



Dry reed relay in enclosure with solid-s timing components .2" ctr. PC pins. R or recycling time, less than 60 ms. CJH justable ±10%. −10° to +55° C. Exte resistor for max. time (not included): *75 †1.8 meg. .687 h. x 2.718" (max.). Av. sh wt., 2½ oz.

RESISTOR ADJUSTABLE ON OPERATE

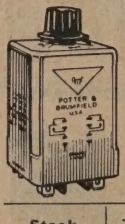
Stock No.	Mfr's Type	Time Sec.	Input Volts	Action Input	EACH			
					1-9	10-24	25-49	5
886-0104	CJH-01-20010*	0.1-10	12VDC	SPST NO	19.80	18.81	17.82	15
886-0105	CJH-01-20120†	1-120	12VDC	SPST NO	22.55	21.42	20.30	18
886-0106	CJH-01-30010*	0.1-10	24VDC	SPST NO	19.80	18.81	17.82	15
886-0107	CJH-01-30120†	1-120	24VDC	SPST NO	22.55	21.42	20.30	18
886-0108	CJH-02-20010*	0.1-10	12VDC	SPST NC	20.45	19.43	18.41	16
886-0109	CJH-02-20120†	1-120	12VDC	SPST NC	22.75	21.61	20.48	18
886-0111	CJH-03-20010*	0.1-10	12VDC	SPDT	21.25	20.19	19.13	17
886-0112	CJH-03-20120†	1-120	12VDC	SPDT	24.00	22.80	21.60	19
886-0113	CJH-03-30010*	0.1-10	24VDC	SPDT	21.25	20.19	19.13	17
886-0114	CJH-03-30120†	1-120	24VDC	SPDT	24.00	22.80	21.60	19

KDP GENERAL-PURPOSE RELAY

Compact relay for dense packaging uses in electr control systems. Has 8 Form C bifurcated cont for simultaneous switching of several isolated puts. 8PDT contacts rated 1 amp at 30 VDC or amp at 120 VAC, resistive. Operate time: 15 m max. at 25° C. Life: electrical, 100,000 operati mechanical, 10 million operations. Temp. range, − to +70° C. 1.19x.56x1.54". Socket below. Wt., 1½

Stock No.	Mfr's Type	Coil		EACH			
		VDC	Ohms	1-24	25-49	50-99	10 U
886-0538	KDP-29D11	24	580	9.35	8.88	8.42	6.
886-1408	9KD2	Socket, hold-down springs. . Pkg. of 10/9					

CUB51 ADJUSTABLE TIME-DELAY RELAYS



Knob-adjustable delay-on-operate time delay rel DPDT contacts rated 10 amps at 28 VDC resist or 120 V, 60 Hz AC, 80% power factor. Calibra dial. Tolerance: adjustable, ±10%. Repeatabil ±3%. Reset time, 150 msec. Recycle time, 150 m Transient protection of twice rated input volt for up to 8 msec. Polarity protected. For operat at normal room temperature. Timing intervals adjustable over timing ranges from 1 to 10 seco or 1 to 120 seconds. Size, 1.53x1.406x2.782" m (including knob). Shpg. wt., 3½ oz.

Stock No.	Type CUB51-	Time Delay Seconds	Volts AC	EACH			
				1-9	10-24	25-49	5
886-0131	70010	1-10	120	16.30	15.49	14.67	13
886-0132	70120	1-120	120	17.85	16.96	16.07	14

ALCO ISOLATION REMOTE RELAYS

FR-101, 102

FRE-103

FRP-104

FR 101 and 102. Provide low voltage for high voltage circuits. C bine step-down transformer and sensitive AC relays in a si laminated-core construction. 110 VAC required for operation, relay portion is activated by shorting the safe low voltage provi by the step-down transformer. Plastic cover. Max. load, 5 A @ V. Oper. V, 95-125 V. Curr. consumed, 40 mA. Isolated V., un 30 V. 6" leads. Size with cover 2⅛x1¾x1¼".

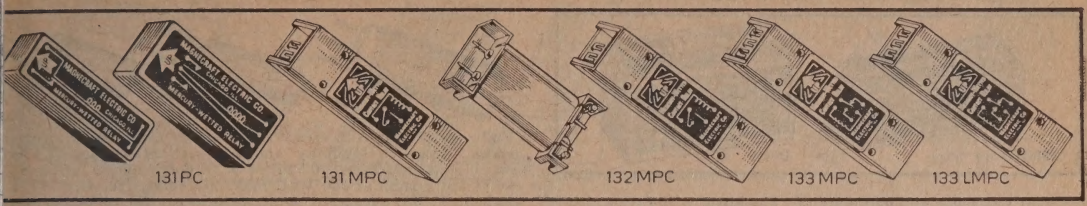
FRE-103 Plug-In. Similar to SPDT type FR-102, but with plug standard wall outlet and 3-way receptacle to select normally o or normally closed controlling circuit. Miniature jack on serves as plug-in for remote controlling unit. FRP-104 Octal P Standard octal base plug added. Plastic dust cover. Free boo containing 28 design ideas. Wt., 5 oz.

Stock No.	Type	Description	EACH			
			1-9	10-99	100-499	500-
700-1900	FR-101	SPST-Basic	4.81	3.85	3.01	2.6
700-1901	FR-102	SPDT-Basic	5.56	4.45	3.47	3.0
700-1902	FRE-103	SPDT-Plug-In	6.19	4.95	3.82	3.3
700-1903	FRP-104	SPDT-Octal	6.81	5.45	4.25	3.7

Allied Electronics Is Headquarters for Industrial Compone

Magnecraft Mercury-Wetted Dry Reed Relays

MERCURY-WETTED-CONTACT REED RELAYS



W131PCX MINIATURE ENCAPSULATED MAGNEREED

oxy-encapsulated, mercury-wetted-contact reed relays with PC tacts. Fast low-level and low-load switching. Contacts rated 28 at 1 A or 100 V maximum resistive. Operate and release time s, average. No contact bounce maintains stability of adjustment. e rated at load, 100 million cycles. Contact resistance, 50 milli-ns, average. All normally open. Operating position, upright, not re than 30° from vertical. Nominal power: SPST, 600 mW; ST, 900 mW. Actual wt.; SPST, 1 oz.; DPST, 2 oz. Wt., 4 oz.

SPST TYPES 9/16x1/2x1 1/2″

Stock No.	Mfr's Type	Coil V	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-99	100-Up
0-1737	131PCX-9	12	250	9.28	8.44	7.60	7.17	6.75	5.91
0-1738	131PCX-10	24	1000	9.41	8.55	7.70	7.27	6.84	5.99

DPST 9/16x11/16x1 1/2″

0-1740	131PCX-12	6	40	11.68	10.62	9.56	9.03	8.50	7.43
0-1741	131PCX-13	12	150	11.72	10.66	9.59	9.06	8.53	7.46
0-1742	131PCX-14	24	650	11.78	10.71	9.64	9.10	8.57	7.50

W131MPC MINIATURE MODULAR RELAYS

dular packaged mercury-wetted reed relays with PC contacts. ap-on steel enclosures. Contacts rated 28 VA at 1 A or 100 V maxim resistive. 1 ms average operate, release time. Life at rated d, 100 million cycles. All N.O. contacts. In table, suffix 2-5 have ST-N.O. (1 form "A") contacts; nominal power, 600 mW; size, 13/32x1″. Suffix 6-9 have DPST-N.O. (2 form "A") contacts; minal power, 700 mW; 3/8x39/64x1″. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type W131-	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-Up
0-1715	MPCX-2	6	70	7.09	6.40	5.76	5.44	5.12
0-1716	MPCX-3	12	300	7.13	6.48	5.83	5.51	5.18
0-1717	MPCX-4	24	1100	7.18	6.53	5.88	5.55	5.22
0-1718	MPCX-5	48	4300	7.68	6.98	6.28	5.93	5.58
0-1719	MPCX-6	6	50	12.68	11.53	10.38	9.80	9.22
0-1720	MPCX-7	12	220	12.74	11.58	10.42	9.84	9.26
0-1721	MPCX-8	24	850	12.62	11.65	10.48	9.90	9.32
0-1722	MPCX-9	48	3300	13.12	11.93	10.74	10.14	9.54

MAGNEREED MERCURY-WETTED REED RELAYS

Operate/release time, 2 milliseconds average. Operating position, upright (can be operated at up to 30° from vertical). Life expectancy, more than 25 million operations. 50 milliohm contact res. Snap-on steel enclosure. PC pins on 0.2″ grid. 2 5/8x4 1/64x3/4″. Wt., 4 oz.

SERIES 132MPC SPST N.O. 50 VA up to 400 VAC resistive.

Stock No.	Mfr's Type	Coil V	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-Up
850-1755	132MPCX2	6	70	6.41	5.83	5.25	4.96	4.66
850-1756	132MPCX3	12	250	6.41	5.83	5.25	4.96	4.66
850-1757	132MPCX4	24	1000	6.41	5.83	5.25	4.96	4.66
850-1758	132MPCX5	48	4000	6.60	6.00	5.40	5.10	4.80

SERIES 133MPC SPDT. 50 VA at up to 400 VAC resistive.

850-1796	133MPCX2	6	70	9.26	8.42	7.58	7.16	6.74
850-1797	133MPCX3	12	250	9.26	8.42	7.58	7.16	6.74
850-1798	133MPCX4	24	1000	9.26	8.42	7.58	7.16	6.74
850-1799	133MPCX5	48	4000	9.46	8.60	7.74	7.31	6.88

BI-STABLE LATCHING MERCURY-WETTED RELAYS

Upright modular pkg. No coil curr. required to hold either latching position. Ideal for memory applications. SPDT Form C break-before-make contacts rated 2 A or 400 V. 2 ms operate. Single-wound, 150 mW; double-wound, 200 mW. 2 5/8x3 3/4x4 1/64″. Wt. 2 oz.

SINGLE-WOUND COILS

Stock No.	Mfr's Type W133-	Coil VDC (mA*)	Coil Ohms	EACH 1-9	10-24	25-49	50-74	75-Up
850-1775	LMPCX17	40*	70	10.86	9.87	8.88	8.39	7.90
850-1776	LMPCX18	6	250	10.88	9.88	8.89	8.40	7.90
850-1777	LMPCX19	12	1000	10.90	9.92	8.93	8.43	7.94
850-1778	LMPCX20	24	4000	11.14	10.07	9.06	8.56	8.06
850-1779	LMPCX21	4*	7000	11.24	10.17	9.15	8.64	8.14

DOUBLE-WOUND COILS (†Per winding)

850-1780	LMPCX22	80*	30†	12.00	11.23	10.11	9.55	8.98
850-1781	LMPCX23	6	120†	12.37	11.25	10.13	9.56	9.00
850-1782	LMPCX24	12	460†	12.45	11.32	10.19	9.62	9.06
850-1783	LMPCX25	24	1800†	12.60	11.42	10.28	9.71	9.14
850-1784	LMPCX26	8*	3000†	12.65	11.50	10.35	9.78	9.20

CLASS 101M SPST MINIATURE REED RELAYS

Stock No.	Mfr's Type	Coil mA	Coil VDC	Coil ±10% Ohms	EACH 1-9	10-24	25-49	50-74	75-Up
0-0845	W101MX-1	....	6	100	2.42	2.20	1.98	1.87	1.76
0-0846	W101MX-2	....	12	250	2.48	2.25	2.03	1.91	1.80
0-0847	W101MX-3	....	24	500	2.48	2.25	2.03	1.91	1.80
0-0848	W101MX-4	9	.....	2500	2.68	2.43	2.19	2.07	1.94

CLASS 102M SPST STANDARD-SIZE REED RELAYS

0-0985	W102MX-1	40	.....	100	2.40	2.18	1.96	1.85	1.74
0-0986	W102MX-2	....	6	200	2.48	2.25	2.03	1.91	1.80
0-0987	W102MX-3	....	12	500	2.48	2.25	2.03	1.91	1.80
0-0988	W102MX-4	....	24	2000	2.72	2.47	2.22	2.10	1.98
0-0989	W102MX-5	5.5	.....	5000	2.89	2.63	2.37	2.24	2.10

CLASS 103M SPDT STANDARD-SIZE REED RELAYS

0-1265	W103MX-1	....	6	200	4.67	4.23	3.81	3.60	3.38
0-1266	W103MX-2	....	12	500	4.67	4.23	3.81	3.60	3.38
0-1267	W103MX-3	....	24	2000	4.99	4.45	4.01	3.78	3.56
0-1268	W103MX-4	5.5	.....	5000	5.08	4.62	4.16	3.93	3.70

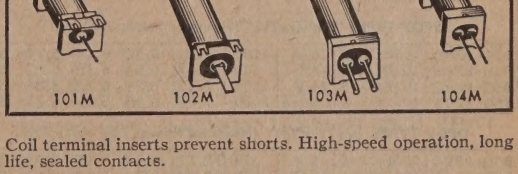
CLASS 104M SPDT MINIATURE REED RELAYS

0-1470	W104MX-1	....	6	200	6.19	5.63	5.07	4.79	4.50
0-1471	W104MX-2	....	12	250	6.25	5.68	5.11	4.83	4.54
0-1472	W104MX-3	....	24	500	6.25	5.68	5.11	4.83	4.54
0-1473	W104MX-4	9	.....	2500	6.46	5.87	5.28	4.99	4.70

IC COMPATIBLE REED RELAYS

0-0857	W101MX-35	....	5	500	2.95	2.68	2.41	2.28	2.14
0-0861	W101MX-41	....	3	250	2.95	2.68	2.41	2.28	2.14
0-0852	W101MX-9	....	5	500	6.82	6.20	5.58	5.27	4.96
0-0853	W101MX-10	....	3	250	6.82	6.20	5.58	5.27	4.96

LOW-COST IN-LINE DRY REED RELAYS



Coil terminal inserts prevent shorts. High-speed operation, long life, sealed contacts.

Class 101M. SPST normally open. Contact rating: 12 volt-amps max. at 0.25 amp, or 100 VAC max. Nominal coil power, 600 mW. Operate time, 1 ms; release, 0.5 ms. Average life, 5 million operations. 2 1/4x1/2x7/16″. Av. shpg. wt., 2 oz.

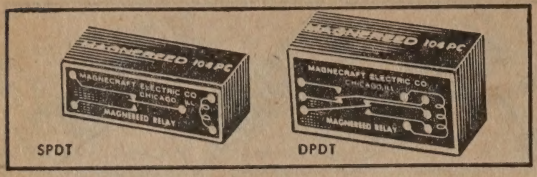
Class 102M. SPST, normally open. Contact rating: 15 volt-amps max. at 1 amp, or 250 VAC max. Nominal coil power, 300 mW. Operate time, 3 ms; release, 0.5 ms. Average life, 20 million operations. 3 1/2x1 9/32x1/2″. Av. shpg. wt., 3 oz.

Class 103M. SPDT Form C. Contact rating: 10 VA max. at 0.5 amp, or 250 VAC max. Nominal coil power, 300 mW. Operate time, 2 ms; release, 0.5 ms. Average life, 25 million operations. 3/16x1/2x1 9/32″. Av. shpg. wt., 2 oz.

Class 104M. SPDT Form C. Contact rating: 3 VA max. at 0.25 amp, or 28 VAC max. Nominal coil power, 500 mW. Operate time, 1 ms; release, 1 ms. Average life, 10 million operations. 1x7/16x1/2″. Av. shpg. wt., 2 oz.

Magnecraft Dry Reed Relays

ENCAPSULATED DRY-REED RELAYS



Inherent reliability and very long life, combined with exceptionally fast low-level and low-load switching, make Magnereed relays the logical choice for a tremendous range of applications. Rigid, tinned terminals and compact size make these relays the wise choice for printed circuit mounting. Encapsulation of the assembly in epoxy resin eliminates breakage and protects coil. Nylon bobbin integrally molded with terminal board supports and terminal pins riveted in position. Hermetically sealed against dust, damage.

TYPE W101PCX MINIATURE MAGNEREED

Normally open contacts are rated at 10 VA @ ½ amp maximum or 200 volts DC maximum, non-inductive. Operating time 1 ms; release time ½ ms average. Operating life expectancy: 5,000,000 cycles at maximum ratings. Nominal power 600 mW. Contact resistance, 150 milliohms, average. Capacitance across contacts, 0.8 pF. Av. shpg. wt. 1 oz.

SPST—N.O. TYPES 5/16x1/2x1 1/2" (Nominal Power 600 mW)

Stock No.	Mfr's Type	mA or VDC	Coil Ohms	EACH 1-24	25-49	50-74	75-99	100-Up
850-0870	101PCX-5	6 V	65	5.11	4.60	4.34	4.09	3.58
850-0871	101PCX-6	12 V	250	5.16	4.64	4.39	4.13	3.61
850-0872	101PCX-7	24 V	1000	5.26	4.73	4.47	4.21	3.68

DPST—N.O. TYPES 5/16x1 1/16x1 1/2" (Nominal Power 900 mW)

850-0874	101PCX-9	6 V	40	7.15	6.43	6.08	5.72	5.00
850-0875	101PCX-10	12 V	150	7.18	6.46	6.10	5.74	5.03
850-0876	101PCX-11	24 V	650	7.24	6.52	6.15	5.79	5.07

TYPE W102PCX STANDARD MAGNEREED

Normally open contacts are rated 15 VA @ 1 ampere; 250 V maximum, non-inductive. Operating time 3 ms average; release ½ ms average. Life expectancy: 20,000,000 cycles. Contact resistance, 100 milliohms average. Any operating position. 1 oz.

SPST—N.O. TYPES 5/8x21/32x2 1/4" (Nominal Power 400 mW)

850-1010	102PCX-2	12 V	400	4.83	4.35	4.10	3.86	3.38
850-1011	102PCX-3	24 V	1500	4.87	4.38	4.14	3.90	3.41

DPST—N.O. TYPES 5/8x1 1/4x2 1/4" (Nominal Power 700 mW) 2 oz.

850-1014	102PCX-6	12 V	200	6.28	5.65	5.34	5.02	4.40
850-1015	102PCX-7	24 V	800	6.33	5.70	5.38	5.06	4.43

TYPE W103PCX STANDARD MAGNEREED

Contacts are rated 10 VA res., ½ amp or 250 V maximum, non-ind. Operating time 2 ms average; release time ½ ms average. Life: 25,000,000 cycles. No biasing magnet. Contact resistance: 100 milliohms average. Any operating position. Shpg. wt., 1 oz.

SPDT TYPES 5/8x21/32x2 1/4" (Nominal Power 400 mW)

850-1290	103PCX-1	6 V	100	7.22	6.50	6.14	5.78	5.05
850-1291	103PCX-2	12 V	400	7.27	6.54	6.18	5.82	5.09
850-1292	103PCX-3	24 V	1500	7.32	6.59	6.22	5.86	5.12
850-1293	103PCX-4	6.5 mA	5000	7.76	6.98	6.60	6.21	5.43

DPDT TYPES 5/8x1 1/4x2 1/4" (Nominal Power 700 mW) 2 oz.

850-1294	103PCX-5	6 V	50	10.77	9.69	9.15	8.62	7.54
850-1295	103PCX-6	12 V	200	10.79	9.71	9.17	8.63	7.55
850-1296	103PCX-7	24 V	800	10.84	9.76	9.21	8.67	7.59
850-1297	103PCX-8	9.0 mA	5000	11.31	10.18	9.61	9.05	7.92

TYPE W104PCX MINIATURE MAGNEREED

Contacts are rated 3 VA @ 0.25 amp or 28 V, max. non-ind. Operate and release, 1 ms. average. No biasing magnet. Contact resistance, 150 milliohms average. Life, 10 million cycles.

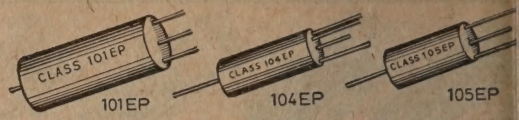
SPDT 5/16x1/2x1 1/2" (Nominal Power 600 mW) 1 oz.

850-1497	104PCX-8	12 V	225	10.12	9.11	8.60	8.10	7.08
850-1498	104PCX-9	24 V	1000	10.22	9.20	8.69	8.18	7.15
850-1499	104PCX-10	8 mA	5000	10.64	9.58	9.04	8.51	7.45

DPST TYPES 5/16x1 1/16x1 1/2" (Nominal Power 900 mW) 3 oz.

850-1493	104PCX-4	12 V	150	14.62	13.16	12.43	11.70	10.23
850-1494	104PCX-5	24 V	650	14.68	13.21	12.48	11.74	10.28

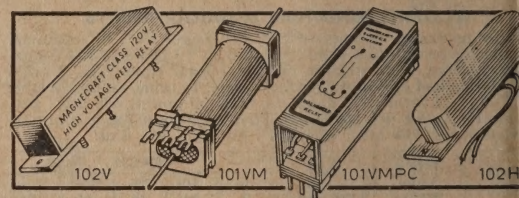
MINIATURE ENCAPSULATED RELAYS



Fully encapsulated in epoxy resin, highly resistant to mechan shock, excessive humidity and corrosive atmospheres. Preci metal contacts. Type 101: SPST-N.O. contact load rating, 12 at ½ amp. max. or 200 VAC max. non-inductive. Operate, 1 Release ½ ms. average. Contact resistance, 150 milliohms aver 1x7/16" dia. Type 104: SPDT, 3 VA maximum at ¼ A max. or 2 maximum non-inductive. 1 ms. operate and release time. S 1x7/16" diameter. Type 105: SPST-N.O., 0.1 VA maximum at mA or 12 volts maximum. Operate time, ¼ ms av., release time ms av. 7/16x1/4" diameter. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	mA or VDC	Coil Ohms	EACH 1-24	25-49	50-74	75-99	
850-0805	101EPX-5	6 V	65	3.62	3.26	3.08	2.90	2
850-0806	101EPX-6	12 V	225	3.62	3.26	3.08	2.90	2
850-0807	101EPX-7	24 V	1000	4.24	3.82	3.60	3.39	2
850-0808	101EPX-8	8 mA	5000	4.68	4.21	3.98	3.74	3
850-1410	104EPX-2	6 V	65	7.37	6.63	6.26	5.90	5
850-1411	104EPX-3	12 V	225	7.37	6.63	6.26	5.90	5
850-1412	104EPX-4	24 V	1000	8.05	7.25	6.84	6.44	5
850-1413	104EPX-5	8 mA	5000	8.55	7.70	7.27	6.84	5
850-1520	105EPX-1	6 V	90	6.18	5.56	5.25	4.94	4
850-1521	105EPX-2	12 V	350	6.18	5.56	5.25	4.94	4
850-1522	105EPX-3	24 V	1300	6.30	5.67	5.36	5.04	4

HIGH-VOLTAGE REED RELAYS



TYPE 101VM. Open style, molded design with axial leads. Se SPST N.O. contacts rated 1000 VDC at 1 mA max. non-ind. N pwr., 600 mW. Operate, 1 ms. 1/2x7/16x1". Type 101 VMPC. Snap PC steel enclosure. SPST N.O. contacts rated 1000 VDC max .001 amp resistive. Nom. pwr., 700 mW. Operate, 1 ms. 1 1/8x3 3/8". Type 102V. Metal-covered. SPST N.O. contacts rated 50 V 3 A, 5000 VDC max. resistive. Operate 3 ms. Cover internally in ated, offers shielding. 4 1/8x1 5/16x7/8". Type W102HVX. Molded package. SPST N.O. contacts rated 10,000 V at .001 A max. ind. Nom. Pwr.: 1.5 mW. 4 1/2x3 3/4x7/8". Type 102UHVX. SPST N contacts rated at 20,000 VDC max. at .001 amps max. non- Av. wt. 3 oz.

1000 VOLTS

Stock No.	Mfr's Type	mA or VDC	Coil Ohms	EACH 1-24	25-49	50-74	75-99	
850-0896	101VMX-1	6 V	100	10.90	9.81	9.27	8.72	
850-0897	101VMX-2	12 V	250	10.92	9.83	9.28	8.74	
850-0898	101VMX-3	24 V	500	10.93	9.83	9.29	8.74	
850-0899	101VMX-4	9 mA	2500	11.12	10.01	9.45	8.90	
850-0889	101VMPCX-1	6 V	50	11.90	10.71	10.12	9.52	
850-0890	101VMPCX-2	12 V	220	11.97	10.77	10.17	9.58	
850-0891	101VMPCX-3	24 V	850	12.00	10.80	10.20	9.60	
850-0892	101VMPCX-4	48 V	3300	12.22	11.00	10.39	9.78	

5000 VOLTS

850-1060	102VX-9	140 mA	30	13.69	12.32	11.64	10.95	
850-1061	102VX-10	6 V	70	13.69	12.32	11.64	10.95	
850-1062	102VX-11	12 V	250	13.73	12.36	11.67	10.98	
850-1063	102VX-12	24 V	1000	13.78	12.40	11.71	11.02	
850-1064	102VX-13	48 V	4000	14.15	12.74	12.03	11.32	
850-1065	102VX-14	9 mA	7000	14.58	13.12	12.39	11.66	

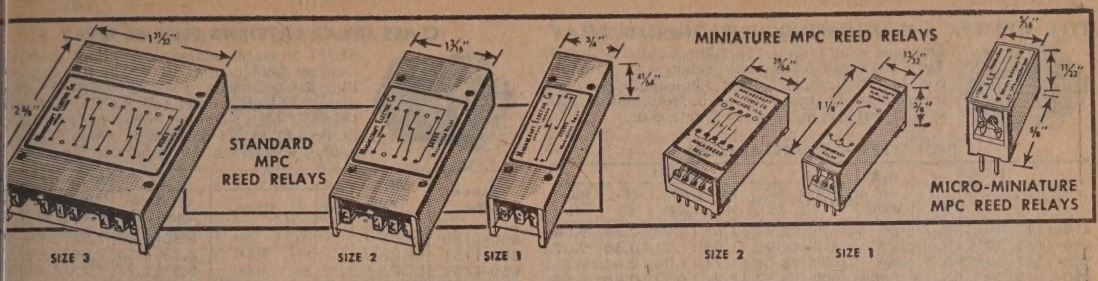
10,000 VOLTS

Stock No.	Mfr's Type	VDC	Coil Ohms	EACH 1-24	25-49	50-74	75
850-0930	W102HVX-1	6	25	19.88	17.89	16.90	1
850-0931	W102HVX-2	12	100	19.88	17.89	16.90	1
850-0932	W102HVX-3	24	400	19.88	17.89	16.90	1

20,000 VOLTS

850-1045	102UHVX-1	6	25	33.62	30.26	28.58	2
850-1046	102UHVX-2	12	100	33.62	30.26	28.58	2
850-1047	102UHVX-3	24	400	33.62	30.26	28.58	2

Allied Electronics Has the Best Order-Filling Record in the Indus



Snap-On Steel Enclosure Prevents Interaction with Other Relays
Terminal Pins on 0.2" Grid Centers for Printed-Circuit Plug-In Mounting

Ultra reliable dry reed relays with contact leads soldered stress-free to rugged terminal posts. Reed capsule contacts are hermetically sealed with inert gas in glass capsule to completely protect them from dust, contamination, moisture or tampering. Reed leads are gold-plated or tinned for ease in soldering connecting lead wires. Molded lead mounting assembly provides fastening lead to bobbin for stress relief to minimize forces being exerted to glass during soldering. Coil is accurately wound on specially designed one-piece molded bobbin insulated for excellent dielectric characteristics. Imbedded coil terminals, molded in bobbin, avoid shorts.

STANDARD MAGNEREED DRY REED RELAYS

SERIES 102MPC SPST N.O. Operate time, less than 3 msec. av. Release, less than ½ msec av. Gold contacts—rated 15 VA, non-inductive at 1 amp, or 250 VAC. Life expectancy, 20 million operations at maximum rating. ½-watt nominal DC rating. Overall size, 3x4¼64x¾". Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Coil V DC	Coil Ohm	EACH 1-24	25-49	50-74	75-99	100-499	500-Up
850-0950	102MPCX6	6	70	3.29	2.96	2.79	2.63	2.30	2.14
850-0951	102MPCX7	12	250	3.29	2.96	2.79	2.63	2.30	2.14
850-0952	102MPCX8	24	1000	3.29	2.96	2.79	2.63	2.30	2.14
850-0953	102MPCX9	48	4000	3.46	3.11	2.94	2.77	2.42	2.25

SERIES 102MPC 3PST N.O. ¾-watt nom. DC. Contacts, 15 VA at 1A or 250 VAC non-ind. 2⅝x4¼64x1¾16". Wt. 2 oz.

850-0970	102MPCX49	12	175	5.63	5.07	4.79	4.51	3.95	3.66
850-0971	102MPCX50	24	750	5.77	5.20	4.91	4.62	4.04	3.76

SERIES 102MPC 6PST N.O. 1½-watt nom. DC. Contacts rated 15 VA at 1A or 250 VAC non-ind. 2⅝x4¼64x1316". Wt. 2 oz.

850-0973	102MPCX52	6	25	9.18	8.27	7.81	7.34	6.43	5.97
850-0974	102MPCX53	12	100	9.30	8.37	7.91	7.44	6.51	6.05
850-0975	102MPCX54	24	375	9.35	8.42	7.95	7.48	6.55	6.08

SERIES 103MPC SPDT. Operate time, 2 msec release time, less than ½ msec av. Contact bounce, 4 milliesecond av. on release. Gold contacts rated 10 VA, at ½ amp max. or 250 VDC max., non-inductive. Life, 25 million operations at max. rating. ½-watt nom. DC. 2⅝x4¼64x1¾16". Shpg. wt. 3 oz.

850-1210	103MPCX2	6	70	5.83	5.25	4.96	4.66	4.08	3.79
850-1211	103MPCX3	12	250	5.83	5.25	4.96	4.66	4.08	3.79
850-1212	103MPCX4	24	1000	5.83	5.25	4.96	4.66	4.08	3.79
850-1213	103MPCX5	48	4000	6.00	5.40	5.10	4.80	4.20	3.90

SERIES 103MPC DPDT. ¾-watt nom. DC. Contacts rated 10 VA at 1A, or 250 VAC. 2⅝x4¼64x1¾16". Wt. 2 oz.

850-1238	103MPCX30	6	50	8.33	7.50	7.09	6.67	5.84	5.44
850-1239	103MPCX31	12	175	8.33	7.50	7.09	6.67	5.84	5.44
850-1240	103MPCX32	24	750	8.47	7.63	7.20	6.78	5.93	5.51

SERIES 103MPC 4PDT. Size 3. 1½-watt nom. DC. Contacts rated 10 VA at ½ A or 250 VAC. 2⅝x4¼64x1¾32". Wt. 3 oz.

850-1242	103MPCX34	6	25	14.60	13.14	12.41	11.68	10.22	9.49
850-1243	103MPCX35	12	100	14.70	13.23	12.50	11.76	10.29	9.56
850-1244	103MPCX36	24	375	14.77	13.29	12.55	11.82	10.34	9.60

SERIES 102RMP POWER REED RELAYS. SPST N.O. Size 1. ½-watt nominal, DC. Contact load rating, 100 VA, 3 A max., or 250 volts max. 2⅝x4¼64x¾". Shpg. wt. 1 oz.

850-1025	102RMPCX2	12	250	7.88	7.09	6.70	6.31	5.52	5.13
850-1026	102RMPCX3	24	1000	7.93	7.14	6.74	6.34	5.55	5.15
850-1027	102RMPCX4	48	4000	8.18	7.36	6.95	6.54	5.73	5.32

I.C. COMPATIBLE REED RELAYS

850-0840	W101MPCX104	5	450	4.12	3.71	3.50	3.30	2.88	2.58
850-1460	W104MPCX46	5	300	7.53	6.78	6.40	6.02	5.27	4.80

LOW COST P.C. REEL RELAYS

850-0978	W102MPCX145	6	70	2.50	2.25	2.13	2.00	1.89	1.53
850-0979	W102MPCX146	12	250	2.50	2.25	2.13	2.00	1.89	1.53
850-0980	W102MPCX147	24	1000	2.50	2.25	2.13	2.00	1.89	1.53

MINIATURE DRY REED RELAYS

SERIES 101 MPC SPST N.O. Operate time, 1 millisecond, av.; release time, .5 millisecond, av. Contact load rating: 10 VA max. at ½ A or 200 VDC max., non-inductive. Contact bounce, .5 millisecond, av. Life expectancy, 5 million operations. ½-watt nominal DC. Low profile, compact design saves space. No taller than commonly used capacitors and resistors . . only ⅜" high. Size, 1⅛x1332x⅜". 1 oz.

Stock No.	Mfr's Type	Coil VDC	Coil Ohms	EACH 1-24	25-49	50-74	75-99	100-499	500-Up
850-0830	101MPCX1	6	70	3.60	3.24	3.06	2.88	2.52	2.34
850-0831	101MPCX2	12	300	3.60	3.24	3.06	2.88	2.52	2.34
850-0832	101MPCX3	24	1100	3.63	3.27	3.09	2.90	2.54	2.36
850-0833	101MPCX4	48	4300	3.77	3.39	3.20	3.02	2.64	2.45

SERIES 101MPC 3PST. .7-watt nom. DC. Contacts rated 12 VA at ½ A or 200 VDC. 1⅛x3964x⅜". Wt. 3 oz.

850-0835	101MPCX6	12	220	6.75	6.08	5.74	5.40	4.73	4.39
850-0836	101MPCX7	24	850	6.77	6.09	5.75	5.42	4.74	4.40

SERIES 104MPCX SPDT. Operate/release time, 1 millisecond, av. Contact bounce: N.O., 0.5 millisecond; NC. 2 milliseconds. Rated 3 VA max. at ¼ A or 28 volts max. Life expectancy, 10 million operations at rated load. ½-watt nom. DC. Contact resistance, 150 milliohms, aver. Size, 1⅛x1332x⅜". Shpg. wt. 1 oz.

850-1440	104MPCX1	6	70	6.82	6.14	5.80	5.46	4.77	4.43
850-1441	104MPCX2	12	300	6.83	6.15	5.81	5.46	4.78	4.44
850-1442	104MPCX3	24	1100	6.85	6.17	5.82	5.48	4.80	4.45

SERIES 104MPCX DPDT. .7-watt nominal. DC. Operate/release time, 1 ms. average. Contact Bounce, less than ½ ms. aver. N.O. contacts; less than 2 ms, NC contacts. 1⅛x3964x⅜". Shpg. wt. 3 oz.

850-1445	104MPCX6	12	220	11.63	10.47	9.89	9.30	8.14	7.56
850-1446	104MPCX7	24	850	11.65	10.49	9.90	9.32	8.16	7.57

LOW-PRICED MINIATURE RELAYS

850-0842	W101MPCX122	6	70	1.86	1.83	1.80	1.78	1.64	1.46
850-0843	W101MPCX123	12	300	1.86	1.83	1.80	1.78	1.64	1.46
850-0844	W101MPCX124	24	1100	1.86	1.83	1.80	1.78	1.64	1.46

MICROMINIATURE DRY REED RELAYS

SERIES 105MPC SPST N.O. Operate time, 250 microseconds, average. Release time, 500 microseconds, average. Rating: 0.1 VA max. at 10 mA or 12 volts max. non-inductive. 0.3 watts nominal, DC. Contact resistance, 200 milliohms, average. Life expectancy, 10 million operations at rated load. 5⅛x1132x5⅛6". Wt. 1 oz.

Stock No.	Mfr's Type	Coil VDC	Coil Ohms	EACH 1-24	25-49	50-74	75-99	100-499	500-Up
850-1547	105MPCX1	6	120	5.45	4.91	4.63	4.36	3.82	3.54
850-1548	105MPCX2	12	500	5.47	4.92	4.65	4.38	3.83	3.56
850-1549	105MPCX3	24	2000	5.58	5.02	4.74	4.46	3.91	3.63

TYPE 103LMPC MAGNETIC LATCHING REED RELAY

SPDT bi-stable reed relay requires no coil current to hold contacts in either of two latching positions. Available with single-wound coils for switching upon polarity reversal, or double-wound coils having separate polarized windings. Contacts rated 10 VA at 200 V, maximum, or 0.2 amp maximum non-inductive. Life expectancy: 25-million operations at rated load. Steel cover provides excellent mechanical protection and magnetic shielding. 2⅝x4¼64x¾". Size 1 case. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Coil VDC	Coil Ohms	EACH 1-24	25-49	50-74	75-99	100-499	500-Up
850-1180	103LMPCX4	6	250	7.07	6.36	6.01	5.66	4.95	4.60
850-1185	103LMPCX9	6	120/120	8.33	7.50	7.08	6.66	5.83	5.41
850-1186	103LMPCX10	12	460/460	8.33	7.50	7.08	6.66	5.83	5.41
850-1187	103LMPCX11	24	1800/1800	9.00	8.10	7.65	7.20	6.30	5.85

Magnecraft Reed and Selected Relays

TYPE W103CPX ENCLOSED PLUG-IN MAGNEREED RELAY

Dry reed relay plug-in assembly. Consist of 2 or 3 Type 103 break-before-make relays with common coil, in "High impact" plastic housing. Oper., release times less than 3 ms, each. Nom. power, 300 mW. 2⅛x1⅜x1⅜". Av. shpg. wt., 6 oz.

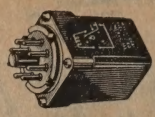
DPDT TYPES—8-PIN OCTAL PLUGS

Stock No.	Mfr's Type	mA or VDC	Coil Ohms	EACH 1-24	25-49	50-74	75-99	100-Up
850-1115	103CPX-7	6 V	75	12.92	11.63	10.98	10.34	9.04
850-1116	103CPX-8	12 V	300	12.95	11.66	11.01	10.36	9.07
850-1117	103CPX-9	24 V	1000	13.01	11.71	11.06	10.41	9.11
850-1118	103CPX-10	8 mA	5000	13.57	12.21	11.53	10.86	9.50

3PDT TYPES—11-PIN PLUGS

850-1120	103CPX-12	12 V	150	16.83	15.15	14.31	13.46	11.78
850-1121	103CPX-13	24 V	650	16.95	15.26	14.41	13.56	11.87
850-1122	103CPX-14	10 mA	5000	17.50	15.75	14.86	14.00	12.25

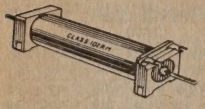
CLASS 103LCP LATCHING PLUG-IN RELAY



SPDT bi-stable magnetic latching reed rel Contact load rating: 10 VA at 0.2 amp m Plug-in mounting for standard octal-s sockets. Single wound coil: LCPX 7-10, (1 1⅜x2⅛" high.) Double wound coil: dual inp LCPX 11-14, (1⅜x1⅜x2⅛" high.) Life: million operations. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type W103-	COIL mA	V	Ohms	EACH 1-24	25-49	50-74	75-99	1
850-1150	LCPX-7	....	6	250	8.30	7.47	7.06	6.64	5
850-1151	LCPX-8	....	12	1000	8.33	7.50	7.08	6.66	5
850-1152	LCPX-9	....	24	4000	8.57	7.71	7.28	6.86	6
850-1153	LCPX-10	4	..	7000	8.80	7.92	7.48	7.04	6
850-1154	LCPX-11	....	6	120/120	9.87	8.88	8.39	7.90	6
850-1155	LCPX-12	....	12	460/460	9.97	8.97	8.47	7.98	6
850-1156	LCPX-13	....	24	1800/1800	10.02	9.02	8.52	8.02	7
850-1157	LCPX-14	8	..	3000/3000	10.32	9.29	8.77	8.26	7

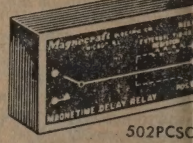
CLASS 102RMX IN-LINE POWER REED RELAYS



In-line axial lead power reed relays provide high current switching and high reliability at low cost. Standard size, SPST-NO; rated 3 amps. Contact load rating: 100 VA at 3 amps max. or 250 VAC. Operate Time: 1.5 msec. average. Release Time: 1 msec. average. Contact Bounce: 1 msec. average. Operate in any position. Size, 2¼x½x7/16". Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type W102-	Coil Res., Ohms	Nominal Voltage or Current	EACH 1-24	25-49	50-74	75-99	1
850-1035	RMX-5	200	6 VDC	4.18	3.76	3.55	3.34	2
850-1036	RMX-6	500	12 VDC	4.22	3.80	3.59	3.38	2
850-1037	RMX-7	2000	24 VDC	4.33	3.90	3.68	3.46	3
850-1038	RMX-8	5000	48 VDC	4.53	4.08	3.85	3.62	3

PRINTED CIRCUIT TIME DELAY RELAYS



502PCSC

Class 502PCSO and 503PCSO. Time delay on operate, adjustable 100 msec. to 100 sec. using 60K ohm/sec. external resistor, or 1 sec. to 5 minutes at 10K/sec. Repeatability, ±5% at nominal voltage at 25°C after first cycle, ±10% over voltage or temp. range indicated. Polarity protection. Reset time, less than 10 msec.

Class 502PCSR and 503PCSR. Time delay on release, adjustable 200 msec. to 100 sec. using 25K ohm/sec. resistor, or 1 sec. to 5 min. at 6.5K/sec. Repeatability, ±2% at nom. voltage at 25°C, ±4% over voltage and temp. range. Temperature, +10° to +55°C.

Combine rugged monolithic silicon structure with dry reed relay for isolated circuit switching. Two fully adjustable timing ranges, using remote pot or fixed resistor. Encapsulated in low profile PC package. SPST-NO (Form A) types rated 1 amp, 15 VA or 250 VAC maximum, resistive; SPDT (Form C) types rated 0.5 amp, 10 VA 250 VAC max. resistive. 2¼x1¼x¾". Av. shpg. wt., 2 oz.

CLASS 502PCSO SPST-NO (Form A) SLOW OPERATE RELAYS

Stock No.	Mfr's Type W502-	DC Volts ±15%	Timing Range	EACH 1-9	10-24	25-49	50-99	100-Up
850-2001	PCSOX-2	12	100 msec.	18.96	18.01	17.06	15.17	14.22
850-2002	PCSOX-3	24	to 100 sec.	18.96	18.01	17.06	15.17	14.22
850-2004	PCSOX-5	12	12 seconds	21.30	20.23	19.17	17.04	15.98
850-2005	PCSOX-6	24	to 5 min.	21.30	20.23	19.17	17.04	15.98

CLASS 502PCSR SPST-NO (Form A) SLOW RELEASE RELAYS

850-2025	PCSRX-2	12	200 msec.	26.73	25.39	24.06	21.38	20.05
850-2026	PCSRX-3	24	to 100 sec.	26.73	25.39	24.06	21.38	20.05
850-2028	PCSRX-5	12	1 second	29.84	28.35	26.86	25.36	22.38
850-2029	PCSRX-6	24	to 5 min.	29.84	28.35	26.86	25.36	22.38

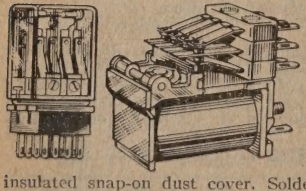
CLASS 503PCSO SPDT (Form C) SLOW OPERATE RELAYS

Stock No.	Mfr's Type W503-	DC Volts ±15%	Timing Range	EACH 1-9	10-24	25-49	50-99	10 U
850-2051	PCSOX-2	12	100 msec.	20.82	19.78	18.74	16.66	15.
850-2052	PCSOX-3	24	to 100 sec.	20.82	19.78	18.74	16.66	15.
850 2054	PCSOX-5	12	12 seconds	22.31	21.19	20.08	17.85	16.
850-2055	PCSOX-6	24	to 5 min.	22.31	21.19	20.08	17.85	16.

CLASS 503PCSR SPDT (Form C) SLOW RELEASE RELAYS

850-2075	PCSRX-2	12	200 msec.	28.59	27.16	25.73	22.87	21.
850-2076	PCSRX-3	24	to 100 sec.	28.59	27.16	25.73	22.87	21.
850-2078	PCSRX-5	12	1 second	31.70	30.12	28.53	25.36	23.
850-2079	PCSRX-6	24	to 5 min.	31.70	30.12	28.53	25.36	23.

CLASS 77 MINIATURE-SIZE 4DPT RELAY



Telephone-type relay features miniature-size 4DPT contact combination, 5 A contact rating and greater contact pressure without increasing coil power. Precision-built hinge-pin armature bearings, oversize surfaces. Silver-cadmium oxide contacts, gold flash. Molded resin insulation. Molded, insulated snap-on dust cover. Solder terminals. High dielectric strength. 1 17/64x1 19/32x5 5/64". Av. shpg. wt., 2 oz.

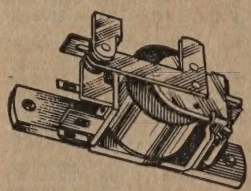
Stock No.	Mfr's Type	Coil Volts	Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
850-0225	W77CSX-1	6DC	40	5.30	5.04	4.77	4.51	3.58
850-0226	W77CSX-2	12DC	160	5.30	5.04	4.77	4.51	3.58
850-0227	W77CSX-3	24DC	600	5.40	5.13	4.86	4.58	3.65
850-0228	W77CSX-4	48DC	2500	5.55	5.27	5.00	4.72	3.75
850-0229	W77CSX-5	110DC	10,000	5.97	5.67	5.37	5.07	4.03

AC TYPE 77 TELEPHONE RELAY AND SOCKETS

AC version of Class 77 relays. 4PDT. 5-amp contact rating. 1 17/64x ¾x1 9/32". Wt., 2 oz. Molded sockets rated at 5 amps. 1 oz.

850-0220	W77ACSX1	115AC	.....	5.96	5.66	5.36	5.07	4.02
850-2096	70-161-1 Solder socket w/ret.			.58	.52	.49	.46	.44
850-2098	70-161-3 Printed Circuit Sock.			.58	.52	.49	.46	.44

CLASS 88K LOW-COST POWER SWITCHING RELAY



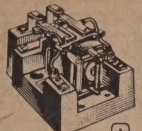
Extra reliability to meet exacti requirements over a wide range applications. Provides lowest fr tion and maximum contact effi tiveness with stabilized adjustme over long life. Has silver cadmi oxide, gold-flashed contacts rat 15 amps @ 115 VAC/32 VD SPDT, 1 form C standard. Conta assemble to glass insulated termi board for dielectric strength of 7 VAC rms. Flexible moving cont arm for excellent contact wipe. Connections to terminals are ma with AMP Faston 250 receptacles on contacts, and Faston 110 coil (or equivalent), or are soldered. Nominal power: *3 VA. †1.5 Voltage operated relays pull in at 85%, or less, of nominal voltage 25°C. With mounting base and mounting base insulator. Size (i cluding mounting base) 2⅜x1 13/64x1¼". Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Coil Volts	Ohms	EACH 1-9	10-24	25-49	50-99	10 U
850-0363	W88AKX-1*	24AC	.....	5.12	4.86	4.61	4.35	3.
850-0364	W88AKX-2*	115AC	.....	5.12	4.86	4.61	4.35	3.
850-0365	W88AKX-3*	230AC	.....	6.20	5.89	5.58	5.27	4.
850-0536	W88KX-1†	6DC	25	4.90	4.66	4.41	4.17	3.
850-0537	W88KX-2†	12DC	100	4.90	4.66	4.41	4.17	3.
850-0538	W88KX-3†	24DC	400	4.90	4.66	4.41	4.17	3.
850-0539	W88KX-4†	110DC	8000	5.68	5.40	5.11	4.83	3.

Write or Call for Larger-Quantity Price

Magnecraft Industrial Control Relays

A HIGH VOLTAGE POWER RELAYS



s 99. Designed for high- ent switching. Molded act barrier and phenolic . Dielectric strength,) VAC, rms. Screw ter- als. Listed as across-the- starters by Under- er's Laboratories, Inc.

s 99 SPDT Relay. Single pole, double throw contacts (1 form "C") d 25 amperes. 2½x2½x2½". Av. shpg. wt., 8 oz.

tock No.	Mfr's Type	Coil Volts	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-Up
-0690	W99AX-2	115AC	.....	5.68	5.11	4.83	4.54	3.98
-0691	W99AX-3	230AC	.....	5.86	5.27	4.98	4.69	4.10

s 99 DPST Relay. Double pole, single throw contacts (2 form "A")). rated 25 amps. 2⅝x2½x2½". Av. wt., 9 oz.

-0697	W99AX-9	115AC	.....	6.67	6.00	5.67	5.34	4.67
-0698	W99AX-10	230AC	.....	6.85	6.17	5.82	5.48	4.80
-0794	W99X-10	12DC	70	6.36	5.72	5.41	5.09	4.45
-0795	W99X-11	24DC	290	6.38	5.74	5.42	5.10	4.47

s 99 DPDT relay. DPDT contacts rated 25A, SPDT aux. contacts d 5A. Power 3 VA. Screw terminals. 2½x4⅜x2⅝". Wt., 12 oz.

-0703	W99AX-15	115AC	.....	10.43	9.39	8.87	8.34	7.30
-0704	W99AX-16	230AC	.....	10.63	9.57	9.04	8.50	7.44

s 99 DPDT Relay. Double pole, double throw contacts (2 form ") rated 25 amps. 2⅝x2½x3⅜". Av. wt., 11 oz.

-0693	W99AX-5	115AC	.....	8.43	7.59	7.17	6.74	5.90
-0694	W99AX-6	230AC	.....	8.63	7.77	7.34	6.90	6.04
-0790	W99X-6	12DC	70	8.12	7.31	6.90	6.50	5.68
-0791	W99X-7	24DC	290	8.14	7.33	6.92	6.51	5.70

s 99 SPST-N.O.-DB Relay. Normally open, double-break contacts orm "A") rated 50 amps. 2⅜x2½x2½". Av. wt., 8 oz.

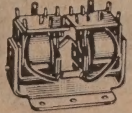
-0675	W99ADX-1	24AC	.....	5.64	5.08	4.79	4.51	3.95
-0676	W99ADX-2	115AC	.....	5.64	5.08	4.79	4.51	3.95
-0677	W99ADX-3	230AC	.....	5.85	5.27	4.97	4.68	4.10
-0720	W99DX-1	6DC	18	5.35	4.82	4.55	4.28	3.75
-0721	W99DX-2	12DC	70	5.35	4.82	4.55	4.28	3.75
-0722	W99DX-3	24DC	290	5.37	4.83	4.56	4.30	3.76
-0723	W99DX-4	110DC	6000	5.74	5.17	4.88	4.59	4.02

B SPACE-SAVING POWER RELAYS

sses 99S and 99SD. Similar to standard Class 99, but have no e. Same steel hinge pin armature bearings with oversize bear- surfaces for long life and contact effectiveness with adjustment bility. 99S: SPDT (1 Form "C") 25 amps. 99SD: SPDT N.O. (1 rm A)—double-break. 50 amps. 1⅞x½x2". Shpg. wt. 6 oz.

Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
0-0750	W99SAX-1	24AC	7.35	6.62	6.25	5.88	5.15	4.59
0-0751	W99SAX-2	115AC	7.40	6.66	6.29	5.92	5.18	4.63
0-0752	W99SAX-3	230AC	7.62	6.86	6.48	6.10	5.33	4.76
0-0780	W99SX-1	6DC	7.11	6.40	6.04	5.69	4.98	4.44
0-0781	W99SX-2	12DC	7.13	6.42	6.06	5.70	4.99	4.46
0-0782	W99SX-3	24DC	7.15	6.44	6.08	5.72	5.01	4.47
0-0783	W99SX-4	110DC	7.47	6.72	6.35	5.98	5.23	4.67
0-0740	W99SADX-1	24AC	6.26	5.63	5.32	5.01	4.38	3.91
0-0741	W99SADX-2	115AC	6.34	5.71	5.39	5.07	4.44	3.96
0-0742	W99SADX-3	230AC	6.56	5.90	5.58	5.25	4.59	4.10
0-0765	W99SDX-1	6DC	6.10	5.49	5.19	4.88	4.27	3.81
0-0766	W99SDX-2	12DC	6.10	5.49	5.19	4.88	4.27	3.81
0-0767	W99SDX-3	24DC	6.14	5.53	5.22	4.91	4.30	3.84
0-0768	W99SDX-4	110DC	6.44	5.80	5.47	5.15	4.51	4.03

W88L INTERMITTENT-DUTY RELAYS



vo C class 88 relays (see next column) with in- locking latch-in levers mounted on a common se. Each relay is complete with independent erating coil. 10 A silver alloy contacts. ominal power AC units, 6 VA; DC, 3 W. PDT; †6PDT. 1⅝x1¾x2⅛". 6½ oz.

Stock No.	Mfr's Type W88-	Coil Volts	Coil Ohm	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
0-0390	ALX-3*	24 AC	...	11.98	11.38	10.78	10.18	8.39	6.82
0-0391	ALX-4*	115 AC	...	11.98	11.38	10.78	10.18	8.39	6.82
0-0575	LX-2*	12 DC	50	10.91	10.36	9.82	9.27	7.64	6.21
0-0576	LX-3*	24 DC	200	10.91	10.36	9.82	9.27	7.64	6.21
0-0393	ALX-6†	24 AC	...	14.46	13.74	13.01	12.29	10.12	8.23
0-0394	ALX-7†	115 AC	...	14.46	13.74	13.01	12.29	10.12	8.23
0-0578	LX-5†	6 DC	12	13.28	12.61	11.95	11.29	9.30	7.56
0-0580	LX-7†	24 DC	200	13.28	12.61	11.95	11.29	9.30	7.56

all, Write or Wire For Larger Quantity Prices

W88 ALL-PURPOSE OPEN RELAYS

Versatile, low-cost clapper-type relays provide reliability and long-life adjustment stability. 10 A silver alloy contacts. Nominal power for AC units, 3 VA; DC, 1.5 W plate-current types: SPDT, 12 mW; DPDT, 250 mW; 3PDT, 375 mW. *Coil ohms of plate circuit types. 1¼x1⅜x 1¾". Wt. 3 oz.

Stock No.	Mfr's Type W88-	Coil Volts	Action	EACH 1-9	10-24	25-49	50-99	100-Up
850-0405	AX-4	115 AC	SPDT	4.02	3.82	3.62	3.42	2.81
850-0605	X-3	12 DC	SPDT	3.60	3.42	3.24	3.06	2.52
850-0606	X-4	24 DC	SPDT	3.60	3.42	3.24	3.06	2.52
850-0409	AX-8	115 AC	DPDT	4.70	4.47	4.23	4.00	3.29
850-0609	X-7	12 DC	DPDT	4.16	3.95	3.74	3.54	2.91
850-0611	X-9	110 DC	DPDT	4.80	4.56	4.32	4.08	3.36
850-0619	X-17	2500*	DPDT	4.42	4.20	3.98	3.76	3.09
850-0412	AX-11	24 AC	3PDT	5.24	4.98	4.72	4.45	3.67
850-0413	AX-12	115 AC	3PDT	5.24	4.98	4.72	4.45	3.67
850-0613	X-11	12 DC	3PDT	4.64	4.41	4.18	3.94	3.25
850-0614	X-12	24 DC	3PDT	4.64	4.41	4.18	3.94	3.25

W88P PLUG-IN ENCLOSED RELAYS

Same as W88 relays, but enclosed in plastic cover. 3PDT has 11-pin plug; others, octal plug. * has neon indicator. 2⅛x1⅜x1⅜". 5 oz.

850-0310	ACPX-4	115 AC	SPDT	6.17	5.86	5.55	5.24	4.01
850-0450	CPX-3	24 DC	SPDT	5.94	5.64	5.35	5.05	4.16
850-0460	CPX-13	7.2 mA	SPDT	6.49	6.17	5.84	5.52	4.54
850-0314	ACPX-8	115 AC	DPDT	6.91	6.56	6.22	5.87	4.49
850-0399	ANCPX-2*	115 AC	DPDT	8.02	7.62	7.22	6.82	5.61
850-0453	CPX-6	12 DC	DPDT	6.55	6.33	5.99	5.66	4.33
850-0454	CPX-7	24 DC	DPDT	6.55	6.33	5.99	5.66	4.33
850-0455	CPX-8	110 DC	DPDT	7.16	6.80	6.44	6.09	5.01
850-0463	CPX-16	10.0 mA	DPDT	6.93	6.58	6.24	5.90	4.85
850-0464	CPX-17	7.2 mA	DPDT	7.04	6.69	6.34	5.98	4.62
850-0318	ACPX-12	115 AC	3PDT	8.59	8.16	7.73	7.30	5.58
850-0457	CPX-10	12 DC	3PDT	8.12	7.71	7.31	6.90	5.68
850-0458	CPX-11	24 DC	3PDT	8.12	7.71	7.31	6.90	5.68
850-0466	CPX-19	12.3 mA	3PDT	8.47	8.05	7.62	7.20	5.93
850-0467	CPX-20	8.7 mA	3PDT	8.58	8.15	7.72	7.39	6.01

W88H SEALED DPDT PLUG-IN RELAYS

Contacts rated 10 A. Nominal power: AC units, 3VA; DC, 1.5 W. Octal socket. 2½x1¹⁵⁄₁₆". 6 oz.

Stock No.	Mfr's Type	Coil Volts	Coil Ohm	EACH 1-9	10-24	25-49	50-99	100-Up
850-0355	W88AHPX-24	115AC	.....	11.30	10.74	10.17	9.61	7.91
850-0490	W88HPX-33	12DC	100	10.77	10.23	9.69	9.15	7.54
850-0491	W88HPX-34	24DC	400	10.77	10.23	9.69	9.15	7.54

TYPE W33H SEALED 5-AMP SUBMINIATURE DC RELAY

(Not illus.) Silver alloy contacts. 4PDT with 14-pin header. Nominal power required, 3-watts. Size, 1⁴¹⁄₆₄x1¹¹⁄₃₂x3¹⁄₃₂". Wt., 5 oz.

850-0110	W33HSX183	24DC	280	16.70	15.03	14.20	13.36	12.53

TYPE W88D HEAVY-DUTY POWER RELAYS

Positive wiping, 50-ampere double-break contacts. SPST, normally open, action. Nominal power: AC units, 3 VA; DC, 1.5 watts. Solder terminals; #6-32 mtg. hole, locating lug. 1⅞x1¼x1¹³⁄₁₆". 4 oz.

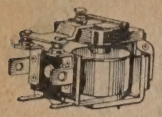
Stock No.	Mfr's Type 88D	Coil Volts	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-499	500-Up
850-0330	ADX-2	115 AC	...	5.25	4.73	4.46	4.20	3.94	3.68
850-0475	DX-2	12 DC	100	4.65	4.19	3.95	3.72	3.49	3.26
850-0476	DX-3	24 DC	400	4.70	4.23	4.00	3.76	3.53	3.29

CLASS 88LCP 10-AMP PLUG-IN RELAY

20-pin latching relay. 4PDT. 2⅜x1¾x3⅜" high. *AC Types, 6 VA. †DC Types, 3 W. Wt., 11 oz.

Stock No.	Mfr's Type 88-	COIL V	COIL Ohm	EACH 1-9	10-24	25-49	50-99	100-Up
850-0375	ALCPX-10*	6	.....	17.26	16.30	15.53	14.67	12.08
850-0376	ALCPX-11*	24	.....	17.26	16.39	15.53	14.67	12.08
850-0377	ALCPX-12*	120	.....	17.26	16.39	15.53	14.67	12.08
850-0555	LCPX-9†	6	12	15.99	15.19	14.39	13.59	11.19
850-0556	LCPX-10†	12	50	15.99	15.19	14.39	13.59	11.19
850-0557	LCPX-11†	24	200	15.99	15.19	14.39	13.59	11.19
850-0558	LCPX-12†	120	4000	16.26	15.45	14.63	13.82	11.38

Magnecraft General-Purpose Relays



CLASS 88KD LOW-PRICED 50-AMPERE GENERAL-PURPOSE POWER RELAYS

Versatile relays with telephone-type-relay reliability at general-purpose-relay prices, for industrial applications. Heavy-duty silver alloy oxide, gold-flashed SPST-N.O. double make contacts rated 50 amperes at 115 VAC or 28 VDC, resistive. Stationary contacts assembled to insulated terminal board. Movable contacts and armature on molded phenolic insulator for excellent contact wipe. Terminals accept AMP Faston "250" receptacles on contacts, or "110" series coil. *Pull-in at 80% or less, DC; 85% or less, AC. †Resistance., ±10%. Single mtg. hole. 1 1/16 x 1 1/16 x 1 1/2". Wt., 3 oz.

Stock No.	Mfr's Type	Coil V*	Coil Ohms†	EACH 1-9	10-24	25-49	50-99	100 Up
850-0510	W88KADX-1	24AC	...	5.30	5.04	4.77	4.51	3.7
850-0511	W88KADX-2	115AC	...	5.30	5.04	4.77	4.51	3.7
850-0525	W88KDX-1	6DC	25	4.70	4.47	4.23	4.00	3.2
850-0526	W88KDX-2	12DC	100	4.70	4.47	4.23	4.00	3.2
850-0527	W88KDX-3	24DC	400	4.70	4.47	4.23	4.00	3.2
850-0528	W88KDX-4	110DC	8000	5.58	5.30	5.02	4.74	3.9

HIGH-RELIABILITY TIME DELAY RELAYS

SOLID-STATE TIME DELAY RELAY WITH 5% REPEATABILITY

Model 211CP. Combines solid-state timing circuit with dependable electromechanical relay to provide DPDT 10-ampere switching. Available in operate-delay and release-delay types, for either AC or DC operation. Timing repeatability: ±5% of setting at nominal voltage @ 25°C. Reset time, 100 ms typical. Three adjustable timing ranges: 1 to 10 sec., 1 to 180 sec., and 2 to 300 sec. Protected from voltage transients up to twice the nominal input voltage for periods up to 8 ms. Operating temperature: −10° to +55°C. Overall size, 2 7/8 x 2 3/8 x 1 3/4". Av. wt., 10 oz.

OPERATE DELAY TYPES (8-pin socket mounting)

Stock No.	Mfr's Type W211	Input in Volts	Timing Range sec.	EACH 1-9	10-24	25-49	50-99	100-Up
850-1850	ACPSOX-5	120 AC	1 to 10	18.98	18.03	17.68	15.18	14.24
850-1852	ACPSOX-7	120 AC	1 to 180	18.98	18.03	17.68	15.18	14.24
850-1853	ACPSOX-8	120 AC	2 to 300	18.98	18.03	17.68	15.18	14.24
850-1879	CPSOX-1	24 DC	1 to 10	18.98	18.03	17.68	15.18	14.24
850-1881	CPSOX-3	24 DC	1 to 180	18.98	18.03	17.68	15.18	14.24
850-1882	CPSOX-4	24 DC	2 to 300	18.98	18.03	17.68	15.18	14.24

RELEASE DELAY TYPES (11-pin socket mounting)

850-1865	ACPSRX-5	120 AC	1 to 10	22.93	21.78	20.64	18.34	17.20
850-1867	ACPSRX-7	120 AC	1 to 180	22.93	21.78	20.64	18.34	17.20
850-1868	ACPSRX-8	120 AC	2 to 300	22.93	21.78	20.64	18.34	17.20
850-1890	CPSRX-1	24 DC	1 to 10	22.93	21.78	20.64	18.34	17.20
850-1892	CPSRX-3	24 DC	1 to 180	22.93	21.78	20.64	18.34	17.20
850-1893	CPSRX-4	24 DC	2 to 300	22.93	21.78	20.64	18.34	17.20

SOLID-STATE TIME DELAY RELAY WITH 1% REPEATABILI

- Applications in Process Controls, Heating, Automation
- Rugged Relay for 10-Ampere DPDT Output Switching
- Protected Against Voltage Transients Up to 1000 Vo

Model 212M. Units combine solid-state timing functi circuit with rugged electromechanical relay for ampere DPDT output switching. Has ±1% repea bility; extremely fast reset time. Circuit is protect against voltage transients up to 1000 volts. Mold plastic enclosure is designed for space saving surfa mounting. It is equipped with screw type terminals, a justable knob and calibrated dial that is individually calibrated each time range with dial plate calibrated in seconds. By use jumper wire across appropriate terminals, the slow operate mo may be programmed for three different timing functions: ti delay on operate; non-totalizer control and totalizer/pre- counter. Slow release delay types may be programmed for time del on release; interval timing and momentary actuation. 4 1/4 x 4 1/2 x 1 1/ Shpg. wt., 14 oz.

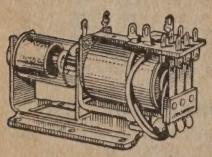
OPERATE DELAY TYPES

Stock No.	Mfr's Type W212	Input in Volts	Timing Range sec.	EACH 1-9	10-24	25-49	50-99	100 U
850-1925	MASOX-2	120 AC	.5 to 10	36.15	33.79	32.78	30.76	29.4
850-1926	MASOX-3	120 AC	5 to 100	37.74	35.29	34.25	32.18	30.8
850-1927	MASOX-4	120 AC	50 to 500	43.24	41.60	39.96	37.65	35.0

RELEASE DELAY TYPES

850-1946	MASRX-2	120 AC	.5 to 10	42.06	40.61	39.16	37.03	34.4
850-1947	MASRX-3	120 AC	5 to 100	43.82	42.32	40.82	38.65	35.9
850-1948	MASRX-4	120 AC	50 to 500	49.73	46.39	45.18	42.76	41.0

CLASS 110 AIR-DASHPOT ADJUSTABLE TIME DELAY RELAYS



Feature DPDT silver-alloy contacts rated 10 amps. Operate delay adjustable from 0.2 to 45 sec. Repeat accuracy of ±10%. Resets in 2 seconds. AC relays have built-in diode rectification. Power: DC, 4 watts; AC, 7 volt-amperes. ‡Open, solder terminals. 7 oz. *Plug-in octal, †screw terminals. Both have metal dust covers. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Coil Volts	EACH 1-9	10-24	25-49	50-99	100 Up
850-1565	*W110ACPX-9	115 AC	29.79	26.81	25.32	23.83	22.3
850-1573	†W110ACSX-1	115 AC	30.07	27.06	25.56	24.06	22.5
850-1583	‡W110AX-9	115 AC	20.91	18.82	17.77	16.73	15.6
850-1593	‡W110X-9	24 DC	17.75	15.97	15.09	14.20	13.3
850-1594	‡W110X-10	110 DC	18.34	16.51	15.59	14.67	13.7

ELECTRICALLY-ACTUATED TIME-DELAY SWITCHES

CLASS 112M AIR-DASHPOT TIME-DELAY SWITCHES

Factory-wired DPDT switches feature operate-delay and release-delay. No standby power required for release-delay. Dependable air-dashpot timing-unit has counterbalanced switch lever. Dashpot piston is coupled to switch-lever with solenoid assembly added to air-dashpot/snap-switch combination electrically initiating the time-switching function. Timing is adjustable from 1 to 150 seconds. Time-repeat accuracy, ±10%. Either knob or Allen-screw timing-adjustment, with cap to minimize tampering. Contacts rated 10 amps, 115 VAC or 32 VDC, resistive. Temperature range, −65°C to +180°C. High-impact plastic enclosure with screw terminals for panel mounting. Flange mount with 3/16" holes on 3" centers. Size, 1 1/2 x 4 1/2 x 4 1/2". Av. shpg. wt., 14 oz.

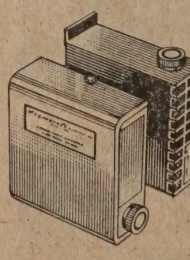
SLOW-OPERATE DELAY TYPES

Stock No.	Type W112	COIL Volts	COIL Ohms	Adj. Type	EACH 1-9	10-24	25-49	50-Up
850-1653	MASOX-1	120 AC	.....	Knob	28.23	26.82	25.41	22.58
850-1654	MASOX-2	120 AC	.....	Screw	28.23	26.82	25.41	22.58
850-1680	MSOX-2	24 DC	80	Knob	28.23	26.82	25.41	22.58
850-1681	MSOX-3	24 DC	80	Screw	28.23	26.82	25.41	22.58

SLOW-RELEASE DELAY TYPES

850-1667	MASRX-1	120 AC	.....	Knob	28.23	26.82	25.41	22.58
850-1668	MASRX-2	120 AC	.....	Screw	28.23	26.82	25.41	22.58
850-1693	MSRX-1	24 DC	80	Knob	28.23	26.82	25.41	22.58
850-1694	MSRX-2	24 DC	80	Screw	28.23	26.82	25.41	22.58

CLASS 112 AIR-DASHPOT TIME-DELAY SWITCHES



Identical in specifications and oper tion to Class 112M at left except h metal enclosure instead of plastic, cal brated-knob timing adjustment, and to be internally wired by customer. Siz 1 3/4 x 3 3/16 x 3 3/16". Ideal as automatio controls, protective circuit delays, alar systems, temperature controls, an many more applications. Have time tested air-dashpot timing unit wit counterbalanced switch lever. Timing adjustable from 1 to 150 seconds. Tem perature range, −65°C to +180°C Contacts are rated 10 amps, 115 VA or 32 VDC, resistive. Av. shpg. wt 1 1/4 lbs.

SLOW-OPERATE DELAY TYPES

Stock No.	Type W112	COIL Volts	COIL Ohms	EACH 1-9	10-24	25-49	50-Up
850-1610	ACSOX-4	120 AC	.....	24.30	23.09	21.87	19.44
850-1628	CSOX-3	24 DC	80	2.430	23.09	21.87	19.44

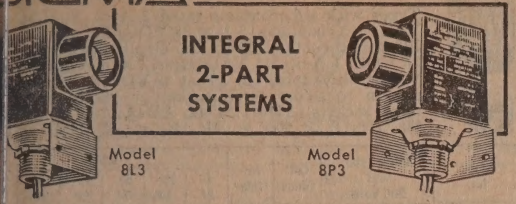
SLOW-RELEASE DELAY TYPES

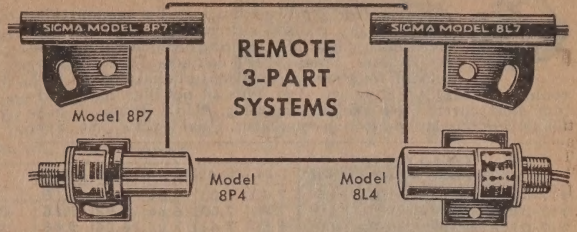
850-1618	ACSRX-4	120 AC	.....	24.30	23.09	21.87	19.44
850-1637	CSRX-3	24 DC	80	24.30	23.09	21.87	19.44

For Production-Quantity Prices, Contact Your Nearest Branch Office

Photoelectric Systems and Sensitive Relays

SIGMA — INTEGRAL AND REMOTE PHOTORELAY SYSTEMS





-Speed Types 8P8 and 8P10. Gives up to 1200 operations per ute with a maximum range of 12 feet. Has resistive rating of 5 os maximum at 28 volts DC or 115 volts AC, and 2.5 amps at volts AC. Provides up to 100 million mechanical operations. es 8P8 and 8P10 have SPDT contacts.

eral-Purpose Type 8P3. Will provide up to 600 operations per ute. Has a 10-amp resistive rating at 28 volts DC or 115 volts , and 5 amps at 230 volts DC. Designed to give up to 10 million hanical operations. Operates up to 12 feet from light source. s SPDT contact arrangement.

t Source 8L3-115. All three systems above may be used with your light source, or with the 8L3-115 Light Source listed in the le below. Leads are #18 AWG, with an average 18″ length. erating temperature range, +32° to +122°F. 2½x1²⁹⁄₃₂x3¹¹⁄₁₆″.

Stock No.	Mfr's Type	Mounting and Size	Wt. Oz.	EACH
7-0266	8P8-115	½″ conduit fitting, mounting bracket. 2½x1²⁹⁄₃₂x3⁷⁄₁₆″	13	45.15
7-0268	8P10-115	5-pin plug. 2½x1²⁹⁄₃₂x3³⁄₁₆″	8	43.10
7-0260	8P3-115	½″ conduit fitting, mounting bracket. 2½x1²⁹⁄₃₂x3¹¹⁄₁₆″	13	22.55
7-0254	8L3-115	Light source for 8P8-115, 8P10-115, 8P3-115 listed above	13	16.40

Subminiature Receiver 8P7 with 8L7 Light Source. Light gives a 12″ beam for 10 operations per second. Lamp life is rated for up to 4000 hours of operation. Leads are #22 AWG, averaging 10″ in length. Each unit only 1½″ long, and ⅝″ in diameter. Av. wt., 1 oz.

Miniature Receiver 8P4 with 8L4 Light Source. Provides a maximum operating range of 25 feet, for 10 operations per second. Light source has an adjustable focus. 10″ long #18 AWG leads. 3 oz.

8A, 8A3 Amplifier-Relay Control. Solid-state. 8A has plug-in replaceable DPDT relay. 5A @ 28 VDC or 115/230 VAC. 8A3 has 50 ms to 20 sec. time delay. 10A @ 28 VDC res., 5A @ 230 V. Source voltage both units 115/230 VAC. Oper. range, +32° to +122° F. 2 lbs.

NOTE: Each system must include an 8A Amplifier Control, and the appropriate Light Source shown in table below. Amplifier Control Housing optional. Av. 9 lbs. **Write for prices on quantities of 25 up.**

Stock No.	Mfr's Type	Mounting	EACH
917-0264	8P7	Lead wires, mounting bracket	14.90
917-0258	8L7	Light source for 8P7 above	10.80
917-0262	8P4	⅜″ conduit fitting, mtg. bracket	16.40
917-0256	8L4	Light source for 8P4 above	14.35
917-0250	8A	Amp. relay control, chassis only	61.55
917-0252	8A3	Amp. with time delay	82.10
917-0098	AT373-1	Control Housing. 11½x10¹¹⁄₁₆x4¼″	16.20

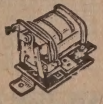
TYPE 8R MINIATURE LOW-PRICED PHOTORELAYS

) cycles/minute for 1 million electrical operations, nimum: Rugged plug-in unit. 8RC01A has ⅝″ light-sitive aperture, 8RC02A has plastic shield with 3⁄32″ erture for positive operation under high ambient ht. —40° to +140°F. ■U.L. Recog. C.S.A.

Stock No.	Mfr's Type	EACH				
		1-24	25-49	50-74	75-99	100-249
917-0272	8RC01A	18.65	17.71	16.79	14.92	13.06
917-0274	8RC02A	18.65	17.71	16.79	14.92	13.06

TYPES 41 AND 42 SENSITIVE SPECIAL-PURPOSE RELAYS

TYPE 41 SPDT RELAYS



C types are for on-off or gradually changing signals; aded-pole AC for high-speed keying. High release circuits with high idle current. SPDT silver con-cts 2 A, except *5 A § 10 A, at 28 VDC or 120 V C. AC sensitivity: ACS, .2VA; ACG, .4VA; DC sen-ivity, 40 mW. Open types, 2¼x1¼x1⁵⁄₁₆″. Wt., 3 Enclosed, 1²¹⁄₆₄x1²¹⁄₆₄x2³⁄₆₄″. ■U.L. Recog., C.S.A. Listed. †Octal g. Shpg. wt., 3 oz. **Write For Larger Quantity Prices.**

UNENCLOSED AC RELAYS—SOLDER TERMINALS

Stock No.	Mfr's Type and Coil Ohms	Coil VAC or DC mA	EACH				
			1-9	10-49	50-74	75-99	100-Up
7-0520	41FZ-10-ACG/BSL	6§	5.11	4.65	4.42	4.19	3.72
7-0521	41FZ-35-ACS/SIL	6	5.88	5.35	5.08	4.82	4.28
7-0523	41FZ-5000-ACG/BSL	115§	5.33	4.85	4.61	4.37	3.88
7-0524	41FZ-10000-ACS/SIL	115	6.54	5.95	5.65	5.36	4.76

UNENCLOSED DC RELAYS—SOLDER TERMINALS

7-0510	41F-200-S/SIL	15.0	5.66	5.15	4.89	4.64	4.12
7-0511	41F-500-S/SIL	9.0	5.66	5.15	4.89	4.64	4.12
7-0512	41F-1000-S/SIL	6.5	5.66	5.15	4.89	4.64	4.12
7-0514	41F-5000-S/SIL	3.0	5.88	5.35	5.08	4.82	4.28
7-0515	41F-10000-S/SIL	2.0	6.21	5.65	5.37	5.09	4.52

ENCLOSED AC RELAYS—PLUG-IN

7-0535	41ROZ-5000-ACG/BSL	115*†	7.53	6.85	6.51	6.17	5.48
7-0536	41JOZ-12000-ACS/SIL	150†	15.84	14.40	13.68	12.96	11.52

ENCLOSED DC RELAYS—OCTAL PLUG-IN

7-0530	41RO-1000-S/SIL	6.5	8.03	7.30	6.94	6.57	5.84
7-0532	41RO-5000-S/SIL	3.0	8.25	7.50	7.13	6.75	6.00
7-0533	41RO-10000-S/SIL	2.0	8.63	7.85	7.46	7.07	6.28
7-0537	41RO6-1000-S/SIL	6.5	8.03	7.30	6.94	6.57	5.84
7-0538	41RO6-2500-S/SIL	4.0	8.03	7.30	6.94	6.57	5.84
7-0539	41RO6-5000-S/SIL	3.0	8.25	7.50	7.13	6.75	6.00

TYPE 42 DPDT RELAYS

Enclosed type have octal plug-in bases and plastic dust covers. Open type have solder terminals. DC sensitivity: (S) 100 mW; (G) 200 mW. AC units, 0.30 VA for ACS type, 0.50 VA for ACG types. Withstand vibration, 10g to 55 Hz; shock 100g (non-operating). Contacts 5 A @ 28 VDC, 120 VAC. exc. †2 A. 1²¹⁄₆₄x1²¹⁄₆₄x2″. ■U.L. Recog. C.S.A. 3 oz.

AC RELAYS

Stock No.	Mfr's Type and Coil Ohms	Coil VACor mA DC	EACH				
			1-9	10-49	50-74	75-99	100-Up
917-0570	42ROZ-8-ACG/SIL	6	8.52	7.75	7.36	6.98	6.20
917-0572	42ROZ-200-ACG/SIL	24	8.52	7.75	7.36	6.98	6.20
917-0573	42ROZ-4000-ACG/SIL	115	8.52	7.75	7.36	6.98	6.20
917-0585	42RO6Z-4000-ACG/SIL	115	8.52	7.75	7.36	6.98	6.20
917-0550	42JOZ-4000-ACG/SIL	115	14.74	13.40	12.73	12.06	10.72
917-0574	42ROZ-7000-ACS/SIL	115†	10.23	9.30	8.84	8.37	7.44

ENCLOSED DC RELAYS

917-0552	42RO-200-G/SIL	32	8.52	7.75	7.36	6.98	6.20
917-0553	42RO-500-G/SIL	20	8.52	7.75	7.36	6.98	6.20
917-0554	42RO-1000-G/SIL	14	8.52	7.75	7.36	6.98	6.20
917-0555	42RO-2500-G/SIL	9	8.52	7.75	7.36	6.98	6.20
917-0556	42RO-5000-G/SIL	6.5	8.91	8.10	7.70	7.29	6.48
917-0557	42RO-10000-G/SIL	4.5	9.13	8.30	7.89	7.47	6.64
917-0558	42RO-12000-G/SIL	4.0	9.57	8.70	8.27	7.83	6.96
917-0577	42RO6-500-G/SIL	20	8.52	7.75	7.36	6.98	6.20
917-0578	42RO6-1000-G/SIL	14	8.52	7.75	7.36	6.98	6.20
917-0583	42RO6-1000-S/SIL	10†	9.40	8.55	8.12	7.70	6.84
917-0579	42RO6-2500-G/SIL	9	8.52	7.75	7.36	6.98	6.20
917-0581	42RO6-10000-G/SIL	4.5	9.13	8.30	7.89	7.47	6.64
917-0560	42RO-150-S/SIL	26†	9.40	8.55	8.12	7.70	6.84
917-0562	42RO-500-S/SIL	14†	9.40	8.55	8.12	7.70	6.84
917-0563	42RO-1000-S/SIL	10†	9.40	8.55	8.12	7.70	6.84
917-0564	42RO-2500-S/SIL	6.2†	9.40	8.55	8.12	7.70	6.84
917-0565	42RO-5000-S/SIL	4.5†	9.73	8.85	8.41	7.97	7.08
917-0566	42RO-10000-S/SIL	3.1†	10.01	9.10	8.65	8.19	7.28

Recognized Under the Component Program of Underwriter's Laboratories, Inc.

SIGMA Special and High-Performance Relays

TYPE 4 PLATE-CIRCUIT RELAYS

DC relays for 20 mW applications. For vacuum tube plate circuits, transistor circuits with high idle current and applications requiring high release or stable trip values. 2-amp SPDT contacts. Type 4F unenclosed; for screw mtg.; solder terminal and coil lead conn. 1½x1⅝x1½". Shpg. wt., 3 oz. Type 4R not illus. has aluminum dust cover; 5-pin plug-in mounting. ■U.L. Recog., C.S.A. Listed. For burglary protection equipment. 1½x1½x2⅜". Wt., 5 oz.

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-24	25-49	50-74	75-99	100-Up
917-0150	4F-1000-S/SIL	4.5	7.40	7.03	6.66	5.92	5.18
917-0154	4F-2500-S/SIL	3.0	7.40	7.03	6.66	5.92	5.18
917-0158	4F-5000-S/SIL	2.0	7.80	7.41	7.02	6.24	5.46
917-0161	4F-8000-S/SIL	1.6	8.05	7.65	7.25	6.44	5.64
917-0164	4F-10,000-S/SIL	1.4	8.05	7.65	7.25	6.44	5.64
917-0170	4R-1000-S/SIL	4.5	10.10	9.60	9.09	8.08	7.07
917-0174	4R-5000-S/SIL	2.0	10.40	9.88	9.36	8.32	7.28
917-0177	4R-8000-S/SIL	1.6	10.70	10.17	9.63	8.56	7.49
917-0180	4R-10,000-S/SIL	1.4	10.70	10.17	9.63	8.56	7.49

TYPE 5 EXTRA-SENSITIVE RELAYS

SPDT extra-sensitive DC relays. Withstand shocks to 100g. Silver contacts rated 1 A except *.25 A. ■U.L. Recog. for use in burglary protection equipment. C.S.A. Listed. Type 5F has screw mtg.; solder term. 1¹¹⁄₁₆x1¾x1⅝". Shpg. wt., 3 oz. Type 5R, not illus. has aluminum dust cover; 5-pin plug-in mtg. 1½x1½x2¼". 5 oz.

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-24	25-49	50-74	75-99	100-Up
917-0205	5F-1000-S/SIL	2.3	10.50	9.98	9.45	8.40	7.35
917-0208	5F-1000-SS/PAL	1.0*	11.95	11.35	10.76	9.56	8.37
917-0211	5F-5000-S/SIL	1.0	11.25	10.69	10.13	9.00	7.88
917-0214	5F-10,000-S/SIL	.70	12.30	11.69	11.07	9.84	8.61
917-0217	5F-10,000-SS/PAL	.30*	13.70	13.02	12.33	10.96	9.59
917-0220	5F-16,000-S/SIL	0.55	13.30	12.64	11.97	10.64	9.31
917-0225	5R-1000-S/SIL	2.3	13.30	12.64	11.97	10.64	9.31
917-0227	5R-2500-S/SIL	1.4	13.30	12.64	11.97	10.64	9.31
917-0229	5R-5000-S/SIL	1.0	14.00	13.30	12.60	11.20	9.80
917-0232	5R-10,000-S/SIL	.70	15.00	14.25	13.50	12.00	10.50
917-0235	5R-16,000-S/SIL	0.55	16.15	15.34	14.54	12.92	11.31

TYPE 26 MINIATURE RELAYS

Rugged DC relays with SPDT action and balanced armature construction. Offer long mechanical life and high release. Operating sensitivity: CDS, 4 mW; S, 5 mW. SIL in Type indicates silver contacts rated 1.0 amp at 28 VDC or 120 VAC; PAL, palladium, 0.5 amp. Withstand shock to 100g (non-operating). Tapped holes for screw mounting. 5 solder terminals. All are unenclosed. Size, 1x1⅞x1⅛". Shpg. wt., 3 oz.

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-24	25-49	50-74	75-99	100-Up
917-0450	26F-1000-S/SIL	2.3	12.00	11.40	10.80	10.20	9.00
917-0454	26F-8000-CDS/PAL	0.7	14.70	13.97	13.23	12.50	11.03

TYPE 48 LOW-PRICED SPDT RELAYS

Low-cost, sensitive relays, excellent for use with burglar, police and fire alarm systems. Operates from minimum of 5- or 10-milliwatt input. Bridge-type contact structure, with solid silver contacts. Compliant armature provides excellent contact wipe. Temperature range, —4°F to +158°F. Contacts rated 2 amps with pickup power of 10 milliwatts. Type 48F is screw mounting open type, with 5 solder terminals. Insulated from chassis. 1¹⁷⁄₆₄x1⁷⁄₁₆x2⁹⁄₃₂". Shpg. wt., 3 oz. Type 48RO comes in a plastic dust cover with octal plug. Overall size, 2³⁄₆₄x1²³⁄₆₄". Shpg. wt., 4 oz.

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-24	25-49	50-74	75-99	100-Up
917-0600	48F-1000-G/SIL	3.2	6.70	6.37	6.03	5.36	4.69
917-0601	48F-2500-G/SIL	2.0	6.70	6.37	6.03	5.36	4.69
917-0602	48RO-1000-G/SIL	3.2	7.85	7.46	7.07	6.28	5.50
917-0603	48RO-2500-G/SIL	2.0	7.85	7.46	7.07	6.28	5.50

TYPE 65 COMMERCIAL SPDT RELAYS

Compact commercial relay gives positive response to low power signals. High adjustment stability, 5 million oper. mechanical life. Ideal for slide projectors, toys, games. Contacts rated 1 amp. Sensitivity, 90 mW. 65F1 is screw mtg. with solder term. 6³⁄₆₄x1¹⁄₁₆x1³⁄₁₆". 65FP1 has terminals for printed circuit, 1¼x1¹⁄₁₆x1³⁄₁₆". Wt. 1 oz.

Stock No.	Mfr's Type and Coil Volts	Coil Ohms	EACH 1-24	25-99	100-499	50-Up
917-0851	65F1A-12DC	1640	1.80	1.50	1.35	1.05
917-0852	65F1A824DC	6560	1.80	1.50	1.35	1.05
917-0854	65FP1A-12DC	1640	2.04	1.60	1.44	1.12
917-0855	65FP1A-24DC	6560	2.04	1.60	1.44	1.12

TYPE 62 UNIVERSAL MINIATURE PLUG-IN

Types with std. contacts rated 2 A at 28 VDC VAC; SCO contacts, 5 A at 28 VDC; 4 A at 115 V Bifurcated-contact (T) for dry-circuit switching 2 28 VDC, 1 A at 115 VAC. Sens. 700 mW (6PDT, W). Sensitive types (S) 1 A at 28 VDC. Stud mour plug-in to solder term. socket or choice of 3 term. sockets (AD41, AD42, AD43, .100" grid). 4⁹⁄₆₄" (HxD) 2P, 6¹⁄₆₄" w.; 4P, 1³⁄₁₆" w.; 6P, 1²⁵⁄₆₄" w.

Stock No.	Mfr's Type and Coil Volts	Coil Ohms	Action	EACH 1-24	25-49	50-74	75-99	100-249
917-0759	62R2-12DC	185	DPDT	3.05	2.90	2.75	2.44	2.14
917-0760	62R2-24DC	700	DPDT	3.05	2.90	2.75	2.44	2.14
917-0762	62R2-110DC	15000	DPDT	4.50	4.28	4.05	3.60	3.15
917-0779	62R4-12DC	185	4PDT	3.40	3.23	3.06	2.72	2.38
917-0780	62R4-24DC	700	4PDT	3.40	3.23	3.06	2.72	2.38
917-0782	62R4-110DC	15000	4PDT	5.00	4.75	4.50	4.00	3.50
917-0801	62R6-12DC	90	6PDT	4.40	4.18	3.96	3.52	3.08
917-0802	62R6-24DC	430	6PDT	4.40	4.18	3.96	3.52	3.08
917-0804	62R6-110DC	9000	6PDT	5.60	5.32	5.04	4.48	3.92
917-0763	62R2-6DC-SCO	52	DPDT	3.15	2.99	2.84	2.52	2.21
917-0764	62R2-12DC-SCO	185	DPDT	3.15	2.99	2.84	2.52	2.21
917-0765	62R2-24DC-SCO	700	DPDT	3.15	2.99	2.84	2.52	2.21
917-0766	62R2-48DC-SCO	2500	DPDT	3.25	3.09	2.93	2.60	2.28
917-0767	62R2-110DC-SCO	15K	DPDT	4.60	4.37	4.14	3.68	3.22
917-0784	62R4-6DC-SCO	52	4PDT	3.60	3.42	3.24	2.88	2.52
917-0785	62R4-12DC-SCO	185	4PDT	3.60	3.42	3.24	2.88	2.52
917-0786	62R4-24DC-SCO	700	4PDT	3.60	3.42	3.24	2.88	2.52
917-0787	62R4-48DC-SCO	2500	4PDT	3.80	3.61	3.42	3.04	2.66
917-0788	62R4-110DC-SCO	15K	4PDT	5.20	4.94	4.68	4.16	3.64
917-0806	62R6-6DC-SCO	25	6PDT	4.80	4.56	4.32	3.84	3.36
917-0807	62R6-12DC-SCO	90	6PDT	4.80	4.56	4.32	3.84	3.36
917-0808	62R6-24DC-SCO	430	6PDT	4.80	4.56	4.32	3.84	3.36
917-0809	62R6-48DC-SCO	1550	6PDT	5.00	4.75	4.50	4.00	3.50
917-0810	62R6-110DC-SCO	9000	6PDT	5.80	5.51	5.22	4.64	4.06
917-0773	62R2T-6DC	52	DPDT	3.45	3.28	3.11	2.76	2.42
917-0774	62R2T-12DC	185	DPDT	3.45	3.28	3.11	2.76	2.42
917-0775	62R2T-24DC	700	DPDT	3.45	3.28	3.11	2.76	2.42
917-0776	62R2T-48DC	2500	DPDT	3.55	3.37	3.20	2.84	2.49
917-0777	62R2T-110DC	15K	DPDT	4.90	4.66	4.41	3.92	3.43
917-0795	62R4T-6DC	52	4PDT	4.00	3.80	3.60	3.20	2.80
917-0796	62R4T-12DC	185	4PDT	4.00	3.80	3.60	3.20	2.80
917-0797	62R4T-24DC	700	4PDT	4.00	3.80	3.60	3.20	2.80
917-0798	62R4T-48DC	2500	4PDT	4.10	3.90	3.69	3.28	2.87
917-0799	62R4T-110DC	15K	4PDT	5.40	5.13	4.86	4.32	3.78
917-0816	62R6T-6DC	25	6PDT	4.90	4.66	4.41	3.92	3.43
917-0817	62R6T-12DC	90	6PDT	4.90	4.66	4.41	3.92	3.43
917-0818	62R6T-24DC	430	6PDT	4.90	4.66	4.41	3.92	3.43
917-0819	62R6T-48DC	1550	6PDT	5.00	4.75	4.50	4.00	3.50
917-0820	62R6T-110DC	9000	6PDT	6.30	5.99	5.67	5.04	4.41

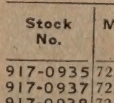
SENSITIVE RELAYS

Stock No.	Type and Coil Ohms	Pickup mW	EACH 1-24	25-49	50-74	75-99	100-249
917-0769	62R2S-2500	85	3.40	3.23	3.06	2.72	2.38
917-0770	62R2S-5000	85	3.80	3.61	3.42	3.04	2.66
917-0771	62R2S-10,000	85	4.20	3.99	3.78	3.36	2.94
917-0790	62R4S-2500	175	3.80	3.61	3.42	3.04	2.66
917-0791	62R4S-5000	175	4.20	3.99	3.78	3.36	2.99
917-0792	62R4S-10,000	175	4.60	4.37	4.14	3.68	3.22
917-0812	62R6S-2500	250	4.90	4.66	4.41	3.92	3.43
917-0813	62R6S-5000	250	5.40	5.13	4.86	4.32	3.78
917-0814	62R6S-10,000	250	5.90	5.61	5.31	4.72	4.13

SOCKETS

917-0050	AD222-Sold. Term. Socket	.55	.52	.50	.44	.39
917-0052	AD23 2-P P.C. Socket	.55	.52	.50	.44	.39
917-0074	AD41 2-P P.C. Socket	.55	.52	.50	.44	.39
917-0053	AD244-Sold. Term. Socket	.65	.62	.59	.52	.46
917-0054	AD25 4-P P.C. Socket	.65	.62	.59	.52	.46
917-0076	AD42 4-P P.C. Socket	.65	.62	.59	.52	.46
917-0056	AD266-Sold. Term. Socket	.95	.90	.85	.76	.67
917-0058	AD27 6-P P.C. Socket	.95	.90	.85	.76	.67
917-0078	AD43 6-P P.C. Socket	.95	.90	.86	.76	.67

TYPE 72 HIGH-SPEED POLAR RELAYS



For high speed switching, pulse repeating, telegraph to 500 pulses/sec. Extremely sensitive. SPDT contacts rated .06-A, ind. load. Removable plastic cove Dual coil. †Current in one coil to trip either direction 2⁵⁄₆₄x1⁷⁄₁₆". TCP Contacts. Shpg. wt., 4 oz.

Stock No.	Mfr's Type and Coil Ohms	mA DC†	EACH 1-24	25-49	50-74	75-99	100-Up
917-0935	72AOZ-160-TG	3.6	37.40	35.53	33.66	29.92	26.1
917-0937	72AOZ-160-TS	1.4	37.40	35.53	33.66	29.92	26.1
917-0938	72AOZ-4000-TS	0.28	38.65	36.72	34.79	30.92	27.0

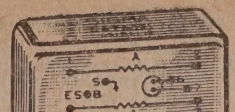
■Recognized Under the Component Program of Underwriter's Laboratories, Inc

Special and General-Purpose Relays

SIGMA

DATACEL® SERIES 301 1, 2, & 4-POLE OPTO-ELECTRONIC RELAYS

put-output circuit isolation and solid-state nstruction. Light beam coupling to one, two four photoconductive cells isolates each cuit electrically. AC or DC use. For high- nsity printed circuit packaging or solder rminal mounting with socket at left. High iability and long life for data processing ntrol and digital circuitry. Switching func- ns include: isolation interface; logic cir- cuits; data sampling; automatic feedback. Temperature range: —40° C to +50° C. Ratings at 25°C: power dissipation, 175 mW each cell except †500, §400, ‡75; output off resistance (R_D), 10 megohms minimum; output voltage, 250 volts AC or DC peak. All are 12-pin except 301R1 Series, 8 pin. *Incandescent lamp except 150-volt types, neon. Size, 1x½x½". Av. shpg. wt., ¼ oz.



301 Series

AD32-1 Socket

Stock No.	Mfr's Type	Lamp Input* V	Lamp Input* mA	Max. "On" R_L, Ohms	Poles	EACH 1-9	10-49	50-74	75-99	100-Up
917-1403	301R1-6†	6	40	400	1	2.64	2.40	2.28	2.16	1.92
917-1404	301R1-12†	12	19	500	1	2.64	2.40	2.28	2.16	1.92
917-1405	301R1-24	24	40	200	1	2.64	2.40	2.28	2.16	1.92
917-1406	301R1-150†	150	2	500	1	2.64	2.40	2.28	2.16	1.92
917-1407	301R2-6§	6	40	400	2	4.12	3.75	3.56	3.38	3.00
917-1408	301R2-12§	12	19	500	2	4.12	3.75	3.56	3.38	3.00
917-1409	301R2-24	24	40	200	2	4.12	3.75	3.56	3.38	3.00
917-1410	301R2-150§	150	2	500	2	4.12	3.75	3.56	3.38	3.00
917-1412	301R4-12	12	38	1000	4	5.54	5.30	5.04	4.77	4.24
917-1413	301R4-24‡	24	40	500	4	5.54	5.30	5.04	4.77	4.24

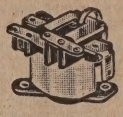
AD32-1 RELAY SOCKET

12 solder terminals for mounting 301 Series relays. 2 mounting holes, .120" diameter spaced 1.3x.260". ¼ oz.

917-0065. 1-24.....Each .65
25-49..Each .62 50-74....Each .59
75-99..Each .52 100-Up....Each .46

TYPE 11 LOW-PRICED RELAYS

eneral-purpose DC or shaded pole AC. DC pes for on-off circuits with gradually changing rrent; AC for on-off only. SPDT silver con- cts: 1 A at 28 VDC/120 VAC. Up to 10g vi- ation or 75g shock, non-operating. Sens., DC lays 50 mW; AC relays 0.3 VA. For —40° to 2°F. U.L. Comp. Prog.-Recog., C.S.A. Listed. Screw mtg., solder rms., except *shoulder lug mtg., PC terms. 1⅛x1⅜x1½". 1 oz.



TYPE 11F-G/SIL DC RELAYS

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-9	10-99	100-Up
917-0310	11F-250-G/SIL	14.0	3.00	2.70	2.43
917-0312	11F-550-G/SIL	9.5	3.00	2.70	2.43
917-0314	11F-1000-G/SIL	7.0	3.00	2.70	2.43
917-0316	11F-1500-G/SIL	5.8	3.00	2.70	2.43
917-0318	11F-2300-G/SIL	4.6	3.00	2.70	2.43
917-0320	11F-6000-G/SIL	2.9	3.52	2.95	2.66
917-0322	11F-9000-G/SIL	2.4	3.70	3.25	2.98
917-0326	11FP-1000-G/SIL*	7.0	2.98	2.80	2.52
917-0329	11FP-2300-G/SIL*	4.6	2.98	2.80	2.52

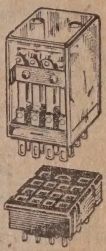
TYPE 11FZ-ACS/SIL AC RELAYS

Stock No.	Mfr's Type and Coil Ohms	V AC	EACH 1-24	25-49	50-74	75-99	100-Up
17-0334	11FZ-25-ACS/SIL	6	4.20	3.99	3.78	3.36	2.94
17-0337	11FZ-9000-ACS/SIL	115	4.93	4.68	4.44	3.94	3.45

TYPE 67 AC AND DC 4PDT RELAYS

- Full 3 Ampere Rating AC or DC
- Choice of Sockets—Standard or Printed Circuit

Rugged miniature 4PDT relay is available for either AC or DC operation. Similar to Type 62 (pg. 257) but with in-line rather than stacked contacts and choice of sockets for either standard solder terminals or printed circuit terminals. Contacts rated 3 amperes, for both AC and DC types. Sensitivity, 1.2 VA for AC types, 900 milliwatts for DC types. Temperature range, —4°F to +140° F. Comes complete with plastic dust cover, designed for stud mounting with 14-prong plug. ■U.L. Recog. 1/10 hp. Order type AD28 or AD29 socket (below). 1⅝x1⅞x⁵⁵⁄₆₄". Japan (see note **). 1¼ oz.



Socket

Stock No.	Mfr's Type and Coil Volts	Coil Ohms	EACH 1-9	10-49	50-74	75-99	100-249	250-Up
917-0861	67R4-12AC	43	5.50	5.00	4.75	4.50	4.00	3.50
917-0863	67R4-24AC	160	5.50	5.00	4.75	4.50	4.00	3.50
917-0867	67R4-115AC	3900	5.94	5.40	5.13	4.86	4.32	3.78
917-0860	67R4-6DC	40	4.84	4.40	4.18	3.96	3.52	3.08
917-0862	67R4-12DC	160	4.84	4.40	4.18	3.96	3.52	3.08
917-0864	67R4-24DC	650	4.84	4.40	4.18	3.96	3.52	3.08
917-0865	67R4-48DC	2600	5.06	4.60	4.37	4.14	3.68	3.22
917-0866	67R4-110DC	11k	6.16	5.10	4.85	4.59	4.08	3.57
917-0060	AD28Sdr.Term.Skt.		.66	.60	.57	.54	.48	.42
917-0062	AD29 P.C. Skt.		.66	.60	.57	.54	.48	.42

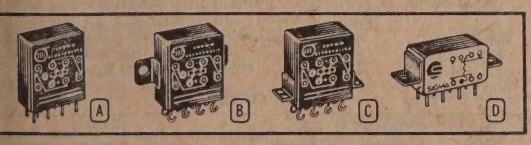
TYPE 59 SPDT SNAP-SWITCH DC RELAYS

Dependable snap action relay for commercial use where pace is limited. Snap-switch contact assembly provides positive operation whether input signal changes slowly r abruptly. Pin-hinge armature construction for me- anical life of 1 million oper. Contacts rated 2 A. Sens, 00 mW. Type 59A has dust cover, octal plug; 5⁄16" x 1½". 1½ oz. 59F open, screw mtg., 2⁹⁄₃₂x1⅛x1¾₆₄". U.L. Rec. C.S.A. 13 oz.**

**Designed and Made to Sigma Specs in Japan.

Stock No.	Mfr's Type and Coil Voltage	Coil Ohms	EACH 1-24	25-99	100-499	500-Up
917-0750	59A01D-6DC	120	4.60	3.90	3.51	2.73
917-0751	59A01D-12DC	465	4.60	3.90	3.51	2.83
917-0752	59A01D-24DC	1800	4.60	3.90	3.51	2.73
917-0753	59F1D-12DC	465	2.50	2.25	2.03	1.58
917-0754	59F1D-24DC	1800	2.50	2.25	2.03	1.58

MINIATURE AND SUBMINIATURE (HALF-SIZE) CRYSTAL CAN RELAYS



xceed MIL-R-5757D. Coil 26.5 VDC nominal except §12 VDC. Con- acts rated 2 A. Hermetically sealed. Excellent vibration and shock esistance. 10 terminals except †9, #8. Letter "R" in Type No. have older terminals, others pin. Temp. range: —65° C to +125° C.

eries 32 DPDT Latching. Stays latched, either position, until reset by everse current. *Dual coil. 0.8x.0.9x0.4". Wt., .65 oz.

eries 33 DPDT. High-reliability subminiature relay with 100 mW ickup power. Size, 0.8x0.9x0.4". Wt., .65 oz.

eries 35 DPDT. High-sensitivity relay for on-off switching. True rystal-can, all-welded. Size, 0.8x0.9x0.4". Wt., .7 oz

eries 36 DPDT. Long-life reliability in an all-welded, half-size sub- niniature relay. 36RJP same but govt. no. M5757/9-001. Size, .8x0.41x0.41". Wt., .35 oz.

SERIES 32 DPDT LATCHING (Max. Pickup 9 mA DC)

Stock No.	Mfr's Type and Coil Ohms	Fig.	EACH 1-24	25-49	50-74	75-99	100-249	250-Up
917-0465	32JD-1200-GD/SIL	A	28.60	27.17	25.74	22.89	20.02	18.59
917-0469	32RJPD-1200-GD/SIL	B*	28.60	27.17	25.74	22.88	20.02	18.59

SERIES 33 DPDT (Max. Pickup 9.2 mA DC)

917-0473	33J-1200-VG/SIL	A†	23.75	22.56	21.38	19.00	16.63	15.44
917-0475	33RJL-1200-VG/SIL	C#	23.75	22.56	21.38	19.00	16.63	15.44
917-0477	33RJP-1200-VG/SIL	B#	23.75	22.56	21.38	19.00	16.63	15.44

SERIES 35 DPDT (Max. Pickup 13.5 mA DC (‡6.5 mA) 8 term.)

917-0481	35JP2-1000-VG/SCN‡	B§	19.45	18.48	17.51	15.56	13.62	12.64
917-0484	35RJL-4000-VG/SCN	C	19.45	18.48	17.51	15.56	13.62	12.64
917-0487	35RJP2-4000-VG/SCN	B	19.45	18.48	17.51	15.56	13.62	12.64

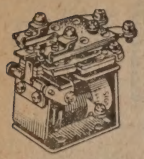
SERIES 36 DPDT HALF SIZE (Max. Pickup 13.5 mA DC 8 term.)

917-0492	36J-700-G/SMN	D/A	10.10	9.60	9.09	8.08	7.07	6.57
917-0495	36JP2-700-G/SMN	D/B	10.60	10.07	9.54	8.48	7.42	6.89
917-0498	36RJP12-98961	D/B	10.60	10.07	9.54	8.48	7.42	6.89

Recognized Under the Component Program of Underwriter's Laboratories, Inc.

Sigma Power, AC & DC Reed Relays and Switche

TYPE 55 AC/DC POWER RELAYS



Rugged and reliable open type relays for continuous heavy duty use. Available in DPDT, 3PDT and 4PDT types. Multiple switching of resistive loads up to 15 amperes at 230 VAC, or up to 10 amperes at 28 VDC. Handle up to 60-ampere inrush current without contact welding. Mechanical life expectance, at least 5 million operations. Temperature range, +14°F to +158°F. All types are screw mounted, with solder terminals. Size: Type 55F2 DPDT, 2 1/16x 2 1/16x2 15/64"; Type 55F3 3PDT, 2 1/16x1 15/16x1 15/16"; Type 55F4 4PDT, 2 55/64x2 3/32x2 11/32". Made in Japan to Sigma specifications. Avg. shpg. wt. 7 oz. Write for larger quantity prices.

Stock No.	Mfr's Type and Coil Volts	Coil Ohm	Action	EACH 1-24	25-49	50-74	75-99	100-249	250-Up
917-0703	55F2-115AC	635	DPDT	8.25	7.84	7.43	6.60	5.78	5.36
917-0701	55F2-24DC	327	DPDT	7.95	7.55	7.16	6.36	5.57	5.17
917-0707	55F3-115AC	635	3PDT	9.35	8.88	8.42	7.48	6.55	6.08
917-0705	55F3-24DC	327	3PDT	9.05	8.50	8.15	7.24	6.34	5.88
917-0711	55F4-115AC	635	4PDT	11.00	10.45	9.90	8.80	7.70	7.15
917-0709	55F4-12DC	80	4PDT	10.45	9.93	9.44	8.36	7.32	6.79
917-0710	55F4-24DC	327	4PDT	10.45	9.93	9.44	8.36	7.32	6.79

TYPE 22 MINIATURE HERMETICALLY SEALED DC RELAYS

Balanced armature construction. Resist 10 g to 300 Hz vibration, 100 g shock. Ideal for airborne and ground based military equipment. Non-polarized. Offers high 33% drop out of pickup current. Sensitivity: SPDT, 20 mW; DPDT, 40 mW. Silver contacts rated 2 A at 28 VDC or 120 VAC. —65°C to +125°C. 1 25/32x1x1". Wt., 3 oz.

SPDT ACTION—HOOK SOLDER TERMINALS

Stock No.	Mfr's Type and Coil Ohms	mA DC	EACH 1-24	25-49	50-74	75-99	100-Up
917-0400	22RJC-500-G/SIL	6.3	14.75	14.01	13.28	11.80	10.33
917-0402	22RJC-1000-G/SIL	4.5	14.75	14.01	13.28	11.80	10.33
917-0404	22RJC-2500-G/SIL	2.8	15.35	14.58	13.82	12.28	10.74
917-0406	22RJC-5000-G/SIL	2.0	15.85	15.06	14.27	12.68	11.10
917-0408	22RJC-8000-G/SIL	1.6	16.45	15.63	14.81	13.16	11.52

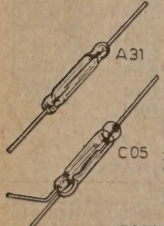
DPDT ACTION—HOOK SOLDER TERMINALS

917-0415	22RJCC-500-G/SIL	9.0	16.45	15.63	14.81	13.16	11.52
917-0417	22RJCC-1000-G/SIL	6.3	16.45	15.63	14.81	13.16	11.52
917-0419	22RJCC-2500-G/SIL	4.0	17.00	16.15	15.30	13.60	11.90
917-0421	22RJCC-5000-G/SIL	2.8	17.60	16.72	15.84	14.88	12.32
917-0423	22RJCC-8000-G/SIL	2.3	18.15	17.24	16.34	14.52	12.71

DPDT ACTION—9-PIN PLUG-IN TYPES

917-0390	22JNCC-2500-G/SIL	4.0	17.40	16.53	15.66	13.92	12.18
917-0392	22JNCC-5000-G/SIL	2.8	18.00	17.10	16.20	14.40	12.60
917-0395	22KNCC-1000-G/SIL	6.3	18.75	17.81	16.88	15.00	13.13
917-0398	22KNCC-5000-G/SIL	2.8	20.00	19.00	18.00	16.00	14.00
917-0399	22KNCC-8000-G/SIL	2.3	20.55	19.52	18.50	16.44	14.39

917-0099 AT155 Socket Assembly..... Each .45



SIGMA-GENERAL REED MAGNETIC REED SWITCHES

Magnetic Reed Form A and Form C switches for low-power electronic circuits. Feature high sensitivity, fast operation (1 ms max.) and resistance to shock (15g's up to 2000 Hz). Control and instrumentation, counting, position indicating, logic and limit switching. This is a true Form C, not magnetically biased. *Center gap, †Offset gap, §Resistive, except ‡reactive (derate depending on conditions).

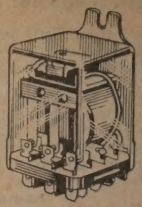
FORM A SPST—PULL-IN RANGE: 20-60 AT

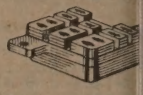
Stock No.	Mfr's Type	Size D.xL.	Load Amps max	Watts DC	VA AC	EACH 1-19	20-99	100-499	500-Up
917-0025	A14-003*	.100x.800	0.5	6	10	1.00	.82	.72	.62
917-0029	A14-007*	.100x.800	1.0	8	12	1.00	.82	.72	.62
917-0027	A14-007*	.100x.800	‡	‡	‡	1.00	.82	.72	.62
917-0032	A31-012†	.090x.560	0.5	6	10	1.10	.90	.79	.68
917-0036	A31-013†	.090x.560	1.0	8	12	1.10	.90	.79	.68
917-0034	A31-013†	.090x.560	‡	‡	‡	1.10	.90	.79	.68

FORM C SPDT—PULL-IN RANGE: 40-85 AT

917-0105	C05-058†	.125x.625	0.5	6	10	3.00	2.50	2.10	1.80
917-0109	C05-059†	.125x.625	0.75	10	15	3.00	2.50	2.10	1.80
917-0107	C05-059†	.125x.625	‡	‡	‡	3.00	2.50	2.10	1.80

GENERAL-PURPOSE AC AND DC RELAYS





For light to medium load switching. .187" terminals solder, quick-connect or plug into sockets. Elec. life: 1 million oper. at 28 VDC; 500,000 at 115 VAC. Mech. life: 10 million oper. 10A rated contacts, 1.2W nom. pwr. Temp. range: Min., —49°F; Max., AC 1 and 2 pole, +131°F; DC, +158°F. Order PC or solder term. sockets below. 68R1, SPDT; 68R2, DPDT; 68R3 and 68R34, 3PDT with flanged case. ■UL Recog. Made in Japan to Sigma specifications. Wt. 3 oz. Write for larger quantity prices.

AC TYPES

Stock No.	Mfr's Type	COIL DATA Nom. VAC	Ohms	Pickup mA. VAC	EACH 1-24	25-49	50-74	75-99	1
917-0885	68R1-12AC-SCO	12	21	10.2	3.35	3.18	3.02	2.68	2.
917-0892	68R1-115AC-SCO	115	2250	93	3.35	3.18	3.02	2.68	2.
917-0893	68R1-230AC-SCO	230	9110	196	3.65	3.47	3.29	2.92	2.
917-0895	68R2-6AC-SCO	6	6	5.1	4.10	3.90	3.69	3.28	2.
917-0897	68R2-12AC-SCO	12	21	10.2	4.10	3.90	3.69	3.28	2.
917-0899	68R2-24AC-SCO	24	75	20.4	4.10	3.90	3.69	3.28	2.
917-0903	68R2-115AC-SCO	115	2250	98	4.10	3.90	3.69	3.28	2.
917-0904	68R2-230AC-SCO	230	9110	196	4.50	4.28	4.05	3.60	3.
917-0906	68R3-6AC-SCO	6	4.5	5.1	4.60	4.37	4.14	3.68	3.
917-0907	68R3-12AC-SCO	12	19	10.2	4.60	4.37	4.14	3.68	3.
917-0909	68R3-24AC-SCO	24	74	20.4	4.60	4.37	4.14	3.68	3.
917-0913	68R3-115AC-SCO	115	2000	98	4.60	4.37	4.14	3.68	3.
917-0914	68R3-230AC-SCO	230	7500	196	5.05	4.80	4.55	4.04	3.

DC TYPES

Stock No.	Mfr's Type	COIL DATA Nom. VDC	Ohms	Pickup Max. VDC	EACH 1-24	25-49	50-74	75-99	10
917-0886	68R1-12DC-SCO	12	120	9	3.25	3.09	2.93	2.60	2.
917-0888	68R1-24DC-SCO	24	470	18	3.25	3.09	2.93	2.60	2.
917-0891	68R1-110DC-SCO	110	10,000	83	3.65	3.47	3.29	2.92	2.
917-0898	68R2-12DC-SCO	12	120	9	3.65	3.47	3.29	2.92	2.
917-0900	68R2-24DC-SCO	24	470	18	3.65	3.47	3.29	2.92	2.
917-0902	68R2-110DC-SCO	110	10,000	83	4.20	3.99	3.78	3.36	2.
917-0908	68R3-12DC-SCO	12	120	9	4.20	3.99	3.78	3.36	2.
917-0910	68R3-24DC-SCO	24	470	18	4.20	3.99	3.78	3.36	2.
917-0912	68R3-110DC-SCO	110	10K	83	4.60	4.37	4.14	3.68	3.
917-0072	AD40	Solder Terminal Socket			.75	.71	.68	.60	.
917-0085	AD51	PC Terminal Socket			.85	.81	.77	.68	.

AC AND DC TYPES

Flanged case for direct-chassis mounting.

917-0923	68R34-115AC-SCO	115 (AC)	2K	98	4.60	4.37	4.14	3.68	3.
917-0924	68R34-230AC-SCO	230 (AC)	7.5K	196	5.05	4.80	4.55	4.04	3.
917-0918	68R34-12DC-SCO	12	120	9	4.20	3.99	3.78	3.36	2.
917-0920	68R34-24DC-SCO	24	470	18	4.20	3.99	3.78	3.36	2.
917-0922	68R34-110DC-SCO	110	10K	83	4.60	4.37	4.14	3.68	3.

SIGMA-GENERAL REED MINIATURE REED RELAYS

300

400

Magnetically operated relays control low pow multi-circuits in minimum space. Standard P contacts. Contact rating: 0.5A. Low-level lif expectancy (resistive) more than 50 millio operations. Operate, bounce, release time 2 ms. 300 Series, plastic housing; 400 Serie metal housing. Last two digits in 300 Seri Type No. indicate coil voltage (DC). 400 Seri coil voltage 26.5VDC. Last three digits in 40 Type indicate MIL-R-5757/29- group. 2 oz.

300 SERIES

Stock No.	Mfr's Type	Coil Ohms	Action	EACH 1-9	10-24	25-Up
917-1402	301-24	1500	SPDT	4.65	4.19	3.72
917-1420	302-24	1500	DPDT	7.35	6.62	5.88
917-1445	310-12	280	SPST	3.50	3.15	2.80
917-1446	310-24	1500	SPST	3.50	3.15	2.80
917-1455	320-12	280	DPST	4.60	4.14	3.68
917-1456	320-24	1500	DPST	4.60	4.14	3.68

400 SERIES

917-1650	401-002	1450	SPDT	9.00	7.20	6.66
917-1655	402-005	925	DPDT	14.00	11.20	10.36
917-1660	410-001	2350	SPST	5.50	4.40	4.07
917-1665	420-003	925	DPST	7.20	5.76	5.33

■Recognized Under Component Program of Underwriter's Laboratories, Inc

Magnetic Reed Switches

HAMLIN INC

DRY AND MERCURY-WETTED REED SWITCHES

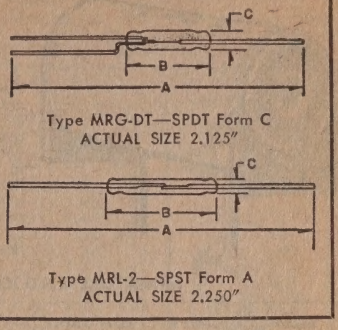
Ultra Compact and Highly Sensitive with Rapid Cycling Rate

Hermetically Sealed for Dependability

- Unaffected by Temperature or Pressure
- Ideal for A Wide Variety of Systems and Instrument Applications

Dry and mercury-wetted magnetic reed switches that are precision crafted for reliable operation under the most critical conditions. Offer excellent flexibility in a broad range of applications. Hermetically sealed for safe, dependable use in any atmosphere—even under explosive conditions. Unaffected by high or low temperature extremes or pressure. Offer long life. Compact size with high sensitivity and rapid cycling rate make these switches ideal for a wide variety of industrial uses.

Excellent for use in position indicators, counting instruments, limiting switches, flow meters, communications instruments and reed relays. Actuating time: 1 millisecond or less. Dry reed switches have life expectancy of 10 million operations; mercury wetted switches, 1 billion operations. Contacts: Form A (SPST-N.O.) or C (SPDT). May be actuated by permanent or electro magnets. Permanent magnets sold at right. See following chart for switch dimensions. Av. shpg. wt., 1 oz. each.



Type MRG-DT—SPDT Form C
ACTUAL SIZE 2.125"

Type MRL-2—SPST Form A
ACTUAL SIZE 2.250"

DIMENSION CHART FOR SWITCHES *Oval Envelope

Size Code	1	2	3	4	5	6	7	8	9	10	11
A) Overall L. Nom.	2.000	2.000	2.010	2.125	2.125	2.250	2.250	3.375	3.375	3.250	3.465
B) Glass L. Max.	.375	.500	.475	.560	.610	.800	.800	1.610	1.562	2.100	1.640
C) Glass Dia. Max.	.090	.070	.110x .072*	.092	.130	.090	.130	.195	.218	.218	.212

MAGNETS FOR SWITCHES BELOW

Stock No.	Mfr's Type	Size	EACH
807-0001	H-31-604	1/16x1/16x1/2"	.30
807-0002	H-32-605	3/16x3/16x1"	.35
807-0003	H-33-606	1/8x1/8x3/4"	.30
807-0004	H-34-607	1/4x1/4x1"	.40

MINIATURE MAGNETIC REED SWITCHES

Stock No.	Mfr's Type	Size Code	Form	Max. DC Contact Ratings, W.	Max. Amps	Max. DC Volts	Min. VDC Breakdown	Stock Ampere Turn Pull-in	Actuating Magnet	EACH 1-9	10-24	25-99	100-999	1000-4999	5000-Up
7-0023	MRH-2-185	7	A	10	.500	28	300	30±7.5	H-33	2.11	1.58	1.28	1.00	.75	.60
7-0030	MRR-2-185	7	A	10	.500	200	300	30±7.5	H-33	1.53	1.15	.83	.66	.50	.37
7-0029	MRL-2-186	7	A	10	.500	100	300	30±10	H-33	1.40	1.05	.70	.55	.35	.25
7-0024	MRH-15-185	7	A	10	.500	50	300	30±7.5	H-33	2.80	2.10	1.80	1.70	1.33	.90
7-0031	MRR-5-235	7	A	10	.500	500	1000	40±7.5	H-33	2.80	2.10	1.85	1.70	1.33	.90

SUB-MINIATURE MAGNETIC REED SWITCHES

7-0033	MSRH-2-185	6	A	10	.500	28	300	30±7.5	H-33	2.11	1.58	1.28	1.00	.75	.60
7-0037	MSRR-2-185	6	A	10	.500	200	300	30±7.5	H-33	1.53	1.15	.83	.66	.50	.35
7-0034	MSRL-2-186	6	A	10	.500	100	300	30±10	H-33	1.40	1.05	.70	.55	.35	.25

TINY MAGNETIC REED SWITCHES

7-0039	MTRR-2-185	4	A	10	.250	100	300	30±7.5	H-33	1.76	1.32	.95	.75	.69	.56
7-0026	MRH-DT-175	5	C	3	.250	28	250	27.5±7.5	H-33	6.99	5.25	4.50	4.25	3.33	2.25
7-0025	MRG-DT-175	5	C	3	.250	28	250	27.5±7.5	H-33	5.60	4.20	3.00	2.40	2.25	2.00

MICRO AND MINI MAGNETIC REED SWITCHES

7-0022	MMRR-2-185	1	A	3	.010	28	250	30±7.5	H-31	2.46	1.84	1.31	1.05	.95	.76
7-0020	MINI-2-115	2	A	3	.110	28	200	30±7.5	H-31	2.80	2.10	1.85	1.70	1.00	.60
7-0047	MINI-DT-125	3	C	1	.010	10	200	27.5±7.5	H-31	8.40	6.30	5.00	4.75	4.50	4.25

STANDARD MAGNETIC REED SWITCHES

7-0013	DRG-2-425	10	A	15	1.0	250	500	70±7.5	H-34	1.06	.79	.56	.45	.35	.30
7-0014	DRR-1-425	10	A	15	1.0	400	500	70±7.5	H-34	1.19	.89	.64	.51	.39	.31
7-0016	DRS-2-425	10	A	25	1.0	250	500	70±7.5	H-34	1.76	1.32	1.10	1.06	.83	.57
7-0017	DRS-5-425	10	A	50	3.0	500	1200	70±7.5	H-34	2.80	2.10	1.50	1.20	1.10	.90
7-0015	DRR-5-425	10	A	25	1.0	1000	1500	70±7.5	H-34	2.11	1.58	1.35	1.10	1.00	.70
7-0018	DRT-5-425	10	A	50	3.0	1000	1500	70±7.5	H-34	2.80	2.10	1.50	1.20	1.10	.90

COMPACT MAGNETIC REED SWITCHES

Stock No.	Mfr's Type	Size Code	Form	Max. DC Contact Ratings, W.	Max. Amps	Max. DC Volts	Min. VDC Breakdown	Stock Ampere Turn Pull-in	Actuating Magnet	EACH 1-9	10-24	25-99	100-999	1000-4999	5000-Up
7-0040	SRR-2-425	8	A	15	1.0	400	500	70±7.5	H-32	1.19	.89	.64	.51	.39	.31
7-0005	DRR-DT-445	9	C	3	.5	100	350	72.5±7.5	H-32	2.80	2.10	1.70	1.33	1.20	.90
7-0006	DRR-DTH-445	9	C	10	.5	250	1000	72.5±7.5	H-32	3.50	2.63	1.88	1.50	1.35	1.10
7-0007	DRT-DTH-445	9	C	20	1.5	500	1000	72.5±7.5	H-34	5.60	4.20	3.65	3.40	2.66	1.60

HIGH-VOLTAGE MAGNETIC REED SWITCHES

7-0008	DRVT-5-658	10	A	50	3.0	3500	5000	120±20	H-34	4.20	3.15	2.50	2.25	2.00	1.50
7-0009	DRVT-10-658	10	A	50	3.0	7500	10000	120±20	H-34	5.60	4.20	3.00	2.40	2.25	2.00
7-0010	DRVT-15-979	10	A	50	3.0	12500	15000	200 max.	H-34	1.12	8.40	7.25	6.80	5.32	4.20
7-0011	DRVT-20-979	10	A	50	3.0	17500	20000	200 max.	H-34	16.80	12.60	11.00	10.20	7.98	6.00
7-0012	DRVT-25-979	10	A	50	3.0	20000	25000	200 max.	H-34	22.43	16.80	14.50	13.60	10.40	8.00

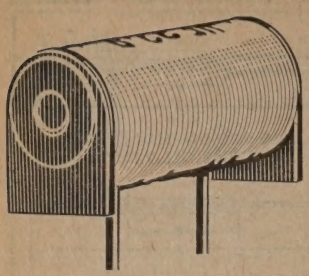
HIGH-CURRENT MAGNETIC REED SWITCHES

7-0045	DRAC-5-999	11	A	700	3.0	240	700	250 max.	H-34	7.00	5.25	4.60	4.10	3.60	3.10
7-0046	DRAC-6-999	11	A	100	3.0	110	3000	250 max.	H-34	7.00	5.25	4.60	4.10	3.60	3.10

MERCURY-WETTED MAGNETIC REED SWITCHES

7-0021	MRC-3-387	7	A	28	1.0	100	1000	65±15	H-33	5.60	4.20	3.00	2.90	2.50	1.75
7-0019	HRC-1-535	10	A	50	3.0	400	1000	80±7.5	H-34	2.80	2.10	1.50	1.20	1.00	.80

Reed Coils, T-Bar and Flatpack Relays



COTO-COIL, INC. REED COILS

- Design Your Own Coils
- Achieve New Flexibility in Reed Switching
- Eliminate the Need for Expensive Relays
- Get Maximum Performance

Now you can design your own reed relay and achieve maximum coil and switch performance at minimum cost. Eliminates the need for relays more sophisticated and costly than your circuit requires. Allows new flexibility in reed switching; gives you freedom of establishing your own electrical characteristics and mechanical layouts. Each reed coil is provided with easily inserted pins for mounting to PC boards—can also be mounted to chassis. See pages 248, 249 for Reed Switches.

Digits in manufacturer's type number indica DC voltage; example: UF-48P designates volts DC. Types UF-6P, UF-12P, UF-24P, U 32P, UF-48P, SF-6P, SF-12P, SF-24P, SF-32 SF-48P have 1-reed operation. Types UD-6 UD-12P, UD-24P, UD-32P, UD-48P, SD-6 SD-12P, SD-24P, SD-32P, SD-48P ha 2-reed operation. Types UT-6P, 12P, 24 32P, 48P have 4 to 5-reed operation. Typ SH4-6P, 12P, 24P, 32P, 48P have 4-reed ope tion. Order from tables below.

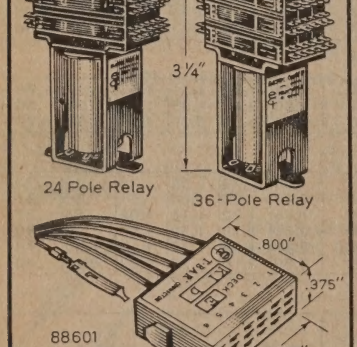
MINIATURE REED COILS

Stock No.	Mfr's Type	Coil Ohms ±10%	EACH 1-9	10-24	25-99	100-Up
759-6485	UF-6P	150	1.23	1.05	.93	.81
759-6486	UF-12P	600	1.33	1.13	1.00	.88
759-6487	UF-24P	2500	1.73	1.48	1.30	1.13
759-6488	UF-32P	4000	2.13	1.81	1.60	1.39
759-6489	UF-48P	8600	4.03	3.43	3.03	2.63
759-6480	UD-6P	86	1.38	1.28	1.08	.93
759-6481	UD-12P	350	1.48	1.38	1.13	.98
759-6482	UD-24P	1320	1.83	1.63	1.38	1.23
759-6483	UD-32P	2250	2.08	2.78	1.55	1.33
759-6484	UD-48P	5550	2.88	2.43	2.18	1.88
759-6490	UT-6P	85	1.31	1.13	1.10	.86
759-6491	UT-12P	340	1.15	1.15	1.03	.89
759-6492	UT-24P	1300	1.48	1.48	1.31	1.15
759-6493	UT-32P	2550	1.63	1.63	1.45	1.25
759-6494	UT-48P	5300	2.41	2.41	2.13	1.85

STANDARD REED COILS

Stock No.	Mfr's Type	Coil Ohms ±10%	EACH 1-9	10-24	25-99	100-Up
759-6455	SF-6P	113	1.53	1.30	1.15	1.0
759-6456	SF-12P	450	1.68	1.43	1.30	1.1
759-6457	SF-24P	1650	1.83	1.56	1.38	1.2
759-6458	SF-32P	2840	2.43	2.07	1.83	1.5
759-6459	SF-48P	5890	3.03	2.58	2.28	1.9
759-6450	SD-6P	90	1.73	1.48	1.31	1.1
759-6451	SD-12P	335	1.93	1.63	1.48	1.2
759-6452	SD-24P	1290	2.13	1.83	1.63	1.4
759-6453	SD-32P	2165	2.58	2.23	1.98	1.7
759-6454	SD-48P	5700	3.23	2.78	2.43	2.1
759-6460	SH4-6P	40	2.47	2.00	1.73	1.5
759-6461	SH4-12P	160	2.73	2.23	1.93	1.7
759-6462	SH4-24P	650	3.03	2.43	2.13	1.8
759-6463	SH4-32P	1090	3.23	2.63	2.33	1.9
759-6464	SH4-48P	2500	3.73	3.03	2.63	2.2

ELECTRONIC CONTROLS, INC. T-BAR SERIES 801 AND 401 RELAYS



Switches up to 48 circuits simultaneously. Contact rating: non-inductive; 150 watts, 3 A make/break, 500 W, 5 A carry. Contact Life: min. 20,000,000 cycles @ 100 mils to min. of 100,000 @ 3 A, 150 watts res. Gold-bonded fine silver contacts arranged in "C" combinations. Operate/release times le than 30 ms. Temp. range —55°C to +8 C. Terminals may be soldered or wires m be crimped to snap-on terminals (below) connection of STR size 22, 24, 26 wire. A relay wt., 10 oz. Av. connector wt., 2 oz.

Stock No.	Mfr's Type	Coil VDC	Coil Ohms	Coil Amps	Watts @Nom. Volts	Cont. Arr.	EACH 1-9	10-24	25-49	50-74	75-Up
774-0075	801-4C24	24	193.0	.124	2.98	4PDT	10.15	9.23	8.77	8.33	7.9
774-0081	801-8C24	24	193.0	.124	2.98	8PDT	14.53	13.21	12.55	11.92	11.3
774-0087	801-12C12	12	49.1	.244	2.96	12PDT	18.46	16.79	15.95	15.15	14.4
774-0088	801-12C24	24	193.0	.124	2.98	12PDT	16.78	15.26	14.50	13.77	13.1
774-0091	801-12C110	110	3963.0	.028	3.05	12PDT	16.78	15.26	14.50	13.77	13.1
774-0096	801-24C12	12	45.0	.267	3.19	24PDT	33.22	30.20	28.69	27.26	25.9
774-0097	801-24C24	24	174.0	.138	3.32	24PDT	30.18	27.44	26.07	24.76	23.6
774-0098	801-24C28	28	227.0	.123	3.44	24DPT	30.18	27.44	26.07	24.76	23.6
774-0100	801-24C110	110	3450.0	.032	3.54	24PDT	30.18	27.44	26.07	24.76	23.6
774-0105	801-36C12	12	28.0	.429	5.16	36PDT	44.74	40.68	38.65	36.71	34.9
774-0106	801-36C24	24	111.0	.216	5.15	36PDT	40.67	36.98	35.13	33.37	31.8
774-0107	801-36C28	28	150.0	.187	5.23	36PDT	40.67	36.98	35.13	33.37	31.8
774-0108	801-36C110	110	2355.0	.047	5.18	36PDT	40.67	36.98	35.13	33.37	31.8
774-0115	801-48C12	12	22	.545	6.54	48PDT	56.41	51.29	48.73	46.29	44.1
774-0116	801-48C24	24	94	.255	6.12	48PDT	56.41	51.29	48.73	46.29	44.1

T-BAR CONNECTOR. Package consists of one connector block with 20 easy-to-crimp contact 2 labels and 1 retaining clip provides quick, sure connections.

774-0195. 88601 T-Bar Connector. 1-99 ..... Each 1.35 100-Up ..... Each 1.2
774-0190. 8601-51 Crimping Tool. 59.7
774-0193. 8601-61 Extraction Tool. 9.0

Series 401 Tiny-T Relays

MINIATURE FLATPACK RELAYS

Multiple non-reed relay for fast switching of microamps to 3-amp loads. Low height (.360") and standard tin-plated .100x.100 grid terminal layout for printed-circuit applications. Ideal for use in computers, business machines, automatic testers, process controls, and many other applications. Actuator and contact assembly is enclosed in plastic housing. No sliding or bearing surfaces or pivots to wear out. Minimum mechanical life, over 100,000,000 operations. Contact life, 10,000,000 cycles at 100 milliwatts; 200,000 cycles at 150 watts, 3 amps resistive; 100,000 cycles at 3 amps, 115 VAC resistive. Contacts are gold bonded over fine silver. Type 401-4A is rated at 0.042 am Overall size, .360x2.30x.910". Shpg. wt. 1 oz.

SPECIFICATIONS

Coil Power at Nominal Voltage: Type 4A, 1 watt; **Contact Rating:** m to 500 VAC, resistive load 3 amps at 115 VAC; 5 amps 500 wat carry. **Contact Arrangement:** 4 poles, "2" single throw n.o.: **Conta Life:** 10,000,000 cycles at 100 mW: 200,000 cycles at 150 watts. 3 resistive; 100,000 cycles at 3 A. 115 VAC resistive; 10 milliohms less contact resistance. **Operating Time:** 8 ms. **Release Time:** 5 ms.

Stock No.	Mfr's Type	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-99	100-U
774-0050	401-4A12	12	144	5.88	5.35	5.08	4.83	3.86
774-0051	401-4A24	24	576	5.88	5.35	5.08	4.83	3.86
774-0053	401-4A48	48	2304	5.88	5.35	5.08	4.83	3.86

Dormeyer Solenoids

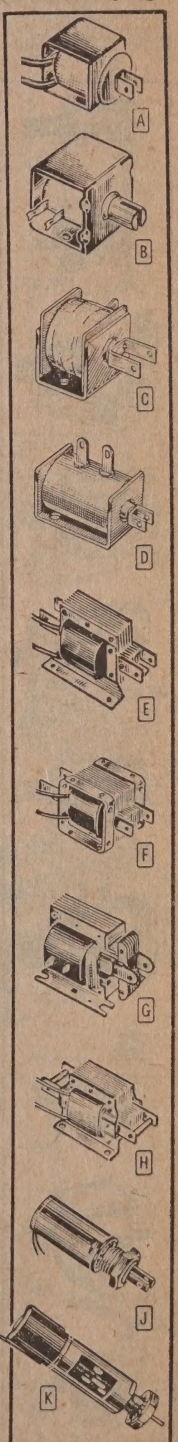
ures A and B are Super-D box-frame solenoids: quiet, cool operation; greater heat dissipation; high seating pull; anti-residual ing; phenolic bobbin; high temperature rating. Figures C and D Super-U folded-frame light-duty solenoids for use where quiet ting pull is not vital. Figures E and F are C-1 general-purpose noids: zinc-dichromate coating; moisture-resistant or moisture- of coils; high temperature rating. Fig. G is Super-T laminated solenoid: zinc-dichromate coating; bakelite bobbin; stainless-steel anti-residual spring. Figure H is C-1 machine-tool laminated solenoid for heavy-duty service; zinc-dichromate coating. **Figure J** types are compact, low-cost tubulars. simplified stud mount with anti-turn feature; low-residual force: stainless-steel plunger cavity; friction reducing coating on plungers; **Fig. K,** push-type version of Fig. J, with built-in return-spring.

TYPES (Specify Mfr's Type No., Volts, and Duty) *Intermittent. †Continuous. §Push-Pull. Av. shpg. wt., 1½ lbs.

Stock No.	Mfr's Type	Fig.	V	Ohms	A	Max. Stroke (In.)	Max. Lift (Oz.)	HxWxD	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
9-6210	B18-507-A-3	A	*115	964	.07	¼	19	¾x¾x4⁹⁄₆₄"	3.06	2.86	2.29	1.91	1.45	1.22
9-6200	B18-7-A-3	A	†115	1500	.04	¼	13	¾x¾x4⁹⁄₆₄"	3.06	2.86	2.29	1.91	1.45	1.22
9-6219	B20-501-A-1	B	*115	338	.12	½	32	1⁵⁄₁₆x1¹³⁄₁₆x1⁹⁄₆₄"	3.31	3.12	2.49	2.09	1.58	1.32
9-6216	B20-1-A-1	B	†115	580	.03	½	13	1⁵⁄₁₆x1¹³⁄₁₆x1⁹⁄₆₄"	3.31	3.12	2.49	2.09	1.58	1.32
9-6222	B21-1-A-1	B	†115	234	.10	⅝	32	1⁵⁄₁₆x1⁵⁄₁₆x1¹³⁄₆₄"	3.61	3.38	2.72	2.27	1.71	1.45
9-6229	B22-1-A-1	B	†115	119	.12	1	29	1¹⁵⁄₃₂x1⁵⁄₁₆x1³⁹⁄₆₄"	4.95	4.64	3.73	3.10	2.36	1.98
9-6233	B24-1-A-1	B	†115	173	.11	1¼	16	1⁵⁄₁₆x1⁵⁄₁₆x2"	4.68	4.40	3.50	2.92	2.24	1.87
9-6267	C9-519-A-14	C	*115	74	.37	½	80	1¹³⁄₃₂x1 ⅜x1¹⁄₁₆"	2.70	2.39	2.02	1.69	1.30	1.13
9-6265	C9-19-A-14	C	†115	172	.13	½	50	1¹³⁄₃₂x1 ⅜x1¹⁄₁₆"	2.75	2.40	2.05	1.72	1.32	1.15
9-6270	C15-519-A-14	C	*115	220	.18	½	55	1x1¹⁄₁₆x1⁹⁄₆₄"	2.37	2.07	1.77	1.48	1.14	.99
9-6337	388-1	C	†115	113	.245	½	72	1¹³⁄₃₂x1 ⅜x1²⁷⁄₃₂"	2.75	2.40	2.05	1.72	1.32	1.15
9-6338	389-1	C	*115	79	.360	½	80	1¹³⁄₃₂x1 ⅜x1²⁷⁄₃₂"	2.70	2.39	2.02	1.69	1.30	1.13
9-6341	430-1	D	†115	500	.083	½	16	⅞x¾x1 ⅝"	2.33	2.03	1.73	1.45	1.11	.94
9-6342	431-1	D	*115	291	.174	½	35	⅞x¾x1 ⅝"	2.27	2.00	1.71	1.42	1.09	.95
9-6315	1-1	E	*115	21	.55	1	144	2³⁄₃₂x1²⁵⁄₃₂x2½"	6.29	5.89	4.72	3.95	2.99	2.52
9-6318	6-1	E	†115	51	.23	1	64	2³⁄₃₂x1²⁵⁄₃₂x2½"	6.29	5.89	4.72	3.95	2.99	2.52
9-6322	11-1	E	*115	1.7	2.7	1½	800	3¹⁄₁₆x2¼x3⅜"	11.24	10.54	8.42	7.03	5.34	4.49
9-6321	10-1	E	†115	6.4	.63	1½	288	3¹⁄₁₆x2¼x3⅜"	11.24	10.54	8.42	7.03	5.34	4.49
9-6347	447-1	E	*115	1	4.2	2	800	3¹⁄₁₆x2⅝x3⅜"	13.47	12.63	10.09	8.40	6.42	5.39
9-6333	158-1	E	†115	3.54	.8	2	256	3¹⁄₁₆x2⅝x3⅜"	13.47	12.63	10.09	8.40	6.42	5.39
9-6326	§16-1	E	*115	23	.56	1	112	2³⁄₃₂x1²⁵⁄₃₂x2½"	7.41	6.96	5.55	4.65	3.54	2.97
9-6324	§14-1	E	†115	56	.21	1	96	2³⁄₃₂x1²⁵⁄₃₂x2½"	7.41	6.96	5.55	4.65	3.54	2.97
9-6332	§149-1	F	*115	1.94	2.9	2	768	3¼x2¹¹⁄₁₆x3¼"	16.89	15.84	12.67	10.57	8.01	6.76
9-6329	§45-1	F	†115	7.1	.68	2	320	3¼x2¹¹⁄₁₆x3¼"	16.89	15.84	12.67	10.57	8.01	6.76
9-6346	§446-1	F	*115	1.07	3.8	2	608	3¼x3¹⁄₁₆x3¼"	19.92	18.67	14.95	12.45	9.49	7.96
9-6335	§229-1	F	†115	3.95	1.42	2	224	3¼x3¹⁄₁₆x3¼"	19.92	18.67	14.95	12.45	9.49	7.96
9-6351	1000-M-1	G	†115	88	13	¾	80	1⁷⁄₁₆x1⁷⁄₁₆x2¼"	5.15	4.81	3.86	3.22	2.57	2.17
9-6355	1500-M-1	G	*115	57.2	.38	¾	112	1⁷⁄₁₆x1⁷⁄₁₆x2¼"	5.15	4.81	3.86	3.22	2.57	2.17
9-6353	1001-M-1	G	†220	35.4	.065	¾	80	1⁷⁄₁₆x1⁷⁄₁₆x2¼"	5.34	4.99	4.00	3.34	2.66	2.24
9-6357	2005-M-1	G	†115	20.5	.41	1¹⁄₁₆	176	2¹⁄₁₆x1¹³⁄₁₆x3"	6.49	6.14	4.95	4.08	3.25	2.76
9-6362	2255-M-1	G	*115	18.3	.54	1¹⁄₁₆	192	2¹⁄₁₆x1¹³⁄₁₆x3"	6.31	6.00	4.81	3.94	3.12	2.63
9-6359	2006-M-1	G	†220	81.6	.20	1¹⁄₁₆	176	2¹⁄₁₆x1¹³⁄₁₆x3"	6.68	6.31	5.12	4.19	3.34	2.84
9-6364	2536-M-1	G	†115	14.9	.45	1¹⁄₁₆	256	2¹⁄₁₆x2¹⁄₁₆x3"	7.87	7.35	5.88	4.93	3.91	3.28
9-6367	2786-M-1	G	*115	11.7	.77	1¹⁄₁₆	392	2¹⁄₁₆x2¹⁄₁₆x3"	7.38	6.89	5.52	4.65	3.69	3.12
9-6370	3000-M-1	G	†115	6.2	.60	1⅜	352	2¹⁵⁄₁₆x2⅜x3¹³⁄₁₆"	9.86	9.23	7.42	6.22	4.94	4.20
9-6374	3500-M-1	G	*115	4.8	1.15	1⅜	416	2¹⁵⁄₁₆x2⅜x3¹³⁄₁₆"	9.17	8.55	6.80	5.76	4.56	3.87
9-6371	3001-M-1	G	†220	26.1	.30	1⅜	352	2¹⁵⁄₁₆x2⅜x3¹³⁄₁₆"	10.06	9.42	7.58	6.33	5.02	4.27
9-6380	§7110-2A	H	*110	14.9	.85	1³⁄₃₂	208	2³⁄₃₂x2³⁄₁₆x4³⁄₁₆"	12.10	11.33	9.08	7.58	5.75	4.84

TYPES (Specify Mfr's Type No., Volts, and Duty) *Intermittent. †Continuous. ‡Pulse. Av. shpg. wt., 1½ lbs.

9-6213	B18-760-A-3	A	*12	24.2	.50	¼	14	¾x¾x5⁹⁄₆₄"	3.06	2.86	2.29	1.91	1.45	1.22
9-6205	B18-259-A-3	B	‡24	119	.2	¼	11	¾x¾x5⁹⁄₆₄"	3.06	2.86	2.29	1.91	1.45	1.22
9-6224	B21-754-A-1	B	*12	7	1.7	⅝	72	1⁵⁄₁₆x1⁵⁄₁₆x1¹³⁄₆₄"	3.61	3.38	2.72	2.27	1.71	1.45
9-6231	B22-754-A-1	B	*12	5.3	2.3	1	144	1¹⁵⁄₃₂x1⁵⁄₁₆x1³⁹⁄₆₄"	4.95	4.64	3.73	3.10	2.36	1.98
9-6239	B24-255-A-1	B	†6	4	1.5	1¼	60	1⁵⁄₁₆x1⁵⁄₁₆x2"	4.68	4.40	3.50	2.92	2.24	1.87
9-6247	B24-755-A-1	B	*6	1.6	3.8	1¼	96	1⁵⁄₁₆x1⁵⁄₁₆x2"	4.68	4.40	3.50	2.92	2.24	1.87
9-6245	B24-754-A-1	B	*12	6.3	1.9	1¼	96	1⁵⁄₁₆x1⁵⁄₁₆x2"	4.68	4.40	3.50	2.92	2.24	1.87
9-6237	B24-253-A-1	B	†24	60	.4	1¼	60	1⁵⁄₁₆x1⁵⁄₁₆x2"	4.68	4.40	3.50	2.92	2.24	1.87
9-6243	B24-753-A-1	B	*24	25.4	.95	1¼	96	1⁵⁄₁₆x1⁵⁄₁₆x2"	4.68	4.40	3.50	2.92	2.24	1.87
9-6235	B24-251-A-1	B	†115	1348	.09	1¼	60	1⁵⁄₁₆x1⁵⁄₁₆x2"	4.68	4.40	3.50	2.92	2.24	1.87
9-6252	B25-754-A-1	B	*12	5.7	2.1	2	104	1¹⁵⁄₃₂x1⁵⁄₁₆x2½"	6.75	6.34	5.08	4.23	3.21	2.71
9-6259	C8-772-A-14	C	*12	14.8	.81	½	26	1³⁄₁₆x¾x1⅛"	2.08	1.91	1.56	1.30	1.00	.87
9-6257	C8-271-A-14	C	‡24	126	.19	½	13	1³⁄₁₆x¾x1⅛"	2.15	1.89	1.63	1.37	1.04	.90
9-6255	C8-269-A-14	C	†115	2400	.05	½	13	1³⁄₁₆x¾x1⅛"	2.22	1.94	1.67	1.39	1.07	.93
9-6262	C8-769-A-14	C	*115	1500	.08	½	26	1³⁄₁₆x¾x1⅛"	2.11	1.84	1.58	1.32	1.01	.88
								TUBULAR AND PUSH TYPES						
9-6275	P2-1L	J	†12	39	.33	¼	11	1x½" dia.	4.89	4.31	3.70	3.10	2.37	2.09
9-6276	P2-2L	J	‡24	167.5	.15	¼	11	1x½" dia.	5.03	4.44	3.81	3.18	2.43	2.15
9-6279	P2-101L	J	*12	30.5	.42	¼	15	1x½" dia.	4.89	4.31	3.70	3.10	2.37	2.09
9-6281	P2-201L	J	†12	6.85	1.85	⅝	24	1x½" dia.	4.89	4.31	3.70	3.10	2.37	2.09
9-6282	P2-202L	J	‡24	30.5	.83	⅝	24	1x½" dia.	5.03	4.44	3.81	3.18	2.43	2.15
9-6285	P4-1L	J	†12	23.25	.55	½	45	1½x¾" dia.	5.83	5.14	4.41	3.69	2.82	2.48
9-6286	P4-2L	J	‡24	99	.26	½	45	1½x¾" dia.	5.95	5.25	4.51	3.77	2.88	2.55
9-6289	P4-101L	J	*12	15.25	.83	⅝	55	1½x¾" dia.	5.83	5.14	4.41	3.69	2.82	2.48
9-6290	P4-202L	J	‡24	15.25	1.7	⅝	70	1½x¾" dia.	5.95	5.25	4.51	3.77	2.88	2.55
9-6292	P6-1L	J	†12	19.5	.65	⅝	100	2x1" dia.	7.00	6.17	5.29	4.42	3.38	2.99
9-6293	P6-2L	J	‡24	82	.31	⅝	100	2x1" dia.	7.12	6.28	5.39	4.51	3.44	3.04
9-6296	P6-101L	J	*12	8.4	1.5	⅝	125	2x1" dia.	7.00	6.17	5.29	4.42	3.38	2.99
9-6297	P6-202L	J	‡24	14.25	1.8	⅝	150	2x1" dia.	7.12	6.28	5.39	4.51	3.44	3.04
9-6300	P8-1L	K	†12	39	.33	¼	6	2x½" dia.	6.34	5.58	4.78	4.00	3.03	2.67
9-6301	P8-2L	K	‡24	167.5	.15	¼	6	2x½" dia.	6.52	5.74	4.93	4.10	3.12	2.75
9-6304	P8-101L	K	*12	30.5	.42	¼	11	2x½" dia.	6.34	5.58	4.78	4.00	3.03	2.67
9-6305	P8-201L	K	†12	6.9	1.85	¼	20	2x½" dia.	6.34	5.58	4.78	4.00	3.03	2.67
9-6306	P8-202L	K	‡24	30.5	.83	¼	20	2x½" dia.	6.52	5.74	4.93	4.10	3.12	2.75
9-6308	P10-1L	K	†12	23.3	.55	¼	40	2.6x¾" dia.	7.55	6.66	5.69	4.76	3.62	3.19
9-6309	P10-2L	K	‡24	101.5	.26	¼	40	2.6x¾" dia.	7.73	6.80	5.84	4.86	3.71	3.26
9-6311	P10-101L	K	*12	15.3	.83	¼	48	2.6x¾" dia.	7.55	6.66	5.69	4.76	3.62	3.19



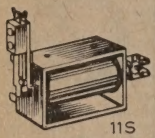
Guardian Solenoids and Solenoid Switches

INDUSTRIAL AC AND DC SOLENOIDS AND NEW PUSH-TYPE

Solenoids and solenoid switches available for AC or DC; intermittent or continuous duty. Popular box-frame solenoids 11 and 28 now available as Push types under numbers 11P and 28P for either AC or DC. Laminated solenoids 16 and 18 are for AC only and are available as Push types under numbers 16P and 18P. For all push types the lengths of the push rods are equal to the maximum stroke length specified. 11P and 28P are approx. 20% less power than listed. Intermittent-duty coils should not be energized for more than 5 consecutive minutes or be permitted to rise more than 85° above 25° C ambient without time for cooling between cycles. Continuous-duty types will not have a temperature rise of more than 85° C at rated voltage and ambient. **Solenoid switches** (suffix Type No.) have SPDT molded switch rated 10 A at 115 VAC switching without addition of a relay in circuit. Intermittent solenoid switch gives continuous duty with external resistor. HD dicates heavy-duty. *Intermittent. †Continuous.

1A1

2, 4, 11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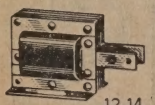
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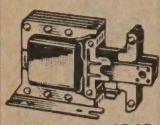
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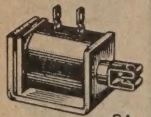
22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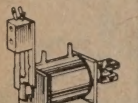
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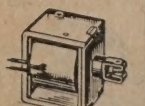

28

28S

AC TYPES (SPECIFY TYPE NO., VOLTS AND DUTY) *INTERMITTENT †CONTINUOUS

Stock No.	Mfr's Type	Volts	Ohms	Stroke and Lift, Ounces @ Inches Min.	Stroke and Lift, Ounces @ Inches Max.	Size, Inches (HxWxL)	Shpg. Wt., Oz.	EACH 1-9	10-24	25-49	50-99	100-249
802-1003	1A1*	115	300	8 @ 1/8"	2 @ 1/2"	1 1/16x1 5/16x1 3/4	4 1/2	4.33	3.47	3.12	2.95	2.43
802-1000	1A1†	115	675	3 @ 1/8"	.5 @ 3/8"	1 1/16x1 5/16x1 3/4	4 1/2	4.33	3.47	3.12	2.95	2.43
802-1009	2*	115	60	33 @ 1/8"	4.5 @ 7/8"	1 5/8x1 7/16x1 9/16	10	5.06	4.05	3.65	3.44	2.84
802-1006	2†	115	166	10 @ 1/8"	1.5 @ 7/8"	1 5/8x1 7/16x1 9/16	10	5.06	4.05	3.65	3.44	2.84
802-1018	2HD*	115	36	38 @ 1/8"	16 @ 3/4"	1 1/16x1 1/16x1 13/16	13	11.91	9.53	8.58	8.10	6.67
802-1014	2HD†	115	113	17 @ 1/8"	4 @ 3/4"	1 1/16x1 7/16x1 13/16	13	11.91	9.53	8.58	8.10	6.67
802-1037	4*	115	37	23 @ 1/8"	22 @ 1"	1 5/8x1 7/16x2	14 1/2	5.77	4.62	4.16	3.93	3.23
802-1032	4†	115	133	8 @ 1/8"	6 @ 1"	1 5/8x1 7/16x2	14 1/2	5.77	4.62	4.16	3.93	3.23
802-1066	11*	24	3.5	25 @ 1/8"	6 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.33	3.47	3.12	2.95	2.43
802-1057	11†	24	8	12 @ 1/8"	1 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.33	3.47	3.12	2.95	2.43
802-1077	11S*	115	85	25 @ 1/8"	6 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	5.70	4.56	4.10	3.88	3.65
802-1070	11*	115	85	25 @ 1/8"	6 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.33	3.47	3.12	2.95	2.43
802-1061	11†	115	200	12 @ 1/8"	1 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.33	3.47	3.12	2.95	2.43
802-1071	11P*	24	3.5	25 @ 1/8"	6 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.96	3.97	3.62	3.45	2.93
802-1062	11P†	24	8	12 @ 1/8"	1 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.96	3.97	3.62	3.45	2.93
802-1072	11P*	120	85	25 @ 1/8"	6 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.96	3.97	3.62	3.45	2.93
802-1065	11*P	120	200	12 @ 1/8"	1 @ 1"	1 3/16x1 27/32x1 5/16	7 1/2	4.96	3.97	3.62	3.45	2.93
802-1082	12*	115	100	32 @ 1/8"	4 @ 1"	1 7/16x1 3/16x1 5/8	6	5.70	4.56	4.10	3.88	3.65
802-1080	12 †	115	150	22 @ 1/8"	6 @ 3/4"	1 7/16x1 3/16x1 5/8	6	6.13	4.91	4.42	4.16	3.44
802-1087	14*	115	11	110 @ 1/8"	50 @ 1 1/2"	2 1/16x1 15/16x2 7/16	19	6.13	4.91	4.42	4.16	3.44
802-1085	14†	115	18	60 @ 1/8"	35 @ 1 1/2"	2 1/16x1 15/16x2 7/16	19	8.30	6.64	5.98	5.64	4.65
802-1094	16*	115	41	90 @ 1/8"	30 @ 3/4"	1 7/16x1 1/4x1 5/8	7 1/2	8.30	6.64	5.98	5.64	4.65
802-1090	16†	115	85	50 @ 1/8"	10 @ 3/4"	1 7/16x1 1/4x1 5/8	7 1/2	5.06	4.05	3.65	3.44	2.84
802-1096	16P*	120	41	90 @ 1/8"	30 @ 3/4"	1 7/16x1 1/4x1 5/8	7 1/2	5.68	4.55	4.15	3.92	3.34
802-1097	16P†	120	85	50 @ 1/8"	10 @ 3/4"	1 7/16x1 1/4x1 5/8	7 1/2	5.68	4.55	4.15	3.92	3.34
802-1092	16†	230	350	50 @ 1/8"	10 @ 3/4"	1 7/16x1 1/4x1 5/8	7 1/2	5.41	4.33	3.90	3.68	3.03
802-1104	18*	115	8.8	280 @ 1/8"	80 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	6.86	5.49	4.94	4.67	3.84
802-1100	18†	115	19.7	145 @ 1/8"	40 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	6.86	5.49	4.94	4.67	3.84
802-1106	18*	230	45	280 @ 1/8"	80 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	7.47	5.98	5.20	4.91	4.05
802-1102	18†	230	78	145 @ 1/8"	40 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	7.47	5.98	5.20	4.91	4.05
802-1107	18P*	120	8.8	280 @ 1/8"	80 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	7.48	5.99	5.54	5.17	4.34
802-1108	18P†	120	19.7	145 @ 1/8"	40 @ 1"	2 1/16x1 13/16x2 1/2	16 1/2	7.48	5.99	5.54	5.17	4.34
802-1130	24†	115	500	10 @ 1/16"	2 @ 5/8"	1 x27/32x1 1/4	3	4.68	3.75	3.38	3.19	3.00
802-1140	24S†	115	500	10 1/2 @ 1/16"	2 @ 5/8"	1 x27/32x1 1/4	3	6.06	4.85	4.36	4.12	3.87
802-1165	28*	115	220	35 @ 1/16"	5 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.68	3.75	3.38	3.19	3.00
802-1156	28†	115	400	20 @ 1/16"	2.5 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.68	3.75	3.38	3.19	3.00
802-1142	28P*	24	7.5	35 @ 1/16"	5 @ 1/2"	1 1/8x1 5/16x1 3/16	3 1/2	4.96	3.97	3.62	3.45	2.93
802-1143	28P†	24	17.4	20 @ 1/16"	2.5 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.96	3.97	3.62	3.45	2.93
802-1144	28P*	120	220	35 @ 1/16"	5 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	5.31	4.25	3.88	3.69	3.50
802-1145	28P†	120	400	20 @ 1/16"	2.5 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	5.31	4.25	3.88	3.69	3.50

DC TYPES (SPECIFY TYPE NO., VOLTS AND DUTY) *INTERMITTENT †CONTINUOUS

Stock No.	Mfr's Type	Volts	Ohms	Stroke and Lift, Ounces @ Inches Min.	Stroke and Lift, Ounces @ Inches Max.	Size, Inches (HxWxL)	Shpg. Wt., Oz.	EACH 1-9	10-24	25-49	50-99	100-249
802-1016	2HD*	24	20	100 @ 1/8"	5 @ 3/4"	1 1/16x1 7/16x1 25/32	13	12.27	9.82	8.84	8.35	6.87
802-1012	2HD†	24	64	50 @ 1/8"	1 @ 5/8"	1 1/16x1 1/16x1 25/32	13	12.27	9.82	8.84	8.35	6.87
802-1035	4*	24	15	110 @ 1/8"	4 @ 1"	1 5/8x1 7/16x2 1/16	14 1/2	5.77	4.62	4.16	3.93	3.23
802-1030	4†	24	54	55 @ 1/8"	2.5 @ 7/8"	1 5/8x1 7/16x2 1/16	14 1/2	5.77	4.62	4.16	3.93	3.23
802-1039	4*	115	346	110 @ 1/8"	4 @ 1"	1 5/8x1 7/16x2 1/16	14 1/2	6.13	4.91	4.42	4.17	3.44
802-1047	4HD*	24	15	156 @ 1/8"	21 @ 3/4"	1 5/8x1 7/16x2 3/16	15	8.81	7.05	6.35	5.99	4.94
802-1042	4HD†	24	50	70 @ 1/8"	1 @ 3/4"	1 5/8x1 7/16x2 3/16	15	8.81	7.05	6.35	5.99	4.94
802-1064	11*	6	2	34 @ 1/8"	2 @ 7/8"	1 3/16x1 5/16x1 7/8	7 1/2	8.81	3.47	3.12	2.95	2.43
802-1055	11†	6	4.5	25 @ 1/8"	1 @ 7/8"	1 3/16x1 27/32x1 5/16	7 1/2	4.33	3.47	3.12	2.95	2.43
802-1068	11*	24	32	34 @ 1/8"	2 @ 7/8"	1 3/16x1 27/32x1 5/16	7 1/2	4.33	3.47	3.12	2.95	2.43
802-1059	11†	24	72	25 @ 1/8"	1 @ 7/8"	1 3/16x1 27/32x1 5/16	7 1/2	4.33	3.47	3.12	2.95	2.43
802-1074	11P*	24	32	34 @ 1/8"	2 @ 7/8"	1 3/16x1 5/16x1 7/8	7 1/2	4.96	3.97	3.62	3.45	2.93
802-1063	11P†	24	72	25 @ 1/8"	1 @ 7/8"	1 3/16x1 5/16x1 7/8	7 1/2	4.96	3.97	3.62	3.45	2.93
802-1073	11S†	24	72	25 @ 1/8"	2 @ 3/4"	1 3/16x1 27/32x1 5/16	7 1/2	4.33	4.56	4.10	3.88	3.65
802-1115	22*	6	4	24 @ 1/16"	1 @ 3/8"	3/4x3/4x1 1/4	2 1/2	5.70	3.23	2.91	2.75	2.26
802-1111	22†	6	9	13 @ 1/16"	.5 @ 3/8"	3/4x3/4x1 1/4	2 1/2	4.03	3.23	2.91	2.75	2.26
802-1117	22*	24	60	24 @ 1/16"	1 @ 3/8"	3/4x3/4x1 1/4	2 1/2	4.03	3.23	2.91	2.75	2.26
802-1113	22†	24	144	13 @ 1/16"	.5 @ 3/8"	3/4x3/4x1 1/4	2 1/2	4.03	3.23	2.91	2.75	2.26
802-1159	28*	6	3.3	35 @ 1/16"	2 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.03	3.23	2.91	2.75	2.26
802-1161	28*	12	13	35 @ 1/16"	2 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.03	3.23	2.91	2.75	2.26
802-1150	28†	12	27	24 @ 1/16"	1 @ 3/8"	1 3/16x1 5/16x1 1/8	3 1/2	4.03	3.23	2.91	2.75	2.26
802-1163	28*	24	50	35 @ 1/16"	2 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.03	3.23	2.91	2.75	2.26
802-1154	28†	24	104	24 @ 1/16"	1 @ 3/8"	1 3/16x1 5/16x1 1/8	3 1/2	4.03	4.33	2.91	2.75	2.26
802-1143	28P*	12	13	35 @ 1/16"	2 @ 1/2"	1 3/16x1 5/16x1 1/8	3 1/2	4.96	3.97	3.62	3.45	2.93
802-1147	28P†	12	27	24 @ 1/16"	1 @ 3/8"	1 3/16x1 5/16x1 1/2	3 1/2	4.66	3.73	3.41	3.25	2.76
802-1148	28P*	24	50	35 @ 1/16"	2 @ 1/2"	1 3/16x1 5/16x1 1/2	3 1/2	4.66	3.73	3.41	3.25	2.76
802-1149	28P†	24	104	24 @ 1/16"	1 @ 3/8"	1 3/16x1 5/16x1 1/2	3 1/2	4.66	3.73	3.41	3.25	2.76
802-1170	28S*	24	50	35 @ 1/16"	2 @ 1/2"	2 1/4x1 5/16x1 9/16	3 1/2	5.41	4.33	3.89	3.63	3.46
802-1168	28S†	24	104	24 @ 1/16"	1 @ 3/8"	2 1/4x1 5/16x1 9/16	3 1/2	5.41	4.33	3.89	3.63	3.46

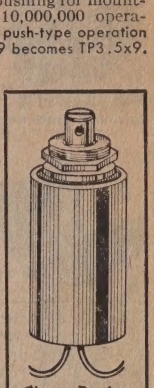
Call Your Nearest Allied Electronics Facility for Quick, Friendly Servi

Guardian Solenoids, Step, Latching Relays

24 VDC TUBULAR TYPE SOLENOIDS

ged and reliable tubular type solenoids for 24 VDC continuous ntermittent duty, with pull-type operation that lifts up to 11 Intermittent duty coils should not be energized for more than 5 secutive minutes or permitted to rise more than 85°C above C ambient temperature without time for cooling between rations. Continuous duty types will not have temperature rise of more than 85°C above 25°C ambient at rated voltage. Clean design permits side-by-side mounting. Threaded bushing for mounting in hole; nut furnished. Life at rated load, 10,000,000 operations minimum. Types T3, T4, and T6 available with push-type operation on Special Order. Specify P after T: Example, T3.5x9 becomes TP3.5x9. Write for 500-999 prices.

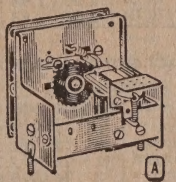
Stock No.	Mfr's Type	Duty	Ohms	Stroke and Lift Ounces @ Inches Min.	Stroke and Lift Ounces @ Inches Max.	Size L. x Dia.	Shpg. Wt., Oz.	EACH 1-24	25-49	50-99	100-249	250-Up
2-0552	T3.5X9	Int.	58	11 @ 1/32	.5 @ 1/2	1 1/8x7/16"	2	3.10	2.79	2.64	2.48	2.17
2-0550	T3.5X9	Cont.	295	8 @ 1/32	.25 @ 5/16	1 1/8x7/16"	2	3.20	2.88	2.72	2.57	2.24
2-0556	T4X7	Int.	82	12 @ 1/32	.5 @ 1/4	7/8x1/2"	7	4.20	3.78	3.57	3.36	2.94
2-0554	T4X7	Cont.	240	4 @ 1/32	.25 @ 5/32	7/8x1/2"	7	4.30	3.87	3.65	3.44	3.01
2-0560	T4X12	Int.	48	15 @ 1/32	.5 @ 5/8	1 1/2x1/2"	9	4.50	4.05	3.83	3.60	3.15
2-0558	T4X12	Cont.	220	6 @ 1/32	.25 @ 5/16	1 1/2x1/2"	9	4.60	4.14	3.91	3.68	3.22
2-0564	T4X16	Int.	29	17 @ 1/32	.5 @ 13/16	2x1/2"	15	4.80	4.32	4.08	3.84	3.36
2-0562	T4X16	Cont.	145	10 @ 1/32	.5 @ 7/8	2x1/2"	15	4.90	4.41	4.16	3.92	3.43
2-0568	T6X12	Int.	48	35 @ 1/16	1 @ 5/8	1 1/2x3/4"	14	5.00	4.50	4.25	4.00	3.50
2-0566	T6X12	Cont.	125	20 @ 1/16	1 @ 1/2	1 1/2x3/4"	14	5.10	4.59	4.33	4.08	3.57
2-0572	T8X9	Int.	30	50 @ 1/16	1 @ 9/16	1 1/8x1"	16	5.15	4.63	4.38	4.12	3.60
2-0570	T8X9	Cont.	130	15 @ 1/16	1 @ 3/8	1 1/8x1"	16	5.20	4.68	4.42	4.16	3.64
2-0576	T8X16	Int.	15	80 @ 1/16	2 @ 1 1/4	2x1"	1	5.40	4.86	4.59	4.32	3.78
2-0574	T8X16	Cont.	95	40 @ 1/16	2 @ 1 1/16	2x1"	6	5.50	4.95	4.65	4.40	3.85
2-0580	T12X13	Int.	14	150 @ 1/8	4 @ 7/8	1 5/8x1 1/2"	10	6.50	5.85	5.52	5.20	4.55
2-0578	T12X13	Cont.	90	48 @ 1/8	1 @ 3/4	1 5/8x1 1/2"	10	6.70	6.03	5.69	5.36	4.69
2-0584	T12X19	Int.	9.5	175 @ 1/8	6 @ 1 1/2	2 3/8x1 1/2"	10	7.10	6.39	6.03	5.68	4.97
2-0582	T12X19	Cont.	59	80 @ 1/8	1 @ 1 1/4	2 3/8x1 1/2"	10	7.20	6.48	6.12	5.76	5.04



Clean Design for Side-by-Side Mounting

AC AND DC STEPPING RELAYS

ecially designed stepping relays for ac- ate sequence selecting, pulse multiply- /dividing, circuit selecting, automatic/ note homing, counting and latching. All 120 VAC except for §24 VDC type. All direct drive units with switching com- ted on energization. Bridging contacts rated at 1½ amperes, 115 volts 60 Hz inductive load. All are rated at 10% ty cycle out of each hour; maximum single period, 5 minutes. Will operate at 15% below or 10% above rated voltage. IR-PC and IR-MC are continuous-rotation types, constructed with micro-finished shaft and oilite shaft bearings. IR-PER and MER are electrical-reset types, with steel box-type frame. IR-MAS is add-and-subtract stepper. IR-PAS is bidirectional stepper. *Active contacts, including zero position. †Zero-position switch only. Wt., 2 lbs.



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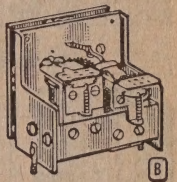

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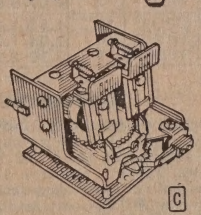

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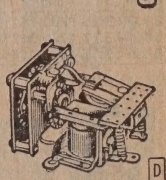
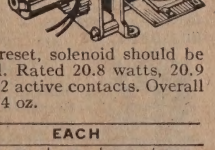


D

Stock No.	Mfr's Type	Fig.	No. Pts.	*Contacts	Size (HxWxD)	EACH 1-24	25-49	50-99	100-249	250-Up
02-0060	IR-PC	A	40	40	3 1/32x3 3/8x3 3/8"	21.95	19.76	18.66	15.37	14.27
02-0053	IR-MC	....	24	24	2 3/16x3x3 1/4"	16.25	14.63	13.81	11.38	10.56
02-0063	IR-PER	B	40	36	3 9/16x3 3/8x3"	28.90	26.00	24.57	20.23	18.79
02-0057	IR-PAS	C	40	40	3 9/16x3 3/8x3 1/4"	28.90	26.00	24.57	20.23	18.79
02-0457	MER	D	24	22	2 3/16x3 5/16x2 3/16"	17.35	15.62	14.75	12.15	11.28
02-0455	§MER	D	24	22	2 3/16x3 5/16x2 3/16"	17.35	15.62	14.75	12.15	11.28
02-0050	IR-MAS	.....	30	†	1 15/16x3 1/8x3 1/4"	19.00	17.00	16.15	13.30	12.35

MER SOL STEPPING RELAYS

me features as MER stepping relays ted above, but with an added solenoid increase switching versatility. Ener- ing the solenoid physically moves the pers away from the selector deck per- tting advance or reset of wipers without ntacting selector deck. Adds many itching advantages as well as increasing ntact capacity and electrical life. Be- use of greatly reduced friction during reset, solenoid should be ergized whenever reset coil is energized. Rated 20.8 watts, 20.9 A. 20 steps per second. 24 points, with 22 active contacts. Overall e, (HWD), 4 17/32x3 7/16x2 3/16". Shpg. wt., 14 oz.



Stock No.	Mfr's Type MER-	Volts	EACH 1-24	25-49	50-99	100-249	250-Up
02-0452	SOL-120AC	120 AC	24.75	22.28	21.04	17.33	16.09
02-0450	SOL-24DC	24 DC	24.75	22.28	21.04	17.33	16.09

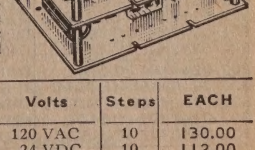
MIDGET LATCHING RELAYS

ingle-coil construction. Designed for positive n-off control of positioning devices, remote ntrols, lighting circuits and similar industrial pplications. Contacts are rated 5 amperes. nap-action switch mechanism operates on im- ulses as short as 20 milliseconds. Contacts hold n the last position of switch when coil is de- nergized. For 115 V, 60 Hz AC. Size, 1⅝x1⅛x ⅛". Shpg. wt., 4 oz.

Stock No.	Type IR-	Action	EACH 1-24	25-49	50-99	100-249	250-Up
802-0290	640 L-A-120A	SPST	4.90	4.41	4.17	3.43	3.19
802-0292	640 L-C-120A	SPDT	5.23	4.71	4.45	3.66	3.40

SLS SOLID STATE LOGIC STEPPER

Only solid-state stepper to accept either high level or logic level inputs with high noise immunity for industrial applications. Each step is a 115 VAC, 2½ amps output, available in either 120 VAC or 24 VDC. Nonbridging, reverse-triggered type. Resetting won't cause energization of intervening contacts. Can be cascaded or paralleled. *External pulse, †Self pulse. 6x4 1/16x4".



Stock No.	Mfr's Type	Volts	Steps	EACH
802-0514	*SLS 110-2A111	120 VAC	10	130.00
802-0510	*SLS 110-1A211	24 VDC	10	112.00
802-0522	*SLS 120-2A111	120 VAC	20	225.00
802-0518	*SLS 120-1A211	24 VDC	20	189.00
802-0516	†SLS 110-25111	120 VAC	10	137.50
802-0512	†SLS 110-15211	24 VDC	10	119.50
802-0524	†SLS 120-25111	120 VAC	20	232.50
802-0520	†SLS 120-15211	24 VDC	20	196.90

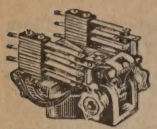
ROTOMITE DC STEPPING RELAYS

Small size enables use in business machines, vending, counting, sorting, model trains, etc. Completely enclosed. Contact ratings at 115 V, 60 Hz: 3 amps resistive, 1 amp inductive; rotate continuously up to 20 steps per second. Expected life over 1 million operations. 2x1 3/16" dia. 5 oz.

Stock No.	Type IR-705-	No. Pos.	V DC	EACH 1-24	25-49	50-99	100-249	250-Up
802-0265	12P-6D	12	6	7.26	6.53	6.17	5.08	4.72
802-0267	12P-12D	12	12	7.26	6.53	6.17	5.08	4.72
802-0269	12P-24D	12	24	7.26	6.53	6.17	5.08	4.72

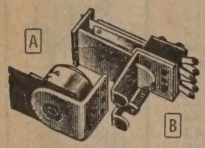
Guardian General-Purpose Relays

SERIES 660 LONG-LIFE IMPULSE RATCHET RELAYS



For on/off control of lighting, motors, etc. Strong cast-aluminum base will not flex when mounted on irregular surfaces. Balanced bearings, cam and drive mechanism. Life expectancy over 1,000,000 steps. Each impulse reverses contacts. Up to 10 steps per second possible. Heavy-duty silver contacts rated 12½ amperes at 115 V, 60 Hz AC resistive. Size, 2 1/16x3x1 3/4". Coil voltage is indicated by the last digits of Type column in table below. Av. shpg. wt. 8 oz.

Stock No.	Type and Coil Voltage	Action	EACH 1-24	25-49	50-99	100-249	250
802-1410	660-C-24AC	SPDT	7.54	6.77	6.41	5.28	4.
802-1414	660-C-120AC	SPDT	7.54	6.77	6.41	5.28	4.
802-1418	660-2C-120AC	DPDT	8.14	7.33	6.92	5.70	5.
802-1424	665-2C-24DC	DPDT	8.14	7.33	6.92	5.70	5.
802-1420	660-4C-24AC	4PDT	11.83	10.65	10.06	8.28	7.
802-1422	660-4C-120AC	4PDT	11.83	10.65	10.06	8.28	7.
802-1426	665-4C-24DC	4PDT	11.83	10.65	10.06	8.28	7.



200 SERIES RELAY ASSEMBLIES

Separate coils (A) and contact assemblies (B) for custom-designing your own relays. (Use Contact Switch Parts below to add poles.) Rated at 115 VAC, noninductive. Standard contact assembly size, 2 7/8x1 1/8x 1 3/4". †Midget; size, 2 1/16x1 1/8x1 1/2". Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Coil Volts	EACH 1-24	25-49	50-99	100-249	250-Up
802-1319	200-6A	6 AC	2.04	1.84	1.73	1.43	1.33
802-1323	200-12A	12 AC	2.04	1.84	1.73	1.43	1.33
802-1327	200-24A	24 AC	2.04	1.84	1.73	1.43	1.33
802-1333	200-120A	115 AC	2.37	2.13	2.01	1.66	1.54
802-1335	200-240A	230 AC	3.14	2.83	2.67	2.20	2.04
802-1321	200-6D	6 DC	2.20	1.98	1.87	1.54	1.43
802-1325	200-12D	12 DC	2.20	1.98	1.87	1.54	1.43
802-1329	200-24D	24 DC	2.20	1.98	1.87	1.54	1.43
802-1331	200-110D	110 DC	2.92	2.63	2.48	2.04	1.90

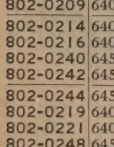
B CONTACT SWITCH ASSEMBLIES

Stock No.	Mfr's Type	Contacts Action	Amps	EACH 1-24	25-49	50-99	100-249	250-Up
802-1311	200-1	SPDT	8	1.76	1.58	1.50	1.23	1.14
802-1313	200-2	DPDT	8	2.31	2.08	1.96	1.62	1.50
802-1315	200-4	DPDT	12.5	2.59	2.33	2.20	1.81	1.68
802-1317	200-5	4PDT	8	4.07	3.66	3.46	2.85	2.65
802-1305	200-M1†	SPDT	10	1.65	1.49	1.40	1.16	1.07
802-1307	200-M2†	DPDT	10	2.04	1.84	1.73	1.43	1.33
802-1309	200-M5†	4PDT	8	3.30	2.97	2.81	2.31	2.15

ALL-PURPOSE RELAYS

Specially designed to provide unusually heavy power control for their compact size. All are rated 10 amperes at 115 V. 60 Hz AC, except 4PDT types, rated 8 amperes. 1-hole base mounting. Last digits of Type indicate coil voltage. SPST normally open. ■U.L. Component-Program Recognized. 1 1/16x1 1/2x1". 4 oz.

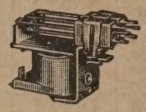
Stock No.	Mfr's Type and Voltage	Action	EACH 1-24	25-49	50-99	100-249	250-Up
802-0202	640U-A-24AC	SPST	3.19	2.87	2.71	2.23	2.07
802-0204	640U-A-120AC	SPST	3.19	2.87	2.71	2.23	2.07
802-0207	640U-C-24AC	SPDT	3.47	3.12	2.95	2.43	2.26
802-0209	640U-C-120AC	SPDT	3.47	3.12	2.95	2.43	2.26
802-0214	640U-2C-24AC	DPDT	3.74	3.37	3.18	2.62	2.43
802-0216	640U-2C-120AC	DPDT	3.74	3.37	3.18	2.62	2.43
802-0240	645-2C-6DC	DPDT	3.74	3.37	3.18	2.62	2.43
802-0242	645-2C-12DC	DPDT	3.74	3.37	3.18	2.62	2.43
802-0244	645-2C-24DC	DPDT	3.74	3.37	3.18	2.62	2.43
802-0219	640U-4C-24AC	4PDT	5.50	4.95	4.68	3.85	3.58
802-0221	640U-4C-120AC	4PDT	5.50	4.95	4.68	3.85	3.58
802-0248	645-4C-24DC	4PDT	5.50	4.95	4.68	3.85	3.58
802-0250	645-4C-110DC	4PDT	5.78	5.20	4.91	4.05	3.76



15-AMPERE ALL-PURPOSE RELAYS

Silver contacts rated at 15 amperes, 115 V, 60 Hz non-inductive load. AC coils usable −15%, +20% rated voltage; DC coils, −20%, +10%. Power required: AC—6 VA, 60 Hz AC; DC—1.5 watts min. and 3 watts max. Single screw center-hole mounting (8-32 tap). Solder lug terminals. Last digits in Mfr's Type indicates coil voltage. Size, 2 9/16x2 29/32". ■AC type U.L. Component-Program Recognized. Av. shpg. wt. 4 oz.

802-1355	240-A-120AC	SPST	3.47	3.12	2.95	2.43	2.26
802-1376	245-A-12DC	SPST	3.47	3.12	2.95	2.43	2.26
802-1378	245-A-24DC	SPST	3.47	3.12	2.95	2.43	2.26
802-1359	240-2C-24AC	DPDT	4.35	3.92	3.70	3.05	2.83
802-1363	240-2C-120AC	DPDT	4.35	3.92	3.70	3.05	2.83
802-1384	245-2C-12DC	4PDT	4.35	3.92	3.70	3.05	2.83
802-1370	240-4C-120AC	4PDT	6.38	5.74	5.42	4.47	4.15
802-1390	245-4C-12DC	4PDT	6.38	5.74	5.42	4.47	4.15
802-1395	245-4C-24DC	4PDT	6.38	5.74	5.42	4.47	4.15



SERIES 900-905 DPDT 10-A RELAYS

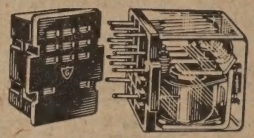
Low-cost DPDT relays featuring a trouble- design that is based upon a minimum num of parts. All contacts are rated 10 amperes 115 volts. AC resistive. One-piece switch mo ing clips and return springs, molded bobl and coil covers, keyed and locked lifters. 1 1/16x2 1/16x1 3/64". 5 oz.

Stock No.	Coil Volts	Stock No.	Coil Volts	EACH 1-9	10-24	25-t
802-1450	24 AC	802-1456	6 DC	1.90	1.80	1.6
802-1452	120 AC	802-1458	12 DC	1.90	1.80	1.6
802-1454	240 AC	802-1460	24 DC	1.90	1.80	1.6

Bulk Pkg. of 50. For bigger savings. Order as "each" in multiples o only. Specify BULK PACKAGE after Stock No. Relays come 'Form Fitted" assembly line trays. Wt. 19 lbs.

Stock No.	Coil Volts	EACH 50	100-Up	Stock No.	Coil Volts	EACH 50	100-
802-1451	24 AC	1.53	1.34	802-1457	6 DC	1.53	1.3
802-1453	120 AC	1.53	1.34	802-1459	12 DC	1.53	1.3
802-1455	240 AC	1.53	1.34	802-1461	24 DC	1.53	1.3

LOW-COST ENCLOSED 10 AMP RELAYS



Feature terminals that can used as solder lug, socket plug or with AMP 110 Faston qu connect series. Contacts rated amps at 115 VAC, non-inducti 1-piece switch reduces contact sistance. 1 5/32x1 1/16x1 3/16". L socket, below. Shpg. wt., 3 oz.

DPDT ACTION

Stock No.	Type IR-	Coil Volts	EACH 1-24	25-49	50-99	100-249	250-499	5 U
802-0300	1220-2C-6A	6 AC	4.40	3.96	3.74	3.08	2.86	2.
802-0302	1220-2C-24A	24 AC	4.40	3.96	3.74	3.08	2.86	2.
802-0304	1220-2C-120A	120 AC	4.40	3.96	3.74	3.08	2.86	2.
802-0325	1225-2C-12D	12 DC	4.40	3.96	3.74	3.08	2.86	2.
802-0327	1225-2C-24D	24 DC	4.40	3.96	3.74	3.08	2.86	2.

3PDT ACTION

802-0310	1220-3C-24A	24 AC	4.95	4.46	4.21	3.47	3.22	2.
802-0312	1220-3C-120A	120 AC	4.95	4.46	4.21	3.47	3.22	2.
802-0314	1220-3C-240A	240 AC	5.23	4.71	4.45	3.66	3.40	3.
802-0332	1225-3C-12D	12 DC	4.95	4.46	4.21	3.47	3.22	2.
802-0334	1225-3C-24D	24 DC	4.95	4.46	4.21	3.47	3.22	2.

Phenolic Relay Sockets. For use with solder lug or AMP Fasten terminals. Shpg. wt., 2 oz.
802-0299. 1-9.....Each .60 10-Up.....Each .

1310 AND 1315 MINIATURE RELAYS

*4PDT plug-in or †4PDT printed circuit sty Contacts rated 5 amps at 30 VDC or 120 VAC sistive. 1 17/64x5 55/64x1 7/64". ■U.L. Recog. 1⅛ oz.

Stock No.	Mfr's Type	Coil Volts	EACH 1-24	25-49	50-99	100-249	250-
802-1810	1310-4C*	6 AC	5.50	4.95	4.67	4.40	3.8
802-1812	1310-4C*	12 AC	5.50	4.95	4.67	4.40	3.8
802-1814	1310-4C*	24 AC	5.50	4.95	4.67	4.40	3.8
802-1816	1310-4C*	120 AC	5.85	5.26	4.97	4.68	4.0
802-1830	1315-4C*	6 DC	4.50	4.05	3.82	3.60	3.1
802-1832	1315-4C*	12 DC	4.50	4.05	3.82	3.60	3.1
802-1834	1315-4C*	24 DC	4.50	4.05	3.82	3.60	3.1
802-1836	1315-4C*	110 DC	5.25	4.72	4.46	4.20	3.6
802-1820	1310P-4C†	6 AC	5.50	4.95	4.67	4.40	3.8
802-1822	1310P-4C†	12 AC	5.50	4.95	4.67	4.40	3.8
802-1824	1310P-4C†	24 AC	5.50	4.95	4.67	4.40	3.8
802-1826	1310P-4C†	120 AC	5.85	5.26	4.97	4.68	4.0
802-1840	1315P-4C†	6 DC	4.50	4.05	3.82	3.60	3.1
802-1842	1315P-4C†	12 DC	4.50	4.05	3.82	3.60	3.1
802-1844	1315P-4C†	24 DC	4.50	4.05	3.82	3.60	3.1
802-1846	1315P-4C†	110 DC	5.25	4.72	4.46	4.20	3.6

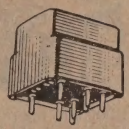
Relay Sockets. ‡Solder terminals or §PC terms. 1 oz
802-1805. ‡Series 1 ST...Ea. .60 802-1807. §Series 2 PC....Ea. .

■Recognized Under Component Program of Underwriter's Laboratories, In

Guardian Special and Solid-State Relays

1350PC AND 1355PC DPDT PC RELAYS

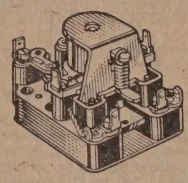
low power solid-state circuitry. All on .1 grid cing for standard printed circuit board. ders right on PC board. Conform to UL re- rements for office appliances and business ipment. 1 watt normal power; ½ watt on uest. 3500 ohm coil resistance (120 VAC). 3 p resistive 115 VAC contact rating. 1 1/16x3 1/32". 5 oz.



Stock No.	Mfr's Type IR-	Coil Volts	EACH 1-24	25-49	50-99	100-249	250-Up
2-0350	1350PC-2C	24 AC	4.20	3.78	3.57	3.36	2.94
2-0352	1350PC-2C	120 AC	4.55	4.09	3.87	3.64	3.18
2-0354	1355PC-2C	6 DC	4.20	3.78	3.57	3.36	2.94
2-0356	1355PC-2C	12 DC	4.20	3.78	3.57	3.36	2.94
2-0358	1355PC-2C	24 DC	4.20	3.78	3.57	3.36	2.94

NEW 2600 SERIES 25 AMP COMPACT POWER RELAYS

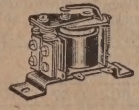
er high power handling capability in a all package. Available as double pole ible throw or double pole single throw both AC and DC types. Feature in- ted coil constructon that protects nature and contacts from mechanical nage or shorting. DPDT-AC coils ed at 240 V continuous with 75% pow- factor, operating power requirement .5 VA, 60 Hz. Easily accessible screw minals; ¼" AMP quick-connect minal kit available. "Press-to-test" armature lever for conven- manual circuit testing. Recessed 10 ampere SPDT auxiliary tch available if needed—has solder lug blade tails and mounts ily. Two .196" mounting holes on 1⅞" centers. Size, 3 5/16x2 1/2x ". Shpg. wt. 12 oz.



Stock No.	Mfr's Type and Voltage	EACH 1-24	25-49	50-99	100-249	250-Up
2-2032	2600U-DPDT-24AC	7.43	6.69	6.32	5.20	4.83
2-2033	2600U-DPDT-120AC	7.43	6.69	6.32	5.20	4.83
2-2034	2600U-DPDT-240AC	7.81	7.03	6.64	5.47	5.08
2-2035	2605U-DPDT-12DC	7.43	6.69	6.32	5.20	4.83
2-2036	2605U-DPDT-24DC	7.43	6.69	6.32	5.20	4.83
2-2037	2605U-DPDT-110DC	7.81	7.03	6.64	5.47	5.08
2-2038	2620U-DPST-24AC	5.65	5.09	4.80	3.96	3.67
2-2039	2620U-DPST-120AC	5.65	5.09	4.80	3.96	3.67
2-2040	2620U-DPST-240AC	6.15	5.54	5.23	4.31	4.00
2-2041	2625U-DPST-12DC	5.70	5.13	4.85	3.99	3.71
2-2042	2625U-DPST-24DC	5.70	5.13	4.85	3.99	3.71
2-2043	2625U-DPST-110DC	6.15	5.54	5.23	4.31	4.00
2-2031	2600U-SPDT-Aux. Sw.	1.49	1.34	1.27	1.04	.97
2-2030	2600U-Quick Conn. Term. Kit	.74	.67	.63	.52	.48

AMP HEAVY-DUTY SPST AC RELAYS

r switching currents up to 20 amperes @ 230 ts, 60 Hz AC, noninductive load. Phenolic tact mounting block has 5/16" dual contacts. enolic is tested at 1500 V breakdown to und. Silver-alloy contacts are SPST, N.O. th hardware. 3x1⅞x1¾". 6 oz.



Stock No.	Type and Coil Volts	Coil Ohms	EACH 1-24	25-49	50-99	100-249	250-Up
2-0165	IR-220-A120AC	600	5.56	5.00	4.73	3.89	3.61
2-0167	IR-220-A240AC	2500	6.11	5.50	5.19	4.28	3.97

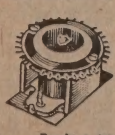
DPDT 10 AMP PLATE CIRCUIT RELAYS

tra long coil for greater sensitivity. Adaptable to ltage operating as well as sensitive plate circuit ntrol. Coil impregnated for reliability and long e. Average power requirement, 0.2 watt. Fine sil- contacts. 2 1/16x2x1 1/2". Wt. 6 oz.

Stock No.	Mfr's Type	Coil Ohms	mA DC	EACH 1-24	25-49	50-99	100-249	250-Up
2-0180	IR-625-2.5	2500	9	4.90	4.41	4.17	3.43	3.19
2-0182	IR-625-5	5000	6.3	5.23	4.71	4.45	3.66	3.40
2-0184	IR-625-10	10,000	4.5	6.38	5.74	5.42	4.47	4.15

32-POLE DC RELAY

pe IR-805-32P. Group-selector 24-volt DC relay multaneously makes up to 32 circuits common on ergization. Effectively insulated from ground. igged phenolic plunger housing assures extra long e. Coil resistance, 72 ohms. For operation from VDC. 2 1/32x1 1/32x2 1/8". Wt. 6 oz.



2-0275. 1-24.....Each 5.50 25-49.....Each 4.95
-99....Each 4.68 100-249....Each 3.85 250-Up....Each 3.58

4PDT, 10 AMP AC RELAYS

Two interlocking AC relays in metal frame bracket. Maintain circuits continuously without coil power consumption. Electrically pulse-operated; mechanical hold, electrical release. For 115 VAC. Type IR-1200/1200-4C: 1 1/16x1 3/4x2 7/8"; Type IR-1200/1200UB (U-shape bracket): 1 13/16x1 3/8x3 3/16". Shpg. wt. 6 oz.

Stock No.	Mfr's Type IR-	EACH 1-24	25-49	50-99	100-249	250-Up
802-0285	1200/1200-4C	10.40	9.36	8.84	8.32	7.29
802-0283	1200/1200UB	10.40	9.36	8.84	8.32	7.28

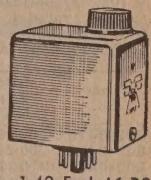
10 AMP 3PDT SOLID-STATE TIME DELAYS

Solve problems of operation control, recycling, safety delays, programmed sequences. Welded 3PDT encapsulated timing module handles 10 A resistive load. Has 15-turn pot with accuracy of ±5% over combined voltage and temperature range (—40°F, +150°F), for setting and resetting. Recycle time is 50 milliseconds; repeatability, ±1%. DC units are polarity protected. Faston 110 mounting, see socket, page 262. Chart included shows No. turns for required delay. 3x1.678x1.391". 5 oz.

Stock No.	Mfr's Type	Coil Volts	Delay Sec.	EACH 1-49	50-99	100-Up
802-0621	TD-63C15	115VAC	1-15	29.70	26.73	24.06
802-0615	TD-33C15	24DC	1-15	24.20	21.88	19.69
802-0623	TD-63C60	115VAC	10-60	30.06	27.54	24.79
802-0617	TD-33C60	24VDC	10-60	25.19	22.67	20.40
802-0625	TD-63C180	115VAC	50-180	36.85	33.16	29.84

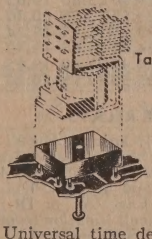
DPDT 5 AMP TIME DELAY RELAY

Relay operating from 115 VAC ±10% 50-60 Hz. Recycle time, 100 milliseconds; repeatability, 5% of nominal setting; accuracy, 10% of nominal setting. 10-turn pot adjusts from 0.5 to 30 seconds. Temperature range, —10°F to +100°F. Plug-in octal mounting. Chart included with relay shows number of turns for required time delay. Size 3x2.062x2.625". Shpg. wt. 8 oz.

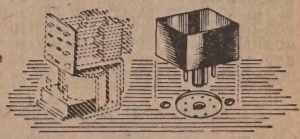


802-0640. Type TDO-62C30-115A.....1-49, Each 16.32
50-99, Each.....15.69 100-Up, Each.....14.12

UNIVERSAL TIME DELAY MODULES



Tapered Base for PC Mounting



Standard Octal Plug-In

- Permits Replacing Defective Relays without Replacing Entire Timing Circuit

Universal time delay module offering complete flexibility in the selection of relays, delays and coil voltages. Accepts Guardian Series Relays 240, 640, 1200, 1220, and 2100. Tapered base accepts relays directly for PC mounting; standard octal base mounts in octal socket, with relay wired in the conventional manner. Module acts as relay driver, use with external terminal adjustment with resistor for desired time delay. In Mfr's Type No., -O indicates On-Attract; -R indicates On-Release. Full instructions. Av. wt., 2½ oz.

TAPERED BASE FOR PC MOUNTING

Stock No.	Mfr's Type IR-	Time Range Sec.	Volts	EACH 1-49	50-99	100-Up
802-0102	TMT-O-100-24DC	.5-100	24DC	11.59	11.10	10.41
802-0114	TMT-R-100-24DC	.5-100	24DC	15.60	14.94	14.01
802-0108	TMT-O-300-24DC	100-300	24DC	14.76	14.14	13.26
802-0120	TMT-R-300-24DC	100-300	24DC	18.72	17.94	16.82
802-0105	TMT-O-100-115AC	.5-100	115AC	11.59	11.10	10.41
802-0117	TMT-R-100-115AC	.5-100	115AC	15.60	14.94	14.01
802-0111	TMT-O-300-115AC	100-300	115AC	14.76	14.14	13.26
802-0123	TMT-R-300-115AC	100-300	115AC	18.72	17.94	16.82

STANDARD OCTAL BASE

802-0070	TMP-O-100-24DC	.5-100	24DC	12.91	12.37	11.60
802-0082	TMP-R-100-24DC	.5-100	24DC	17.48	16.75	15.71
802-0076	TMP-O-300-24DC	100-300	24DC	15.25	14.61	13.70
802-0088	TMP-R-300-24DC	100-300	24DC	19.86	19.02	17.84
802-0073	TMP-O-100-115AC	.5-100	115AC	12.91	12.37	11.60
802-0085	TMP-R-100-115AC	.5-100	115AC	17.48	16.75	15.71
802-0079	TMP-O-300-115AC	100-300	115AC	15.25	14.61	13.70
802-0091	TMP-R-300-115AC	100-300	115AC	19.86	19.02	17.84

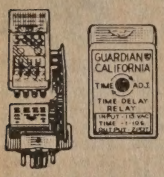
Guardian Time Delay and Sensor Devices

BDT SERIES TIME DELAYS

Versatile commercial time-delay relay operates efficiently on either high or low line in applications where accurate time-delay values are required. Repeatability at nominal temperature and voltage is 2% with temperature stability. Offers unmatched compactness for applications where circuit space-saving becomes crucial. Has replaceable electro-mechanical relay. Available in 120 VAC or 24 VDC with time ranges of 1 to 10 seconds or 10 to 60 seconds with screw type adjustable pot. Termination is standard (8-pin) octal plug with a temperature range of 0°C to +55°C. Operation is on-attract, and output is rated at 5 amperes DPDT. 1.45x1.39x2.15". Av. shpg. wt. 3 oz.

Stock No.	Mfr's Type IR-BDT-	Time Range (in sec.)	Volts	EACH 1-24	25-49	50-99	100-Up
802-0035	0-10-120VAC	1-10	120 VAC	17.10	16.25	15.40	12.80
802-0037	0-60-120VAC	10-60	120 VAC	17.60	16.75	15.85	13.20
802-0034	0-10-24VDC	1-10	24 VDC	16.90	16.05	15.20	12.65
802-0036	0-60-24VDC	10-60	24 VDC	17.10	16.25	15.40	12.80

MET SERIES TIME DELAY

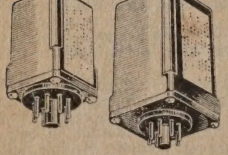


- Quality-engineered for High Tolerance
- Performs with a Repeatability of 1%
- Adjust Time-delay Values with Ease

Economy-designed, time-delay device features high tolerance and outstanding repeatability of 1%, long life performance. Both delay-on-operate and delay-on-release types in two timing ranges: 0.5 seconds to 100 seconds and 100 to 300 seconds. Single-turn pot for convenient adjustment. Available in 24 VAC, 120 VAC, and 24 VDC Accuracy of ±10% of normal setting over voltage and temperature range. Contacts rated at 10 A resistive at 115 VAC. Standard octal plug. 0 in part number indicates delay on operate; R, delay on release. 1.90x2.40x3.50". Wt. 4 oz.

Stock No.	Mfr's Type MET-	Time Range (in sec.)	Volts	EACH 1-24	25-49	50-99	100-Up
802-0470	O-100-24VAC	.5-100	24 VAC	18.00	17.10	16.20	13.50
802-0478	O-300-24VAC	100-300	24 VAC	19.10	18.15	17.20	14.30
802-0474	O-100-120VAC	.5-100	120 VAC	17.60	16.70	15.85	13.20
802-0482	O-300-120VAC	100-300	120 VAC	19.10	18.15	17.20	14.30
802-0472	O-100-24VDC	.5-100	24 VDC	18.00	17.10	16.20	13.50
802-0480	O-300-24VDC	100-300	24 VDC	19.10	18.15	17.20	14.30
802-0486	R-100-24VAC	.5-100	24 VAC	26.20	24.90	23.60	19.65
802-0493	R-300-24VAC	100-300	24 VAC	26.90	25.55	23.95	20.20
802-0490	R-100-120VAC	.5-100	120 VAC	25.50	24.25	22.95	19.24
802-0497	R-300-120VAC	100-300	120 VAC	26.25	24.95	23.65	19.70
802-0488	R-100-24VDC	.5-100	24 VDC	26.20	24.90	23.60	19.65
802-0495	R-300-24VDC	100-300	24 VDC	26.90	25.55	23.95	20.20

SERIES 6100 AND 6300 SOLID-STATE RELAYS

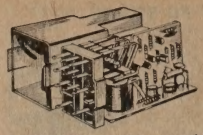


Feature externally adjustable pull-in voltage level from 80-130 volts AC or DC, with close differential between pull-in and dropout. Universal control voltage (AC or DC) with complete circuit isolation from load switching circuit. Internal filtering prevents random turn-on of "off" contacts. Controls lamp, inductive or normal resistive loads fron 10 mA to 3 amps at 115 V, 60 Hz AC. Takes quick-connect (listed below) and Amphenol octal sockets listed on page 328. Series 6100, 1 amp, with quick-connect terminals. 1 19/32x1 23/32x2" high, including tabs. Series 6110: 1 amp, octal plug-in. 1 3/8x1 5/8x2 23/32" high, with plug. Series 6300: 3-amp quick-connect. 1.578x1.783x3.312". Series 6310: 3 amp, octal plug-in. 1 19/32x1 23/32x3 3/8". Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Terminals	Contacts Form	Amps	EACH 1-49	50-99	100-Up
802-2050	6100-THA	QC	A	1	17.95	16.16	15.26
802-2052	6100-THC	QC	C	1	22.95	20.66	19.51
802-2054	6110-OHA	Octal	A	1	18.50	16.65	15.73
802-2056	6110-OHC	Octal	C	1	23.50	21.50	19.98
802-2060	6300-THA	QC	A	3	20.45	18.40	17.38
802-2062	6300-THC	QC	C	3	27.45	24.71	23.33
802-2064	6310-OHA	Octal	A	3	20.95	18.86	17.81
802-2066	6310-OHC	Octal	C	3	28.95	26.06	24.61
802-1720	1220	QC Sockets. Each 1-9			.60	10-Up	.55

Allied offers complete stocks and fast shipment of industrial quantities at OEM prices, prompt off-the-shelf delivery for all your electronics needs. Contact the nearest Allied Electronics facility for information on prices and delivery on quantities larger than shown.

PROTECTIVE SENSOR DEVICES



Fast-acting voltage, frequency a phase rotation sensors with accurate peat cycle characteristic of solid-st input sensors combined with 3PDT, ampere relay output. Plastic dust co Accepts printed-circuit socket, chas mount, clip or chassis-mounted sock Temperature range, 0° to +50°C. L 1,000,000 operations minimum. Relay contacts rated 10 ampe resistive at 115 VAC. Transient protection: 600 volts, 3-phase; 2 volts, others. Electrical latch or unlatch by wiring 24 VDC or VAC enclosed relays (802-0327 and 802-0304, page 254).

3-PHASE, 4-WIRE VOLTAGE SENSING DEVICE

Unit detects, when sufficient voltage is applied, from 3-ph source of 95 VAC, or if there is loss or drop in line averaging VAC. Use as a warning or lockout device to protect 3-phase mot and systems. Designed for pull and drop out; will repeat cl values, taking into account unevenly loaded lines which ca drastic rise and fall in other lines. Wt., 5 oz.

Stock No.	Mfr's Type	AC Volts	Each
802-0135	IR-AV2-611	115, 60 Hz	34.20

OVER-VOLTAGE SENSING DEVICE

Output relay energizes as input voltage rises to adjusted sen point. De-energizes as input voltage drops to approx. 2.5V bel sense-point. Adj. sense-point permits use as either under or o voltage detector. Sense-point adj. thru top of relay cover. 400 H 24 V, AC or DC versions available, allow 3 wks. Wt., 5 oz.

Stock No.	Mfr's Type	Volts	Adj. Range	EAC
802-0140	IR-VS1-610	115 VAC, 60 Hz	90-130 VAC	42.9

UNDER-VOLTAGE SENSING DEVICE

Output relay energizes at its low-voltage pull-in point. Independe of control circuit. Remains energized until voltages rise to adjus sense-point. 400 Hz version available. Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Volts	Adj. Range	EAC
802-0145	IR-VS2-610	115 VAC, 60 Hz	90-130 VAC	42.9

4-WIRE PHASE ROTATION SENSOR DEVICE

With ABC phase rotation, output relay is energized by 75 V balanced phase inputs. If rotation becomes improper, or if phase puts are lost, relay de-energizes. Restore relationships, relay energizes. Non-latching. 400 Hz version available. 5 oz.

Stock No.	Mfr's Type	AC Volts	EACH
802-0138	IR-PR1-610	115, 60 Hz	39.95

FREQUENCY SENSOR ADJUSTABLE SENSE-POINT DEVIC

Under or over-frequency detector. Output relay energizes as fr rises to sense-point, de-energizes when frequency drops to appro mately 1.5% of sense-point. Also, AC generator speed dete destruct. freq. trip-out, AC power loss detector. Wt., 5 oz.

Stock No.	Mfr's Type	AC Volts	Adj. Range	EAC
802-0137	IR-FS1-610	115, 60 Hz	45-66 Hz	55.2

VOLTAGE LEVEL DETECTORS

LDP

LDT

Measure levels of voltage with precise, pin-poi accuracy. Series LDT and LDP are inexpensive, a both sensitive relay drivers possess many exc lent operational characteristics. Either a fix or variable external resistor can be used to adj the sense level over a range of 85 to 135 VAC, 50 60 Hz, which allows functioning as an under over-level detector in a 115 VAC system. Once fix the sense point is extremely stable despite variatic in temperature; repeatability is to within 1 Input voltage is available in 24 VAC, 120 VAC, 2 VAC, and 24 VDC. Temperature range, −10°C +55°C. Choice of either flat pack* or octal plu termination. Select output switch from the follo ing quality-controlled Guardian relays: 640, 645, 1200, 1205, 12 1225, 2600 Series (see pages 254, 255). LDT: 2.00x2.00x.6 LDP: 1.5x1.50x1.00". Av. shpg. wt. 2½ oz.

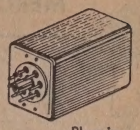
Stock No.	Mfr's Type	Volts	EACH 1-24	25-49	50-99	100-24
802-0415	*LDT-100-24VAC	24 VAC	14.80	14.06	13.30	11.
802-0419	*LDT-100-120VAC	120 VAC	14.80	14.06	13.30	11.
802-0421	*LDT-100-230 VAC	230 VAC	19.20	18.40	17.10	16.
802-0417	*LDT-100-24VDC	24 VDC	15.10	14.35	13.60	11.
802-0405	†LDP-100-24VAC	24 VAC	17.90	17.00	16.10	13.
802-0409	†LDP-100-120VAC	120 VAC	17.90	17.00	16.10	13.
802-0411	†LDP-100-230VAC	230 VAC	22.30	20.90	19.10	18.
802-0407	†LDP-100-24VDC	24 VDC	17.55	16.70	15.80	13.

Intermatic Solid-State Time Delay Relays

signed for all variable on-delay tim- requirements. Silicon semiconduc- and tantalum capacitor for high uracy and stability. Time ranges: to 500 seconds. ±1% repeata- ty. Dial accuracy, ±5% of nominal ing. Recycle time, 50 msec. 0° to 130°F. ambient Max. power consumption, 4½ watts. Protected against voltage transients and polarity changes. See charts at right for action. SS-10 and SS11 timers below are 11-pin glass-to-metal plug-in or surface mount. *115 AC, †24 DC. Av. wt. 14 oz.

Wide selection of ranges for on or off delay

Surface Mount



Plug in

SERIES SS-15 AND SS-16 SURFACE-MOUNT TIMERS

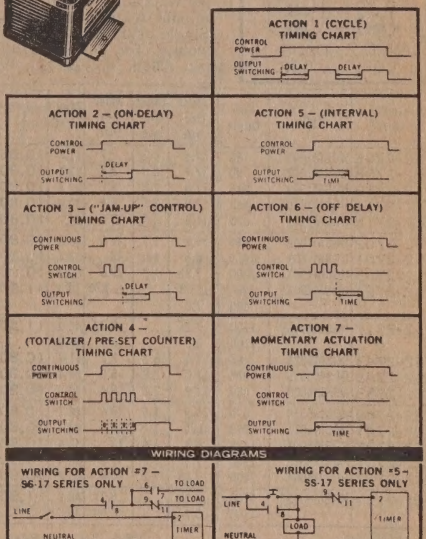
machine tool, process, flow and motor control, welding equipment, etc. Housed steel surface mount case. All terminals on top for easy wiring, locking type ustment bushing with slot for timing control. 3⅝x3⅞x3⅝". Output switching: DT, 10 amps. §Action, see chart at right.

SERIES SS-15 (ON DELAY) §2, 3, 4

Stock No.	Type SS-	Range (Secs.)	EACH
3-1255	15222-B*	.05-.5	46.00
3-1263	15223-B†	.05-.5	46.00
3-1257	15222-C*	.5-5	46.00
3-1265	15223-C†	.5-5	46.00
3-1259	15222-D*	5-50	46.00
3-1267	15223-D†	5-50	46.00
3-1261	15222-E*	50-500	48.00
3-1269	15223-E†	50-500	48.00

SERIES SS-16 (OFF DELAY) §5, 6, 7

Stock No.	Type SS-	Range (Secs.)	EACH
818-1271	16822-B*	.05-.5	46.00
818-1279	16823-B†	.05-.5	46.00
818-1273	16822-C*	.5-5	46.00
818-1281	16823-C†	.5-5	46.00
818-1275	16822-D*	5-50	46.00
818-1283	16823-D†	5-50	46.00
818-1277	16822-E*	50-500	48.00
818-1285	16823-E†	50-500	48.00



SERIES SS-12 AND SS-13 PLUG-IN TIMERS

onomy timers for most industrial uses such as with packaging machines, flow ntrols, plastic molding machines, etc. Offer reliability and accuracy for all timing plications in the range of 1-180 seconds. Complete transistorization reduces ving parts. All-silicon semiconductors and a tantalum timing capacitor are d to provide stability over a wide temperature range and the circuitry is designed eliminate changes in timing due to input voltage fluctuations. The heavy-duty ntacts of the single-pole double throw long-life relay are made of silver cadmium de. Input: 120 VAC. Output switching: DPDT 10 amps. Size, 4¾x2x2". Fits ndard sockets. §Action, see chart at right.

SERIES SS-12 (ON DELAY) 8-PIN §2

Stock No.	Type SS12-	Range (Secs.)	EACH
18-1249	222II	1-15	18.50
18-1250	222JJ	1-60	18.50
18-1251	222KK	1-180	18.50

SERIES SS-13 (OFF DELAY) 11-pin §6

Stock No.	Type SS13-	Range (Secs.)	EACH
818-1252	622II	1-15	19.50
818-1253	622JJ	1-60	19.50
818-1254	622KK	1-180	19.50

SERIES SS-17 AND SS-18 SURFACE MOUNT TIMERS WITH EXTRA RELAY

ve additional relay for instantaneous contacts ich act as extension or control switch. Locking- e bushing for adjusting time periods. Input: 120 C. Output switching: one N.O., one N.C. timed ntact; one N.O., one N.C. instantaneous contact, amps. §Action, see chart above.

Stock No.	Type SS-	Action§	Range (Secs)	EACH 1-24	25-49	50-99	100-Up
818-1300	17212-C	On Delay 2, 5, 7	.5-5	56.00	53.20	50.40	44.80
818-1302	17212-D	On Delay 2, 5, 7	5-50	56.00	53.20	50.40	44.80
818-1315	18612-C	Off Delay 6	.5-5	56.00	53.20	50.40	44.80
818-1317	18612-D	Off Delay 6	5-50	56.00	53.20	50.40	44.80

SERIES SS-20 AND SS-21 8-PIN PLUG-IN TIMERS

w-cost plug-in timers fit standard octal tube ket for ease of installation. Achieve ±2% accu- y to insure repeatability and proper operation timed mechanism. Input: 120 VAC, except †24 C. Output switching: SPDT, 5 amps. Size, 4x2x2". §Action, see chart above.

Stock No.	Type SS-	Action§	Range (Secs)	EACH 1-24	25-49	50-Up
818-1325	20222-Y	On Delay 2	.5-30	29.00	27.55	26.10
818-1330	20223-Y†	On Delay 2	.5-30	29.00	27.55	26.10
818-1335	21622-Y	Off Delay 6	.5-30	29.00	27.55	26.10
818-1340	21623-Y†	Off Delay 6	.5-30	29.00	27.55	26.10

SS-10 SERIES §2, 3, 4

Stock No.	Type SS10-	Range msec	Mtg.	EACH 1-24	25-Up
8-1200	222B*	.05-.5	Plug	46.00	43.70
8-1216	223B†	.50-.5	Plug	46.00	43.70
8-1204	222C*	.5-5	Plug	46.00	43.70
8-1220	223C†	.5-5	Plug	46.00	43.70
8-1208	222D*	5-50	Plug	46.00	43.70
8-1212	222E*	50-500	Plug	48.00	45.60
8-1202	222B1*	.05-.5	Sur.	46.00	43.70
8-1206	222C1*	.5-5	Sur.	46.00	43.70
8-1210	222D1*	5-50	Sur.	46.00	43.70
8-1214	222E1*	50-500	Sur.	48.00	45.60

SS-11 SERIES §5, 6, 7

Stock No.	Type SS-11	Range msec	Mtg.	EACH 1-24	25-Up
818-1225	822B*	.05-.5	Plug	46.00	43.70
818-1241	823B†	.05-.5	Plug	46.00	43.70
818-1229	822C*	.5-5	Plug	46.00	43.70
818-1244	823C†	.5-5	Plug	46.00	43.70
818-1233	822D*	5-50	Plug	46.00	43.70
818-1248	823D†	5-50	Plug	46.00	43.70
818-1237	822E*	50-500	Plug	48.00	45.60
818-1227	822B1*	.05-.5	Sur.	46.00	43.70
818-1231	822C1*	.5-5	Sur.	46.00	43.70
818-1235	822D1*	5-50	Sur.	46.00	43.70
818-1239	822E1*	50-500	Sur.	48.00	45.60

REMOTE POTENTIOMETERS

Selection of remote potentiometers for positive remote control of all timers on this page. Select the potentiometer for your needs by time range that corresponds to your timer. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Range (Secs.)	EACH
818-1100	99B	.05-.5	2.00
818-1101	99C	.5-5	2.00
818-1102	99D	5-50	2.00
818-1103	99E	50-500	2.00
818-1104	99V	.5-30	2.00

LOW-COST TIME DELAY RELAYS

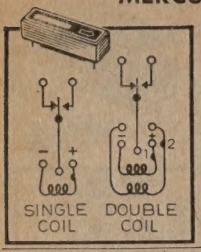
Fill Many of Your Time Delay Needs at Low Cost
Choice of Types for On-Delay or Off-Delay
Compact Packaging to fit Standard Octal Socket

ow Intermatic makes it possible for you to meet any of your time delay relay needs at much wer cost. This series is designed for all vari- ble on-delay and off-delay timing requirements. ffer high accuracy and stability. Fit standard tal socket. Repeatability accuracy is ±5%. Fully protected gainst voltage transients and polarity changes. Input: 120 volts AC DC, except †24 volts AC or DC. Output switching: single pole uble throw, 3 amperes. Series SS-6, on-delay; series SS-8, off- elay. Shpg. wt. ½ lb.

Stock No.	Type SS-	Range (Secs.)	EACH 1-9	10-24	25-49	50-99	100-Up
818-1115	6262-II	1-15	9.51	8.65	8.25	7.81	7.38
818-1121	6263-II†	1-15	9.51	8.65	8.25	7.81	7.38
818-1117	6262-JJ	1-60	9.51	8.65	8.25	7.81	7.38
818-1123	6263-JJ†	1-60	9.51	8.65	8.25	7.81	7.38
818-1119	6262-KK	1-180	9.51	8.65	8.25	7.81	7.38
818-1125	6263-KK†	1-180	9.51	8.65	8.25	7.81	7.38
818-1135	8512-II	1-15	12.05	10.95	10.40	9.85	9.30
818-1141	8513-II†	1-15	12.05	10.95	10.40	9.85	9.30
818-1137	8512-JJ	1-60	12.05	10.95	10.40	9.85	9.30
818-1143	8513-JJ†	1-60	12.05	10.95	10.40	9.85	9.30
818-1139	8512-KK	1-180	12.05	10.95	10.40	9.85	9.30
818-1145	8513-KK†	1-180	12.05	10.95	10.40	9.85	9.30

C. P. Clare Mercury-Wetted and Military Relays

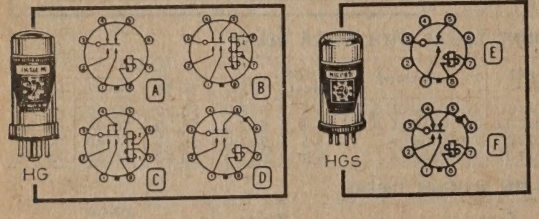
MERCURY-WETTED TYPES



SERIES HGSM RELAYS

Relay modules for PC board mounting. 1000 Series is SPDT make-before-break; 5000 Series is SPDT break-before-make. Contacts rated at 2 amps, 500 volt max., 100 V.A. at rated load. Max. dissipation, 2 watts at 25°C. Temp. rise: 30°C per watt at 25°C ambient. .040" dia. terminals require .063" dia. mtg. hole. Single side-stable; †bistable double wound. **For larger-quantity prices, contact Allied.** 5/8x5/8x2 1/16". Wt. 3 oz.

Stock No.	Type	Coil Ohms	Must Opr. mA	Must Rel. mA	Must Opr. VDC	Max. VDC	EACH 1-9	10-24	25-Up
752-2706	HGSM1005	65	37.4	6.2	2.7	11.4	10.80	8.10	7.56
752-2708	HGSM1007	90	37.7	6.3	3.8	13.4	10.80	8.10	7.56
752-2710	HGSM1009	275	17.0	2.8	5.2	23.4	10.80	8.10	7.56
752-2711	HGSM1010	450	12.9	2.1	6.4	30.0	10.80	8.10	7.56
752-2712	HGSM1011	675	11.6	1.9	8.6	36.7	10.80	8.10	7.56
752-2702	HGSM1002	940	10.1	1.7	10.5	43.3	10.80	8.10	7.56
752-2701	HGSM1001	1425	8.3	1.4	13	53.4	10.80	8.10	7.56
752-2703	HGSM1003	2400	7.35	1.2	20.6	69.2	10.80	8.10	7.56
752-2724	HGSM1063†	460/	±7.8	.....	±3.95	30.3	11.50	8.63	8.05
		460	7.8						
752-2717	HGSM1016†	1100/	7.25	.....	8.77	46.9	11.50	8.63	8.05
		1100	5.7		6.9	46.9			
752-2743	HGSM5021	65	37.4	6.2	2.7	11.4	10.80	8.10	7.56
752-2745	HGSM5035	275	17.0	2.8	5.2	23.4	10.80	8.10	7.56
752-2739	HGSM5009	450	12.9	2.1	6.4	30.0	10.80	8.10	7.56
752-2740	HGSM5010	675	11.6	1.9	8.6	36.7	10.80	8.10	7.56
752-2741	HGSM5011	940	10.1	1.7	10.5	43.3	10.80	8.10	7.56
752-2735	HGSM5001	1425	8.3	1.4	13	53.4	10.80	8.10	7.56
752-2736	HGSM5002	1950	7.5	1.2	17.6	62.4	10.80	8.10	7.56
752-2747	HGSM5064	2400	7.35	1.2	20.6	69.2	10.80	8.10	7.56
752-2737	HGSM5003†	1100/	7.25	.....	8.77	46.9	11.50	8.63	8.05
		1100	5.7		6.99	46.9			



SERIES HG AND HGS RELAYS

HG, SPDT make-before break contacts rated 5 amps at 500 volts, 250 V.A. max. HG2, two switch capsules for DPDT action; HG3, 3PDT; HG4, 4PDT. Life expectancy, 22x10⁹. 2.63x1.312" dia. Base figures (see illus. above): *A, †C, ‡B, §D. Av. shpg. wt., 5 oz.

752-2619	HG-1019§	40	67	30	2.9	11	16.15	12.11	11.30
752-2612	HG-1012§	130	37	16	5.4	20	16.15	12.11	11.30
752-2626	HG-1026*	500	20	8.7	11	39	16.15	12.11	11.30
752-2604	HG-1004*	700	19	8.3	15	45	16.15	12.11	11.30
752-2630	HG-1043*	1000	15	6.6	17	55	16.15	12.11	11.30
752-2601	HG-1001†	2500	10	4.4	28	87	16.45	12.34	11.51
752-2602	HG-1002†	4000	7.5	3.3	33	110	9.35	7.01	6.54
752-2617	HG-1017§	4000	7.5	3.3	33	110	17.00	12.75	11.90
752-2771	HG2A1002†	140	67	28	10	24	26.20	19.65	18.34
752-2778	HG2A1015†	1250	22	9.3	30	71	26.20	19.65	18.34
752-2770	HG2A1001†	5000	11	47	62	142	26.20	19.65	18.34
752-2773	HG2A1004‡	5000	11	47	62	142	26.20	19.65	18.34
752-2776	HG2A1013‡	10,000	8.6	3.6	94	200	26.20	19.65	18.34
752-2785	HG3A1004†	315	44	19	15	36	33.95	25.46	23.76
752-2787	HG3A1006‡	500	35	15	19	45	33.95	25.46	23.76
752-2784	HG3A1003†	5000	11	47	62	142	33.95	25.46	23.76
752-2797	HG4A1011§	390	42	18	18	40	43.70	32.78	30.59
752-2795	HG4A1006§	10,000	8.6	3.7	94	200	43.70	32.78	30.59

HGS, all rated at 2 amps, 500 volts. 100 VA max. 1000 Series—SPDT make-before-break, 5000 Series—SPDT break-before-make. All single side stable but *bi-stable, †chopper. #E, ¶F. Shpg. wt. 5 oz.

752-2666	HGS-1015#	90	6.3	1.1	.63	13	13.35	10.01	9.48
752-2662	HGS-1009#	600	2.9	0.69	1.9	34	13.35	10.01	9.48
752-2660	HGS-1006#	2500	1.4	0.17	3.9	70	13.70	10.28	9.59
752-2676	HGS-1048¶	4000	1.25	0.25	5.5	90	14.25	10.69	9.97
752-2668	HGS-1017#	11,000	0.72	0.12	8.7	148	14.25	10.69	9.97
752-2687	HGS-5008¶	4000	1.25	0.25	5.5	90	14.25	10.69	9.97
752-2691	HGS-5016#	25,000	0.52	0.09	14.3	224	14.25	10.69	9.97
752-2683	HGS-5004#*	4000	0.48		2.1	90	14.25	10.69	9.97
752-2692	HGS-5017#†	600			6.3 Vac		13.90	10.43	9.73

MILITARY TYPES

Wide selection of full and half-size military-type relays of unusu versatility, capable of exceptionally reliable long-life operati under adverse environments. These relays are ideal for use in multitude of industrial situations as well as in many airborne a aerospace applications. Relays employ a rigid frame to mainta permanent alignment of all elements. Contact arrangement is form C. These relays are specially manufactured to meet MIL *5757/10* and *5757/19* specifications.

SERIES "F" RELAYS

Type FW1111G00 has standard ear brackets mounting, solder-header type terminals. FW1105G also with solder-header terminals, has stud mounti on the side of the enclosure. FW1201G00 comes plain case with 3" leads. FW1207G00 features plug-in terminals in plain case. FW1109G00 offe side plate mtg, 3" lead terminals. All contacts ha DPDT arrangement, rated at 2 amps. Av. wt., 5 o

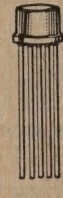
Stock No.	Mfr's Type	DC Volts	Coil Ohms	EACH 1-9	10-24	25-99	100-249	25 U
752-1960	FW1111G00	26.5	675	11.00	9.90	9.35	8.25	7.7
752-1950	FW1105G00	26.5	675	11.00	9.90	9.35	8.25	7.7
752-1980	FW1201G00	26.5	675	11.00	9.90	9.35	8.25	7.7
752-1987	FW1207G00	26.5	675	11.00	9.90	9.35	8.25	7.7
752-1955	FW1109G00	26.5	675	11.00	9.90	9.35	8.25	7.7

TYPE HF

Types HFW201D00 and HFW1201K00 both ha plain cases and 3/16" plug-in terminals. HFW12 K00 has the same 3/16" plug-in-type terminals, h standard ear brackets for mounting. Contacts rated at 2 amps in DPDT arrangement. D C volta is 26.5 for all models. Av. shpg. wt. 5 oz.

Stock No.	Mfr's Type	DC Volts	Coil Ohms	EACH 1-9	10-24	25-99	100-249	25 U
752-2580	HFW1201D00	26.5	1250	15.00	13.50	12.75	11.25	10.
752-2582	HFW1201K00	26.5	700	15.00	13.50	12.75	11.25	10.
752-2584	HFW1205K00	26.5	700	15.00	13.50	12.75	11.25	10.

TF AND TFC SERIES



TF TYPES: TO-5 transistor case relays that meet or exc MIL-R-*5757*/38 and 40. Combine top performance and pa aging compatible with solid-state circuitry. Oper. ten range: −65°C to +125°C. 2.0 ms max. operate tim Must operate voltage at +25°C. is 13.0 VDC. TFC TYP industrial version of TF types. Oper. temp. range: −55 to +75°C with a 4.0 ms max. operate time. Must opera voltage at +25°C is 17.0 VDC. All have 1.5" straight lea *Movable contact connected to case. †All conta insulated from case. Contacts rated at 1 amp. DC Volts, 26

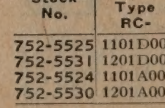
TF SERIES

Stock No.	Mfr's Type	Coil Ohms	Contact Action	EACH 1-9	10-24	25-49	50-99	100 Up
752-6165	TF1201T00*	2000	SPDT	20.90	19.00	18.05	17.10	16.
752-6170	TF2201T00†	2000	SPDT	23.10	21.00	19.95	18.90	17.
752-6175	TF3201R00†	1560	DPDT	30.25	27.50	26.13	24.75	23.

TFC SERIES

752-6150	TFC1201T00*	2000	SPDT	18.15	16.50	15.65	14.85	14.
752-6155	TFC2201T00†	2000	SPDT	19.87	18.25	17.30	16.40	15.
752-6160	TFC3201R00†	1560	DPDT	26.40	24.00	22.80	21.60	22.

SERIES 27400



Continuous duty miniature relays design especially for aerospace applications. Perfor with great dependability and long life in a planes and missile controls even under the m severely adverse conditions. Rugged polariz relays meet MIL-R-6016 requirements. Can a be used widely in commerce and industry. Compact one-inch cu all-welded construction. Resists 100g, 10ms shock and 30g vib tion at 70-3000 Hz. 4PDT contacts rated 10 amperes at 28 VDC 115/200 VAC, 400 Hz (3 phase). Professional single-coil desi Solder hook or plug-in type terminals. Av. shpg. wt. 1/4 oz.

Stock No.	Mfr's Type RC-	Coil Type	Terminals	EACH 1-9	10-24	25-49	50-99	100 U
752-5525	1101D00	DC	Solder hook	49.70	47.20	44.70	39.75	00.
752-5531	1201D00	DC	Plug-in	50.25	47.75	45.20	40.20	00.
752-5524	1101A00	AC	Solder hook	57.40	54.50	51.65	45.90	00.
752-5530	1201A00	AC	Plug-in	57.95	55.05	52.15	46.35	00.

Contact Your Branch Office for Larger Quantity Pric

C. P. Clare Relays

LB AND LBP SERIES

iniature telephone-type relays with excellent tching capacity and versatility. Ideal for military, merical or industrial uses. Six form C contacts d 2 amps. Mechanical life, 100,000,000 opera-ns. LB series for direct PC mounting; LBP ies for direct plug-in socket mounting (sockets ow). 1.24x1.00x1.220". Av. wt., 1 oz.

Stock No.	Type LB-	Stock No.	Type LBP-	Coil V	Coil Ohms	EACH 1-9	EACH 10-24	EACH 25-Up
2-3775	0060B00	752-3790	0060B00	12	130	5.75	5.18	4.89
2-3780	0060H00	752-3795	0060H00	14	200	5.75	5.18	4.89
2-3776	0060C00	752-3791	0060C00	18	330	5.75	5.18	4.89
2-3777	0060D00	752-3792	0060D00	24	590	5.75	5.18	4.89
2-3783	0060K00	752-3798	0060K00	30	915	5.75	5.18	4.89
2-3782	0060J00	752-3797	0060J00	34	1150	6.00	5.40	5.10
2-5565	RP15450-G5	Solder Lug Socket				1.15	1.04	.98
2-5566	RP15450-G6	PC Board Socket				1.15	1.04	.98

LA AND LAP SERIES

nilar in appearance to LB and LPB above.) Miniature telephone, e relays are ideal for process controls communications equip-nt, aircraft, many other military and industrial applications. ir form C contacts are rated at 2 amperes each. LA series for ct PC mounting; LAP series for direct plug-in mtg. (sockets ow). Mechanical life rated at 100,000,000 operations. Only 1.24x 7x.750". Av. shpg. wt. 2 oz.

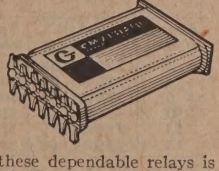
Stock No.	Mfr's Type	Stock No.	Mfr's Type	Coil V	Coil Ohm	EACH 1-9	EACH 10-24	EACH 25-Up
2-3735	LA0040B00		.....	12	130	5.15	4.64	4.38
2-3740	LA0040H00		.....	14	200	5.15	4.64	4.38
2-3737	LA0040D00	752-3748	LAP0040D00	24	590	5.15	4.64	4.38
2-3746	LA0040K00	742-3749	LAP0040K00	30	915	5.15	4.64	4.38
2-3743	LA0040J00		.....	34	1150	5.40	4.86	4.59
2-1905	FV770	Solder Lug Socket				1.35	1.22	1.15
2-1904	FV769	PC Board Socket				1.35	1.22	1.15

JDP TELEPHONE RELAYS

mpact, industrial telephone-type relay, for applica-ns ranging from switching in simple alarm circuits sophisticated computer functions. Switch combi-ion of 2, 4, and 6 pole DT with contacts rated at 4 ps, 150 watts with an operate time of 5 milliseconds nimum. Mechanical life expectancy of 70x10⁶ erations. Relays are enclosed in dust cover; socket s soldering lug terminals.

Stock No.	Mfr's Type	Coil V	Coil Ohm	Contact Action	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-249	EACH 250-Up
2-3150	JDP242C24	24	500	DPDT	6.90	6.21	5.86	5.17	4.83
2-3152	JDP244C24	24	500	4PDT	9.50	8.55	8.08	7.13	6.65
2-3154	JDP246C24	24	300	6PDT	11.65	10.49	9.90	8.74	8.16
2-3160	JDP482C24	48	1300	DPDT	6.95	6.26	5.91	5.21	4.87
2-3162	JDP484C24	48	1300	4PDT	9.65	8.69	8.20	7.24	6.76
2-3164	JDP486C24	48	1000	6PDT	11.70	10.53	9.95	8.78	8.19

CRT SERIES REED RELAYS



tra-reliable reed relays for applica-ns with printed circuit boards. Fea-re precision construction by profes-nal engineers using only the highest ality materials. Reed contacts are led in an inert gas atmosphere within lass tube. Coils are wound on molded bbins capable of accepting up to six areed switch capsules with standard rm A contacts. Life expectancy for these dependable relays is er 20 million operations at rated load. Contacts are rated at VA maximum, non-inductive, 1 ampere maximum; 250 volts ximum with carry load 5 amperes maximum (not switched).

Stock No.	Mfr's Type	Coil V	Coil Ohms	Contact Form	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-249	EACH 250-Up
2-1007	CRT-1007	6	160	1A	3.00	2.70	2.40	2.10	1.95
2-1020	CR2T-1004	6	88	2A	3.95	3.56	3.16	2.77	2.57
2-1040	CR4T-1105	6	56	4A	5.45	4.90	4.36	3.81	3.54
2-1060	CR6T-1003	6	31	6A	6.75	6.08	5.40	4.73	4.39
2-1010	CRT-1010	12	600	1A	3.00	2.70	2.40	2.10	1.95
2-1022	CR2T-1006	12	235	2A	3.95	3.56	3.16	2.77	2.57
2-1042	CR4T-1107	12	136	4A	5.50	4.95	4.40	3.85	3.58
2-1063	CR6T-1006	12	120	6A	5.45	4.90	4.36	3.81	3.54
2-1013	CRT-1013	24	2500	1A	3.50	3.15	2.80	2.45	2.28
2-1026	CR2T-1010	24	1400	2A	4.30	3.87	3.44	3.01	2.80
2-1046	CR4T-1111	24	835	4A	5.45	4.90	4.36	3.81	3.54
2-1066	CR6T-1009	24	510	6A	6.75	6.08	5.40	4.73	4.39

PICOREED REED RELAYS

Sealed contacts rated 0.5 amp max. at 100 V and 10 VA max.; 1.0 amp max. at rated load. Sizes: *.187x.250x.781"; †.225x.380x.781"; ‡.225x.480x.781"; §.225x.580x.781". PRA, 5/8" axial leads; PRB, PC mount. Prefix indicates contact form; PRA, 1 Form A. Av. wt., 1 oz.

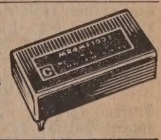
Stock No.	Mfr's Type	Stock No.	Mfr's Type	Coil VDC	Coil Ohms	EACH 1-9	EACH 10-24	EACH 25-Up
752-4901	PRA-2010*	752-4910	PRB-2010*	6	387	3.95	3.63	3.32
752-4919	PR2A-2007†	752-4930	PR2B-2007†	6	136	4.95	4.55	4.16
752-4940	PR3A-2006‡	752-4950	PR3B-2006‡	6	117	5.85	5.38	4.91
752-4960	PR4A-2005§	752-4970	PR4B-2005§	6	88	6.90	6.35	5.80
752-4902	PRA-2013*	752-4911	PRB-2013*	12	1200	3.95	3.63	3.32
752-4922	PR2A-2011†	752-4933	PR2B-2011†	12	740	4.95	4.55	4.16
752-4942	PR3A-2009‡	752-4952	PR3B-2009‡	12	483	5.85	5.38	4.91
752-4962	PR4A-2008§	752-4972	PR4B-2008§	12	351	6.90	6.35	5.80
752-4904	PRA-2016*	752-4904	PRB-2016*	24	5380	4.55	4.19	3.82
752-4924	PR2A-2014†	752-4935	PR2B-2014†	24	3042	5.50	5.06	4.62
752-4944	PR3A-2013‡	752-4954	PR3B-2013‡	24	2254	6.40	5.89	5.38
752-4964	PR4A-2012§	752-4974	PR4B-2012§	24	1856	6.90	6.35	5.80
752-4908	PRA-3010*	752-4917	PRB-3010*	5	387	4.50	4.14	3.78

HIGH SENSITIVITY REED RELAYS

More sensitive relays of the PRA and PRB Series (see above) allow PC board spacing of .500" centers. All Picoreed reed relays have speed to 500 μsec. operate time at nominal coil power. Life expectancy is 100x10⁶ operations at low-level loads, 5x10⁶ at 28 VDC, 0.125 amps. The 5-volt series requires an operate voltage of 3.75 volts at 25°C. Sizes: *.350x.400x.800"; †.350x.500x.800".

752-4900	PRA-2009H*	752-4909	PRB-2009H*	6	535	4.45	4.09	3.74
752-4920	PR2A-2007H†	752-4931	PR2B-2007H†	6	297	5.45	5.01	4.58
752-4923	PRA-2013H*	752-4934	PRB-2013H*	12	2870	4.45	4.09	3.74
752-4921	PR2A-2010H†	752-4932	PR2B-2010H†	12	1180	5.45	5.01	4.58
752-4905	PRA-2016H*	752-4914	PRB-2016H*	24	11900	5.05	4.65	4.24
752-4923	PR2A-2013H†	752-4934	PR2B-2013H†	24	3780	6.00	5.52	5.04
752-4907	PRA-3009H*	752-4916	PRB-3009H*	5	535	5.00	4.60	4.20
752-4926	PR2A-3007H†	752-4937	PR2B-3007H†	5	297	6.00	5.52	5.04

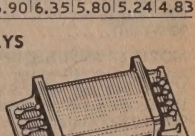
MRME RELAYS



MicroClareed relays offering the same high standards of the Picoreed relays but only one-fifth the size. Epoxy molded modules. Contacts rated at 15 VA maximum, ¾ amp maximum. Size: length, $1^{19}/_{64}$"; height, $2^{5}/_{64}$"; widths, *$1^{3}/_{32}$", †$^{33}/_{64}$", ‡$^{39}/_{64}$", and §$^{45}/_{64}$".

Stock No.	Mfr's Type	V	Coil Ohms	Contact Form	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-249	EACH 250-Up
752-4055	MRME-1041*	6	218	1A	3.95	3.63	3.32	3.00	2.77
752-4065	MR2ME-1041†	6	168	2A	4.95	4.55	4.16	3.76	3.47
752-4075	MR3ME-1041‡	6	125	3A	5.85	5.38	4.91	4.45	4.10
752-4085	MR4ME-1041§	6	95	4A	6.90	6.35	5.80	4.41	4.06
752-4056	MRME-1042*	12	790	1A	3.95	3.63	3.32	3.00	2.77
752-4066	MR2ME-1042†	12	635	2A	4.95	4.55	4.16	3.76	3.47
752-4076	MR3ME-1042‡	12	510	3A	5.85	5.38	4.91	4.45	4.10
752-4086	MR4ME-1042§	12	410	4A	6.90	6.35	5.80	4.41	4.06
752-4057	MRME-1043*	24	3060	1A	4.55	4.19	3.82	3.46	3.19
752-4067	MR2ME-1043†	24	2580	2A	5.50	5.06	4.62	4.18	3.85
752-4077	MR3ME-1043‡	24	1950	3A	6.40	5.89	5.38	4.86	4.48
752-4087	MR4ME-1043§	24	1500	4A	6.90	6.35	5.80	5.24	4.83

MRMC SERIES RELAYS



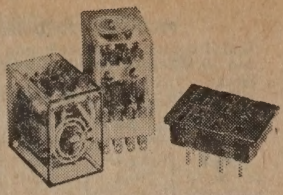
MicroClareed relays operate the same and have the same internal construction as the MRME relays above, but MRMC types are open modules. Both types are designed for printed circuit board application. Offer switching speed as fast as 500 μsec., provide isolation between coil and contact; insensitive to overload transient that would damage a solid-state device. Size: length, $1^{15}/_{64}$"; height, $1^{1}/_{32}$"; widths, *$1^{1}/_{32}$", †$^{29}/_{64}$", ‡$^{35}/_{64}$", and §$^{21}/_{32}$".

Stock No.	Mfr's Type	V	Coil Ohms	Contact Form	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-249	EACH 250-Up
752-4050	MRMC-1041*	6	218	1A	3.20	2.94	2.69	2.43	2.24
752-4060	MR2MC-1041†	6	168	2A	4.15	3.82	3.49	3.15	2.91
752-4070	MR3MC-1041‡	6	125	3A	5.00	4.60	4.20	3.80	3.51
752-4080	MR4MC-1041§	6	95	4A	5.95	5.47	5.00	4.52	4.17
752-4051	MRMC-1042*	12	790	1A	3.20	2.94	2.69	2.43	2.24
752-4061	MR2MC-1042†	12	635	2A	4.15	3.82	3.49	3.15	2.91
752-4071	MR3MC-1042‡	12	510	3A	5.00	4.60	4.20	3.80	3.50
752-4081	MR4MC-1042§	12	410	4A	5.95	5.47	5.00	4.52	4.17
752-4052	MRMC-1043*	24	3060	1A	3.75	3.45	3.15	2.85	2.63
752-4062	MR2MC-1043†	24	2580	2A	4.70	4.32	3.95	3.57	3.29
752-4072	MR3MC-1043‡	24	1950	3A	5.50	5.06	4.62	4.18	3.85
752-4082	MR4MC-1043§	24	1500	4A	5.95	5.47	5.00	4.52	4.17

Relays, Buzzers, Photoelectric Components, Contro

C. P. CLARE

GENERAL PURPOSE RELAYS



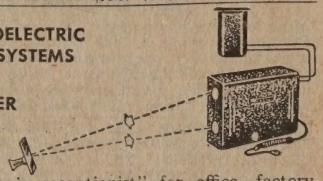
GP-1. Miniature 4PDT relays with dust cover enclosure built to meet U.L. Component Recognition. Silver-gold flashed contacts, rated 3 A at 30 VDC or 120 VAC resistive. Solder terminals. Size, 1.281x.859x1.109".

Stock No.	Mfr's Type	Volts	EACH 1-24	25-49	50-99	100-249	250-Up
752-1650	GP1R11A0000	6AC	5.00	4.85	4.55	3.75	3.50
752-1651	GP1R11A1000	12AC	5.00	4.85	4.55	3.75	3.50
752-1652	GP1R11A2000	24AC	5.00	4.85	4.55	3.75	3.50
752-1654	GP1R11A6000	120AC	5.20	5.05	4.75	3.95	3.70
752-1655	GP1R11D0000	6DC	4.30	4.00	3.75	3.40	3.00
752-1656	GP1R11D1000	12DC	4.30	4.00	3.75	3.40	3.00
752-1657	GP1R11D2000	24DC	4.30	4.00	3.75	3.40	3.00
752-1658	GP1R11D3000	48DC	4.40	4.10	3.85	3.50	3.10
752-1659	GP1R11D4000	90DC	4.60	4.20	3.95	3.60	3.20
752-1660	GP1R11D5000	110DC	4.85	4.45	4.20	3.85	3.45
752-1662	GP1001 Socket, Solder Lug		.60	.57	.54	.42	.39
752-1664	GP1003 Socket, Printed Circuit		.60	.57	.54	.42	.39

WORNER PHOTOELECTRIC COMPONENTS & SYSTEMS

MODEL 61T "FOTO-ELECTRIC" ANNOUNCER

Light Source, Mirror and Warning Chime



Effective low-cost "electronic receptionist" for office, factory, other commercial applications. Light source and photocell are contained in one housing; a mirror reflects back to unit. When light beam is broken, warning chime sounds. Features reliable, all transistor design. Outfit consists of "Fotoelectric" unit, mirror and chime. Unit may be placed three to ten feet from mirror. Instructions. Size, 8¼x6½x2¾". 110-120 V, 50-60 Hz AC.
989-1919. Shpg. wt. 9 lbs. **71.28**
989-1933. Extra Chime. 2 lbs. **6.75**

MINIATURE PHOTOELECTRIC COMPONENTS

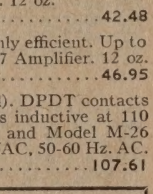
Perfect for use even in areas with severe space limitations. Excellent for high-speed counting. Up to 500 counts per minute when powered by Model 67 Amplifier-Relay, listed below. Units are housed in tough, one-piece aluminum cases that are expertly machined. Designed for pin-point detection on cross-over beam at distances from 3 to 12". Directional beam supervises objects 1" or larger at distances up to 8-feet. Miniature Models M-36 and M-26 install vertically as illustrated. Installation instructions. With 6-ft. cable. 1¼x¾x2½-in. Wt. 12 oz.

MODEL M-36 VERTICAL LIGHT SOURCE. Takes operating voltage from Model 67 Amplifier-Relay below. Shpg. wt. 12 oz.
989-1914. ..... **42.48**

MODEL M-26 VERTICAL PHOTOCELL RECEIVER. Highly efficient. Up to 500 counts per minute when used with Model 67 Amplifier. 12 oz.
989-1910. ..... **46.95**

MODEL 67 AMPLIFIER DPDT RELAY. (Not illustrated). DPDT contacts are rated at 40 amps non-inductive and 5 amps inductive at 110 VAC. For use with Model M-36 Light Source and Model M-26 Photocell Receiver above. Size, 6x8x6". 110-120 VAC, 50-60 Hz. AC.
989-1922. Shpg. wt. 8 lbs. **107.61**

ECONOMY MODEL 4000 "WATCHMAN"



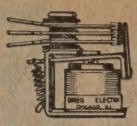
Two-unit photoelectric system for actuating burglar alarms. Light-source has infrared filter for invisible beam. Switch for continuous or momentary alarm. Sensitivity control. Six-volt output for alarm. For indoor use at distances up to 50 feet. Size, 5x5x5½". 110-120 V, 50-60 Hz AC.
989UI940. Shpg. wt. 11¾ lbs. **101.88**

MODEL 5100 "WATCHMAN"

(Not illustrated). Deluxe amplifier and light source for actuating burglar alarms. Has invisible beam light source. Switch for continuous or momentary alarm. Meter jack for plate circuit test. Alarm setting protected by lock. Sensitivity control. Six-volt output for alarm. For indoor applications with distances up to 100 feet. For 110-120 V, 50-60 Hz AC. Size, 5x5x5½". Ship. wt. 14 lbs.
989UI945. ..... **143.94**

OMEGA RELAYS AND BUZZER

SERIES 610 HEAVY-DUTY RELAYS

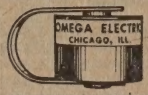


Rated ½ hp at 120 VAC, 20 amps at 12 VAC resistive/pole. Silver cadmium oxid contacts. Quick-connect contact terminals 2⅛x1¾x1½". 4 oz.

Stock No.	Mfr's Type 610-	Contacts	Coil Nom. Volts	Ohms	EACH 1-24	25-49	50-99	100-249	250 Up
879-0405	1CXQ	SPDT	12 AC	7	3.20	3.04	2.88	2.44	2.0
879-0406	1CXQ	SPDT	24 AC	24	3.20	3.04	2.88	2.44	2.0
879-0408	1CXQ	SPDT	120 AC	750	3.20	3.04	2.88	2.44	2.0
879-0410	1CXQ	SPDT	240 AC	3380	3.65	3.47	3.29	2.56	2.3
879-0415	1CYQ	SPDT	12 DC	75	3.10	2.95	2.79	2.17	2.0
879-0416	1CYQ	SPDT	24 DC	285	3.10	2.95	2.79	2.17	2.0
879-0418	1CYQ	SPDT	120 DC	6000	3.55	3.37	3.20	2.49	2.3
879-0425	2CXQ	DPDT	12 AC	7	4.05	3.85	3.65	2.84	2.6
879-0426	2CXQ	DPDT	24 AC	24	4.05	3.85	3.65	2.84	2.6
879-0428	2CXQ	DPDT	120 AC	750	4.05	3.85	3.65	2.84	2.6
879-0429	2CXQ	DPDT	240 AC	3380	4.50	4.28	4.05	3.15	2.9
879-0435	2CYQ	DPDT	12 DC	75	3.95	3.75	3.56	2.77	2.5
879-0436	2CYQ	DPDT	24 DC	285	3.95	3.75	3.56	2.77	2.5
879-0438	2CYQ	DPDT	120 DC	6000	4.40	4.18	3.96	3.08	2.8

SERIES 610 WITH SOLDER TYPE CONTACT TERMINALS

879-0402	1CX	SPDT	24 AC	24	3.00	2.85	2.70	2.10	1.9
879-0403	1CX	SPDT	120 AC	750	3.00	2.85	2.70	2.10	1.9
879-0412	1CY	SPDT	24 DC	285	2.90	2.76	2.61	2.03	1.8
879-0413	1CY	SPDT	120 DC	6000	3.35	3.18	3.02	2.35	2.1
879-0422	2CX	DPDT	120 AC	750	3.85	3.66	3.47	2.70	2.5



TYPE 3030 AC BUZZER

Low cost buzzer; ideal for thermo. end of-cycle use. 6-32 tapped mtg. hole. ⅞ 1 13/32x25/32". Shpg. wt., 2 oz.

Stock No.	Mfr's Type	V AC	Coil Ohms	EACH 1-24	25-49	50-99	100-249	250-Up
879-0500	3030-1	6	45	1.50	1.43	1.35	1.05	.98
879-0501	3030-2	12	45	1.50	1.43	1.35	1.05	.98
879-0502	3030-3	24	150	1.50	1.43	1.35	1.05	.98
879-0503	3030-4	120	3000	1.50	1.43	1.35	1.05	.98

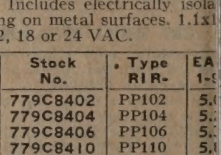
ELECTRONIC CONTROL CORP.

SOLID-STATE RELAYS

LAR Series solid state relays are designed as single pole normally open contactors which use the AC line as the signal power source. Also available as F reed isolated relays. Application of the QUADRAC bidirectio thyristor in the LAR Series eliminates the common causes of r functions found in mechanical relays to make possible hig reliable AC power switching functions. LAR relays are especi well-suited for the switching of tungsten and inductive lo which normally lead to failure of electromechanical relays to pitting and welding of contacts. Includes electrically isola heatsink that permits direct mounting on metal surfaces. 1.1x1 2.1". 120 V except *220. Specify 6, 12, 18 or 24 VAC.

Amps (rms)	Stock No.	Type LAR-	EACH 1-99*	Stock No.	Type RIR-	EA 1-9
2	779C8102	102	4.00	779C8402	PP102	5.(
4	779C8104	104	4.20	779C8404	PP104	5.(
6	779C8106	106	4.28	779C8406	PP106	5.(
10	779C8110	110	4.69	779C8410	PP110	5.(
15	779C8115	115	6.06	779C8415	PP115	7.(
15	779C8116	215*	7.32	779C8416	PP215*	9.(

MSC SERIES SOLID STATE MOTOR SPEED CONTROLS



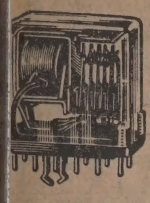
Overcomes the limitations of fixed motor speed selections. Uses full-wave solid state circuit to achieve infinite speed variations for most shaded pole, PSC or universal motors. Permits selection to ind dual preference of motor speed, air flow velocity and noise le Potentiometer with On-Off switch. Third lead wire for access circuits. UFSC is for fans. Mounting bushing and locknut. * cludes mounting kit with faceplate, knob, hardware. 2x1.55x1 1/

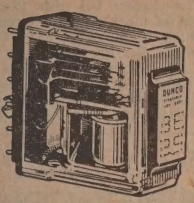
Stock No.	Type	Fig.	VAC	A	EACH
779-8211	MSC-11	B	120	1.6	4.83
779-8231	MSC-31	B	120	3	5.15
779-8232	MSC-31K*	B	120	3	6.62
779-8851	UFSC-51	A	120	5	8.77
779-8852	UFSC-51K*	A	120	5	10.24

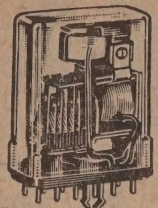
*For Larger-Quantity Prices Contact Nearest Allied Electronics Branch Offi

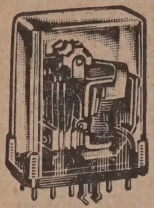
Struthers-Dunn Plug-In Relays

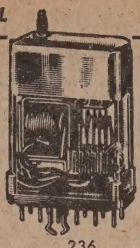
FOR SIMPLIFIED INDUSTRIAL CONTROL


219BBXP


219BBXPLM


255XCXP


211XBXP


236

33377
27390
Sockets

CX3736
CX3671
Enclosures

TYPE 219 FRAME INDUSTRIAL CONTROL RELAYS

ntacts, 10 A. For machine tool and other applications. Handle ds such as relay coils, solenoids, heaters. Operate and release e, 15 msec. max. Oper. at 85% nom. V; withstand 10% over- age. ABAP have 1 N.O., 1 N.C. 2 DT contacts. Suffix M—with ator for manual check of circuit continuity without energizing ; L—neon lamp shows if coil energized; LM—manual actuator lamp. 2 19/32 x 2 5/8 x 1 15/32". 7 oz.

Stock No.	Mfr's Type 219-	DPDT Contacts Plus	Volts	EACH 1-9	10-24	25-49	50-74	75-Up
-1810	XBXP	.....	115AC	15.51	14.10	13.40	12.69	11.28
-1750	BBXP	2 N.O.	24AC	18.59	16.90	16.06	15.21	13.52
-1752	BBXP	2 N.O.	115AC	18.59	16.90	16.06	15.21	13.52
-1754	BBXP	2 N.O.	240AC	18.59	16.90	16.05	15.21	13.52
-1751	BBXP	2 N.O.	24DC	18.59	16.90	16.06	15.21	13.52
-1753	BBXP	2 N.O.	115DC	18.59	16.90	16.06	15.21	13.52
-1705	ABAP	N.O.;N.C.	24AC	18.59	16.90	16.06	15.21	13.52
-1707	ABAP	N.O.;N.C.	115AC	18.59	16.90	16.06	15.21	13.52
-1706	ABAP	N.O.;N.C.	24DC	18.59	16.90	16.06	15.21	13.52
-1764	BBXPL	2 N.O.	115AC	19.91	18.10	17.19	16.29	14.48
-1775	BBXPLM	2 N.O.	115AC	21.34	19.40	18.43	17.46	15.52
-1820	XBXPM	.....	115AC	16.83	15.30	14.53	13.77	12.24

TYPE 219 FRAME 14-PIN PLUG-IN RELAYS

neral-purpose 4 and 6-pole relays for 150-volt industrial control. pin keyed plugs, clear thermoplastic covers. Contacts designed maximum reliability at loads up to 10 amps. For 115 VAC; er voltages available. 1 1/2 x 2 1/32 x 3 1/16" high. Socket (below) has w terminals, captive clamping plates for easy wiring. 7 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-24	25-49	50-74	75-Up
-1840	219XDXP	4PDT	21.12	19.20	18.24	17.28	15.36
-1785	219DXBP	4PNO/2PNC	21.12	19.20	18.24	17.28	15.36
-1795	219FXXP	6PNO	21.12	19.20	18.24	17.28	15.36

TYPE 236 AXXP TIME-DELAY 115 VAC RELAYS

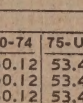
use Type 219 standard relay plus static timing element. Solid- e network timing triggers relay end of preset time. Time delay crewdriver-adjustable over entire time range. Contacts: "on" y DPDT-1 N.O.; 1% timing accuracy with voltage and temper- re variation. 3 3/4 x 2 5/8 x 1 5/32". 11 oz.

Stock No.	Mfr's Type	Range Seconds	EACH 1-9	10-24	25-49	50-74	75-Up
-1862	236ABXP	0.2 to 5	73.48	66.80	63.46	60.12	53.44
-1863	236ABXP	0.2 to 12	73.48	66.80	63.46	60.12	53.44
-1860	236ABXP	0.2 to 20	73.48	66.80	63.46	60.12	53.44
-1861	236ABXP	2.0 to 200	73.48	66.80	63.46	60.12	53.44

12-PIN AND 14-PIN SOCKETS FOR ABOVE RELAYS

nt-connected screws have clamp plates for up to two No. 14 es. Base 2 3/16 x 2 5/8"; height, 7 7/32". Shpg. wt., 3 oz.
-2030. 12-Pin (27390) 1-49.....Ea. 3.30 50-Up.....Ea. 2.50
-2050. 14-Pin (33377) 1-49.....Ea. 3.75 50-Up.....Ea. 2.80

214 FRAME AC, DC RELAYS



er contacts rated 10 amperes at 115 VAC with l flashing for reliable continuity at low levels. relays operate 85-110% and DC relays operate 110% of nominal voltage. Size, 2 3/4 x 1 3/8 x 1 3/8". rage weight, 5 oz.

Stock No.	Mfr's Type	Coil Volts	Action	EACH 1-9	10-24	25-49	50-74	75-Up
-1633	214XAX48P	115AC	SPDT	4.84	4.40	4.18	3.96	3.52
-1632	214XAX48P	24DC	SPDT	4.84	4.40	4.18	3.96	3.52
-1643	214XBX48P	115AC	DPDT	5.50	5.00	4.75	4.50	4.00
-1642	214XBX48P	24DC	DPDT	5.50	5.00	4.75	4.50	4.00
-1663	214XCX48P	115AC	3PDT	6.60	6.00	5.70	5.40	4.80
-1662	214XCX48P	24DC	3PDT	6.60	6.00	5.70	5.40	4.80

TYPE 255 FRAME LATCH RELAYS

Plug-in mechanical latch, electrical reset relays. Combine standard Type 219 frame (left) with latching frame; for contact reliability over 10 million operations. Same specs as Type 219. Base, 2 5/8 x 1 15/32"; height, 3 3/4" (less pins). 10 oz.

Stock No.	Type 255-	Contact Form	Volts	EACH 1-9	10-24	25-49	50-74	75-Up
929-1885	XBXP	DPDT	115 AC	30.91	28.10	26.69	25.29	22.48
929-1895	XCXP	3PDT	24 AC	33.88	30.80	29.26	27.72	24.64
929-1897	XCXP	3PDT	115 AC	33.88	30.80	29.26	27.72	24.64
929-1896	XCXP	3PDT	24 DC	33.88	30.80	29.26	27.72	24.64
929-1898	XCXP	3PDT	115 DC	33.88	30.80	29.26	27.72	24.64
929-1875	BXBP	2NO;2NC	115 AC	33.88	30.80	29.26	27.72	24.64

211XBXP FRAME SEQUENCE DPDT RELAY

DPDT relay that provides exceptional sequence versatility, and features a double cam movement on each step. Cam rotates half a step when coil is energized and completes step when de-energized. 8-tooth ratchet. Contacts transfer on each impulse; are rated 5 amperes @ 115 VAC. Coils, 60 Hz. Base 1 15/32 x 2 5/8"; height, 3 3/4" (less pins). Shpg. wt., 9 oz.

Stock No.	Volts	EACH 1-24	25-49	50-74	75-99	100-Up
929-1607	115 AC	32.01	29.10	27.64	26.19	23.28

PLASTIC RELAY ENCLOSURES

Clear thermoplastic case with phenolic base, 2 5/8 x 1 15/32". Twelve or fourteen usable pins, with 10-A rating. Polarized mounting clip. Fits 27390 socket, or 33377 left. 4 oz.
929-0750. Type CX 3671. 12-Pin. 1-49..Ea. 3.60 50-Up..Ea. 2.70
929-0753. Type CX 3672. 12-Pin. 1-49..Ea. 3.85 50-Up..Ea. 2.90
929-0756. Type CX 3736. 14-Pin. 1-49..Ea. 3.75 50-Up..Ea. 2.80

RATCHET SEQUENCE RELAYS

DPST cam-operated contacts continuously repeat predetermined sequence, stepped from one position to the next by impulse to the coil. B11 Miniature Types. B11BXX relay contacts open and close together; B11AXA contacts open and close alternately. Contacts rated 6 A @ 115 VAC or 24 VDC; 0.5 A @ 115 VDC. Six #6-32 stud terminals, front-connected. 2x 3 13/16". Shpg. wt., 1 lb. C85AXA Power Type. Contacts 20 A @ 115 VAC, 24 VDC; 10 A @ 230 A; 1 A @ 115 VDC; 1/4 A @ 230 VDC. 8-tooth ratchet. Coil 18 VA AC, 14 W DC. 3x5". Shpg. wt., 1 lb.

Stock No.	Mfr's Type	V AC	EACH 1-9	10-24	25-49	50-74	75-Up
929-0722	B11BXX	115	29.37	26.70	25.37	24.03	21.36
929-0719	B11AXA	115	29.37	26.70	25.37	24.03	21.36
929-0770	C85AXA	115	46.53	42.30	40.19	38.07	33.84

A275KXX AND A275KXX91 REVERSING CONTACTORS

TYPE A275KXX. Uses 50% less coil power than solenoid types. Two 3-pole contactors on common frame, mechanically interlocked to prevent simultaneous closure, 1 hp at 120, 240, 480 VAC; 1, 2 or 3 phase with all contacts switching. 3 5/16 x 2 3/16 x 2 7/8". ■U.L. Recog. C.S.A. Listed. 1 lb. TYPE A275KXX91. Similar, but single pole double-throw auxiliary contacts on each armature. 3 5/8 x 2 3/4 x 2 7/8". 3 lbs. TYPE B175KXX. Larger, for heavier loads. 5 1/4 x 4 7/16 x 2 1/2". 4 lbs.

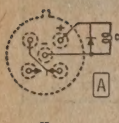
929-0550	A275KXX	24	20.02	18.20	17.29	16.38	14.56
929-0553	A275KXX	120	20.02	18.20	17.29	16.38	14.56
929-0556	A275KXX	240	20.02	18.20	17.29	16.38	14.56
929-0560	A275KXX91	24	23.98	21.80	20.71	19.62	17.44
929-0563	A275KXX91	120	23.98	21.80	20.71	19.62	17.44
929-0566	A275KXX91	240	23.98	21.80	20.71	19.62	17.44
929-0730	B175KXX	115	30.25	27.50	26.13	24.75	22.00
929-0733	B175KXX	240	30.25	27.50	26.13	24.75	22.00

ecognized Under the Component Program of Underwriter's Laboratories, Inc.

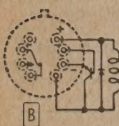
Teledyne Relays

TYPE TO-5 SIZE RELAYS

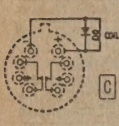
Performance-tested relays ideal for high-isolation switching and RF applications. Feature all-welded construction; TO-5 transistor type enclosure, hermetically sealed. Meet MIL-R-5757D. Type 712 is industrial version, useful in many applications. Suffix D of Type No. indicates internal 1N5315 diode for arc suppression; Suffix T indicates internal 2N222A transistor driver chip. *SPDT contacts. †DPDT contacts. Life: 10,000,000 operations at low level: 1,000,000 at 0.5 amp, 28V DC resistive; 100,000 at 1 amp, 28V resistive. Contact Resistance, 0.1 ohm maximum before life 0.2 ohm after life test at max. current. Operative Power, pull-25° C: 431, 40 mW; 432, 60 mW; 412, 130 mW; 712 185 others, 100 mW. Contact Bounce, less than 1.5 ms. except 420 2.0 ms; 712, 4.0 ms max. Overload, 2 amps at 28 VDC. Vibra 30 G's to 3000 cps. Shock, 80 G's for 11 ms. −65° C to +12 except 712, −55°C to +70°C. Operate Time. 2 ms. Can He Types 411, 412, 0.265"; 420, 421, 422, 712 are 0.275"; 431, 432, 0.



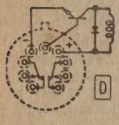
Stock No.	Mfr's Type	Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-Up
959-1925	411-6*	E	6	125	24.72	20.60	18.55	16.50
959-1927	411-9*	E	9	280	24.72	20.60	18.55	16.50
959-1929	411-12*	E	12	500	24.72	20.60	18.55	16.50
959-1931	411-18*	E	18	1130	24.72	20.60	18.55	16.50
959-1933	411-26*	E	26.5	2000	24.72	20.60	18.55	16.50



Stock No.	Mfr's Type	Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-Up
959-1901	411D-6*	A	6	125	29.52	24.60	22.55	20.50
959-1903	411D-9*	A	9	280	29.52	24.60	22.55	20.50
959-1905	411D12*	A	12	500	29.52	24.60	22.55	20.50
959-1908	411D-18*	A	18	1130	29.52	24.60	22.55	20.50
959-1910	411D-26*	A	26.5	2000	29.52	24.60	22.55	20.50



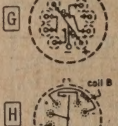
Stock No.	Mfr's Type	Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-Up
959-1914	411T-6*	B	6	125	31.92	26.60	24.55	22.50
959-1916	411T-9*	B	9	280	31.92	26.60	24.55	22.50
959-1918	411T-12*	B	12	500	31.92	26.60	24.55	22.50
959-1920	411T-18*	B	18	1130	31.92	26.60	24.55	22.50
959-1922	411T-26*	B	26.5	2000	31.92	26.60	24.55	22.50



Stock No.	Mfr's Type	Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	50-Up
959-1964	412-6†	F	6	98	32.64	27.20	24.50	21.80
959-1966	412-9†	F	9	220	32.64	27.20	24.50	21.80
959-1968	412-12†	F	12	390	32.64	27.20	24.50	21.80
959-1970	412-18†	F	18	880	32.64	27.20	24.50	21.80
959-1972	412-26†	F	26.5	1560	32.64	27.20	24.50	21.80
959-1940	412D-6†	F	6	98	37.44	31.20	28.50	25.80
959-1942	412D-9†	F	9	220	37.44	31.20	28.50	25.80
959-1944	412D-12†	F	12	390	37.44	31.20	28.50	25.80
959-1946	412D-18†	F	18	880	37.44	31.20	28.50	25.80
959-1948	412D-26†	F	26.5	1560	37.44	31.20	28.50	25.80

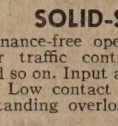
Stock No.	Mfr's Type	Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	
959-1952	412T-6†	D	6	98	39.84	33.20	30.50	2
959-1954	412T-9†	D	9	220	39.84	33.20	30.50	2
959-1956	412T-12†	D	12	390	39.84	33.20	30.50	2
959-1958	412T-18†	D	18	880	39.84	33.20	30.50	2
959-1960	412T-26†	D	26.5	1560	39.84	33.20	30.50	2

Stock No.	Mfr's Type	Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	
959-1977	420-26†	G	26.5	2000	42.48	35.40	35.40	3
959-1979	421-26*	H	26.5	2000	34.44	28.70	28.70	2
959-1981	422-26	J	26.5	2000	47.28	39.40	39.40	3
959-1983	431-4.0K*	E	26.5	4000	28.32	23.60	21.55	1
959-1985	432-26†	F	26.5	3300	36.24	30.20	27.50	2



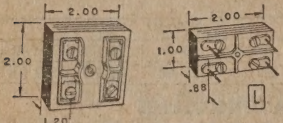
Stock No.	Mfr's Type	Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	
959-2016	712-6	F	6	100	11.88	9.90	9.90	
959-2019	712-9	F	9	220	11.88	9.90	9.90	
959-2021	712-12	F	12	390	11.88	9.90	9.90	
959-2024	712-18	F	18	880	11.88	9.90	9.90	
959-2027	712-26	F	26.5	1560	11.88	9.90	9.90	

Stock No.	Mfr's Type	Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	
959-1989	712D-6	C	6	100	13.38	11.15	11.15	1
959-1991	712D-9	C	9	220	13.38	11.15	11.15	1
959-1993	712D-12	C	12	390	13.38	11.15	11.15	1
959-1995	712D-18	C	18	880	13.38	11.15	11.15	1
959-1997	712D-26	C	26.5	1560	13.38	11.15	11.15	1



Stock No.	Mfr's Type	Fig.	Coil VDC	Coil Ohms	EACH 1-9	10-24	25-49	
959-2002	712T-6	D	6	100	16.68	13.90	13.90	1
959-2004	712T-9	D	9	220	16.68	13.90	13.90	1
959-2006	712T-12	D	12	390	16.68	13.90	13.90	1
959-2008	712T-18	D	18	880	16.68	13.90	13.90	1
959-2010	712T-26	D	26.5	1560	16.68	13.90	13.90	1

SOLID-STATE RELAYS



High reliability and maintenance-free operation make relays ideal for traffic control, emergency power systems and so on. Input and output transient protection. Low contact resistance and contacts withstanding overloads of 1000% above ratings. Lack of moving tacts prevent arcing for switching in explo atmospheres. High contact surge rating lighting control systems. Only units rate amps or higher need external heat sinkin

HIGH POWER, HIGH INPUT UNITS (Fig. K)

Stock No.	Mfr's Type	Input	Output VAC max.	Output Amps	EACH 1-9	10-24	25-49	50-Up
959-2100	61A-14A1-9	3-8 VDC	140	14	32.70	31.10	29.40	27.80
959-2101	61A-14A1-10	7-85 VDC	140	14	38.20	36.30	34.40	32.50
959-2102	61A-14A1-11	90-280 VAC	140	14	34.50	32.80	31.00	29.30
959-2103	61A-14A2-9	3-8 VDC	280	14	35.40	33.60	31.90	28.30
959-2104	61A-14A2-10	7-85 VDC	280	14	40.80	38.80	36.70	34.70
959-2105	61A-14A2-11	90-280 VAC	280	14	37.30	35.40	33.60	31.70
959-2106	61A-21A1-9	3-8 VDC	140	21	35.50	33.80	32.00	30.20
959-2107	61A-21A1-10	7-85 VDC	140	21	40.90	38.80	36.80	34.80
959-2108	61A-21A1-11	90-280 VAC	140	21	37.30	35.40	33.60	31.70
959-2109	61A-21A2-9	3-8 VDC	280	21	38.00	36.10	34.20	32.30
959-2110	61A-21A2-10	7-85 VDC	280	21	43.50	41.40	39.20	37.00
959-2111	61A-21A2-11	90-280 VAC	280	21	40.30	38.30	36.30	34.30

HIGH PERFORMANCE, HIGH INPUT (Fig. L)

Stock No.	Mfr's Type	Input	Output VAC max.	Output Amps	EACH 1-9	10-24	25-49	50-Up
959-2155	601-1101	3-8 VDC	140	1	24.00	21.60	19.20	16.80
959-2156	601-1102	3-8 VDC	140	3	25.50	22.95	20.40	17.85
959-2157	601-1103	3-8 VDC	140	5	27.00	24.30	21.60	18.90
959-2158	601-1104	3-8 VDC	140	7	28.50	25.65	22.80	19.95
959-2159	601-1105	3-8 VDC	140	10	30.50	27.45	24.40	21.35
959-2160	601-1106	3-8 VDC	280	1	25.00	22.50	20.00	17.50
959-2161	601-1107	3-8 VDC	280	3	26.50	23.85	21.20	18.55
959-2162	601-1108	3-8 VDC	280	5	28.00	25.20	22.40	19.60
959-2163	601-1109	3-8 VDC	280	7	29.50	26.55	23.60	20.65
959-2164	601-1110	3-8 VDC	280	10	31.50	28.35	25.20	22.05
959-2165	601-1111	7-85 VDC	140	1	24.00	21.60	19.20	16.80
959-2166	601-1112	7-85 VDC	140	3	25.50	22.95	20.40	17.85
959-2167	601-1113	7-85 VDC	140	5	27.00	24.30	21.60	18.90
959-2168	601-1114	7-85 VDC	140	7	28.50	25.65	22.80	19.95
959-2169	601-1115	7-85 VDC	140	10	30.50	27.45	24.40	21.35
959-2170	601-1116	7-85 VDC	280	1	25.00	22.50	20.00	17.50
959-2171	601-1117	7-85 VDC	280	3	26.50	23.85	21.20	18.55
959-2172	601-1118	7-85 VDC	280	5	28.00	25.20	22.40	19.60
959-2173	601-1119	7-85 VDC	280	7	29.50	26.55	23.60	20.65
959-2174	601-1120	7-85 VDC	280	10	31.50	28.35	25.20	22.05
959-2175	601-1121	90-280 VAC	140	1	24.50	22.05	19.60	17.15
959-2176	601-1122	90-290 VAC	140	3	26.00	23.40	20.80	18.20
959-2177	601-1123	90-280 VAC	140	5	27.50	24.75	22.00	19.25
959-2178	601-1124	90-280 VAC	140	7	29.00	26.10	23.20	20.30

HIGH PERFORMANCE, HIGH INPUT (Cont'd)

Stock No.	Mfr's Type	Input	Output VAC max.	Output Amps	EACH 1-9	10-24	25-49	
959-2179	601-1125	90-280 VAC	140	10	31.00	27.90	24.80	2
959-2180	601-1126	90-280 VAC	280	1	25.50	22.95	20.40	1
959-2181	601-1127	90-280 VAC	280	3	27.00	24.30	21.60	1
959-2182	601-1128	90-280 VAC	280	5	28.50	25.65	22.80	1
959-2183	601-1129	90-280 VAC	280	7	30.00	27.00	24.00	2
959-2184	601-1130	90-280 VAC	280	10	32.00	28.80	25.60	2

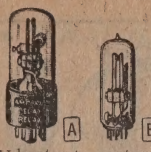
LOW COST COMMERCIAL UNITS (Fig. L)

Stock No.	Type 601-	Input	Output VAC max.	Output Amps	EACH 1-9	10-24	25-49	
959-2115	1001	3-10 VDC	140	1	14.00	12.20	11.20	
959-2116	1002		140	3	15.50	13.50	12.40	1
959-2117	1003		140	5	17.00	15.30	13.60	1
959-2118	1004		140	7	18.50	16.60	14.80	1
959-2119	1005		140	10	20.50	18.45	16.40	1
959-2020	1006		280	1	14.75	13.30	11.80	1
959-2121	1007		280	3	16.25	14.60	13.00	1
959-2122	1008		280	5	17.75	16.00	14.20	1
959-2123	1009		280	7	19.25	17.30	15.40	1
959-2124	1010		280	10	21.25	19.15	17.05	1
959-2125	1011	6-32 VDC or 15-45 VAC	140	1	14.00	12.20	11.20	
959-2126	1012		140	3	15.50	13.50	12.40	1
959-2127	1013		140	5	17.00	15.30	13.60	1
959-2128	1014		140	7	18.50	16.60	14.80	1
959-2129	1015		140	10	20.50	18.45	16.40	1
959-2130	1016		280	1	14.75	13.30	11.80	1
959-2131	1017		280	3	16.25	14.60	13.00	1
959-2132	1018		280	5	17.75	16.00	14.20	1
959-2133	1019		280	7	19.25	17.30	15.40	1
959-2134	1020		280	10	21.25	19.15	17.05	1
959-2135	1021	20-75 VDC or 60-140 VAC	140	1	14.00	12.20	11.20	
959-2136	1022		140	3	15.50	13.50	12.40	1
959-2137	1023		140	5	17.00	15.30	13.60	1
959-2138	1024		140	7	18.50	16.60	14.80	1
959-2139	1025		140	10	20.50	18.45	16.40	1
959-2140	1026	20-75 VDC or 60-140 VAC	280	1	14.75	13.30	11.80	1
959-2141	1027		280	3	16.25	14.60	13.00	1
959-2142	1028		280	5	17.25	16.00	14.20	1
959-2143	1029		280	7	19.25	17.30	15.40	1
959-2144	1030		280	10	21.25	19.15	17.05	1

Large Quantity Users Write for Higher Lot Pri

Special Relays, Relay Chassis, Light Controls

AMPERITE THERMAL RELAYS



ergized heaters close contacts for NO Types
pen for C Types after rated delay period.
ay heater operates on AC or DC. Heater
ws 2 watts; may operate continuously.
ST contact: 3 A @ 115 VAC; 1 A @ 220
C. Voltage breakdown: 800 V; heater-to-
tact, 800 V; except *250 V contact and 500 V heater-to-contact.
np. range: −55° to +70°C. Tolerance ±30%. Octal base size:
" dia., 2⅞" high less prongs. 9-pin miniature: ¾" dia., 2⅝" high.
cify Type No. as well as Stock No. when ordering. Octal, 4 oz, 9-pin,
z.

A OCTAL BASE TUBE SHELL

elay onds	Type NO. Normally Open			Type C. Normally Closed		
	6.3 V	26 V	115 V	6.3 V	26 V	115 V
2*	6N02	26N02	115N02	6C2	26C2	115C2
3*	.....	26N03	115N03	.....	26C3	115C3
5*	6N05	26N05	115N05	6C5	26C5	115C5
10*	6N010	26N010	115N010	6C10	26C10	115C10
15	6N015	26N015	115N015	.....	26C15	115C15
20	6N020	26N020	115N020	.....	.....	115C20
30	6N030	26N030	115N030	6C30	26C30	115C30
45	6N045	.....	115N045	.....	.....	115C45
60	6N060	26N060	115N060	6C60	.....	115C60
20	6N0120	26N0120	115N0120	.....	.....	115C120
80	6N0180	26N0180	115N0180	6C180	26C180	115C180

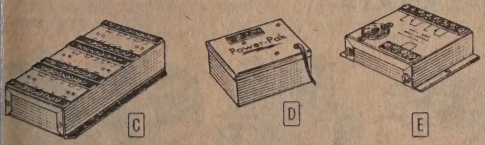
C0005. 1-49.....Each 2.95 50-Up.....Each 2.40

B MINIATURE 9-PIN TUBE SHELL

elay onds	Type NO. Normally Open			Type C. Normally Closed		
	6.3 V	26 V	115 V	6.3 V	26 V	115 V
2*	6N02T	26N02T	115N02T	6C2T	26C2T	115C2T
3*	.....	26N03T	115N03T	.....	26C3T	115C3T
5*	6N05T	26N05T	115N05T	6C5T	26C5T	115C5T
10*	6N010T	26N010T	115N010T	6C10T	26C10T	115C10T
15	6N015T	.....	.....	.....	26C15T	115C15T
20	.....	26N020T	115N020T	6C20T	26C20T	115C20T
30	6N030T	26N030T	115N030T	6C30T	.....	115C30T
45	6N045T	.....	115N045T	.....	.....	.....
60	.....	26N060T	115N060T	6C60T	26C60T	115C60T
90	.....	.....	.....	.....	.....	115C90T
20	.....	26N0120T	115N0120T	6C120T	.....	115C120T

C0006. 1-49.....Each 2.95 50-Up.....Each 2.40

SOUNDOLIER PAKS, POWER SUPPLIES



C D E

RELAY PAKS WITH ACCESSORY POWER SUPPLIES

C RP22 SERIES DC "RELAY PAKS." Fully enclosed sets of relays, each internally wired to a separate 8-terminal strip. "Instant Mount" chassis uses double-faced pressure-sensitive foam tape or standard hardware. Relays are 24 VDC, DPDT, with silver alloy gold-flash contacts rated 5 amps. Coils can be externally wired in series or parallel. Cadmium plated, cold rolled steel chassis; gold irridescent finish. Clearly marked terminals.

Stock No.	Mfr's Type	No. of Relays	Size, Inches	Wt., Lbs.	EACH
963-2002	RP22-2	2	3½x4½x2¼	1¼	13.98
963-2004	RP22-4	4	6⅞x4½x2¼	2½	26.40
963-2006	RP22-6	6	10¼x4½x2¼	3¼	38.55
963-2008	RP22-8	8	13⅝x4½x2¼	4½	49.73
963-2010	RP22-10	10	17x4½x2¼	5¼	60.30

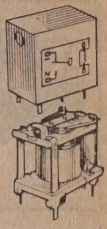
D MODEL PS24-07 DC POWER SUPPLY. Delivers 700 mA at 24 VDC; mounts on "Relay Paks" above. Fused primary, full wave selenium bridge, 7½% ripple at full load. Steel chassis. 4½x3½x2⅛". 6-ft. cord. 3-term. strip. 117 VAC.
963-0807. Shpg. wt. 2½ lbs.....16.50

E PRC SERIES PLUG-IN RELAY CHASSIS. Heavy gauge steel chassis with octal sockets for one or two plug-in DPDT relays. Eight screw terminals (per socket) eliminate soldering.

Stock No.	Mfr's Type	Sockets	Terminal Strips	Size, Inches	Wt., Lbs.	EACH
963-0501	PRC-1	1	1-6, 1-2 term.	4¼x3⅝x1⅜	¾	4.75
963-0502	PRC-2	2	2-8 terminal	6¾x3⅝x1⅜	1¼	8.00

CORNELL-DUBILIER RELAYS

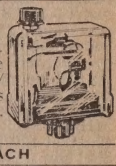
MINIATURE GENERAL PURPOSE RELAYS



600 SERIES. Sensitive relays with tamperproof nylon dust cover. Compact size with PC terminals. Ideal for remote control, warning systems, power amplifier, other light commercial/industrial uses. Recognized under the Component Program of Underwriter's Laboratories. High reliability and long life at rated loads. Palladium crossbar contacts; dry circuit to 2 amps resis. at 28 VDC or 115 VAC. Contacts: SPDT except 683 types, DPDT. Nom. DC coil power: SPDT, 100 mW; DPDT, 360 mW. 1.2x1.2x0.75". Shpg. wt. 1 oz.

Stock No.	Mfr's Type	Coil		EACH					
		Volts	Ohms	1-24	25-49	50-99	100-499	500-999	1000-Up
755-7510	603-6V	6 DC	340	2.11	2.00	1.90	1.42	1.18	1.11
755-7512	603-12V	12 DC	1350	2.43	2.31	2.19	1.64	1.36	1.28
755-7514	603-24V	24 DC	5400	2.82	2.68	2.54	1.90	1.58	1.48
755-7540	683-6V	6 DC	100	3.30	3.14	2.97	2.23	1.85	1.73
755-7542	683-12V	12 DC	400	3.36	3.19	3.02	2.27	1.88	1.76
755-7544	683-24V	24 DC	1500	3.43	3.26	3.09	2.32	1.92	1.80
755-7519	623-12V	12 AC	30	2.78	2.64	2.50	1.88	1.56	1.46
755-7520	623-24V	24 AC	110	2.82	2.68	2.54	1.90	1.58	1.48
755-7521	623-115V	115 AC	2100	3.02	2.87	2.72	2.04	1.69	1.59

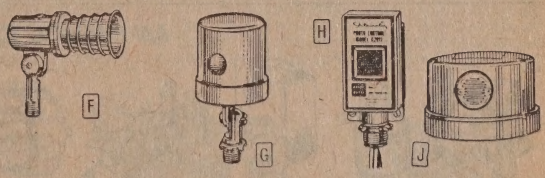
TS SERIES TIME DELAY RELAYS



Solid-state circuit relays with ±1% repeatability. Dustproof polycarbonate case with octal plug. Infinite knob adjustment; DPDT 10-ampere contacts. AC/DC input; delay on energize. Reset: 25 milliseconds typical. Operating temperature: −40° to +85°C. Size, 1 13/32x2 17/32x2 13/16". Shpg. wt. 6 oz.

Stock No.	Mfr's Type	Input VAC/DC	Time Range, Sec.	EACH			
				1-24	25-49	50-99	100-Up
755-4720	TS012AB015	12	0-15	24.00	21.00	18.00	15.00
755-4730	TS024AB015	24	0-15	24.00	21.00	18.00	15.00
755-4740	TS115AB015	115	0-15	26.00	22.75	19.50	16.25
755-4725	TS012AB060	12	0-60	27.00	23.65	20.25	16.90
755-4735	TS024AB060	24	0-60	27.00	23.65	20.25	16.90
755-4745	TS115AB060	115	0-60	28.00	24.50	21.00	17.50

INTERMATIC LIGHT CONTROL DEVICES



Lights turn on at dusk, off at dawn completely automatically. Modern printed circuits are housed in sturdy, weather-tight aluminum. Self-cleaning lens and moisture-proof photocell assure reliability in all weather. Will handle tungsten, mercury vapor or fluorescent lighting applications. AC.

F SERIES K1600. Photocell and Par lampholder complete in one unit. Can be connected with separate light cluster for decorative or flood lighting. ½" threaded mount. 3-5 fc on, 7-10 off. Size, 6 9/16x 2 7/8x6 5/8". Shpg. wt. 1 lb.

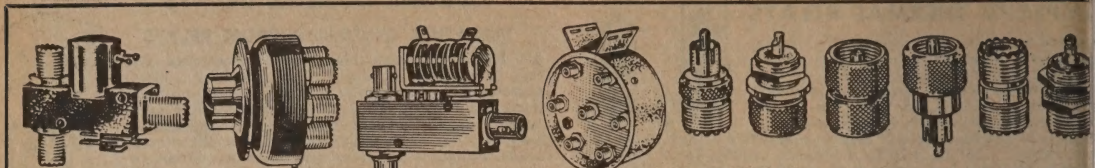
G SERIES K1100. Adjustable stem permits mounting at any angle up to 80°. 2 fc on, 5 fc off. Size, 5¾x2½". Shpg. wt. ½ lb.

H SERIES K1800, K2000, K2300. Fail-safe operation assures lighting will remain "ON" should control circuit fail. *Rated below for tungsten only; rated 1250W for mercury vapor, fluorescent use. K1800: 2-7 fc on, 5-12 off. K2011: 1½ fc on, 5-9 fc off. K2311: 2-5 fc on, 8-12 off. 4x1¾x2". Shpg. wt. ¾ lb.

J SERIES K2100. Molded case has three-prong NEMA twist-and-lock plug. 2½ fc on, 5½ fc off. 3⅛ dia.x2". Shpg. wt. ½ lb.

Stock No.	Type	Fig.	Volts	Watts	Hz	EACH
818-1005	K1111	G	105-130	650	60-50	12.32
818-1006	K1112	G	208-240	650	60-50	12.32
818-1002	K1121	G	105-130	1500	60-50	13.62
818-1016	K1122	G	208-240	1500	60-50	13.62
818-1040	K1611	F	105-130	1000	60-50	11.02
818-1042	K1811	H	120	*1800	60	9.72
818-1043	K1812	H	240	*1800	60	9.72
818-1044	K2011	H	125-130	*1500	60-50	9.07
818-1045	K2111	J	105-130	1000	60-50	9.72
818-1046	K2112	J	208-240	1000	60-50	9.72
818-1048	K2311	H	105-130	3000	60-50	13.62

Coaxial Relays, Switches, Connectors

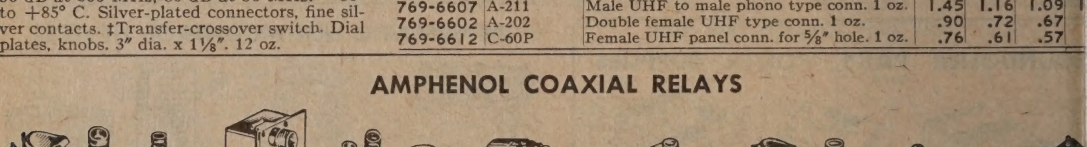


DOW-KEY COAXIAL RELAYS, SWITCHES AND CONNECTORS

UHF conn. except #BNC. All are 50 ohms. **60 Series.** For up to 1 kW. VSWR less than 1.15:1, DC to 500 MHz. Types with asterisk (*) have receiver-protecting connector for 100 dB RF isolation, 0-500 MHz. Types ending in "2" include external DPDT contacts (5 amps @ 110 VAC). 2¾x3¾x1⅛". 10 oz. **260 Series.** DPDT switch for up to 1 kW, 0-500 MHz. VSWR below 1.15:1; isolation exceeds 30 dB @ 500 MHz; loss under 0.03 dB @ 30 MHz. Life, over 1 million operations. 2¾x3¾x1¾". Wt., 12 oz. **260B Series.** Above, but internally connected in de-energized position. Types with dagger (†) include external DPDT contacts for aux. circuits (5 A @ 110 VAC). 12 oz. **Type 71.** SP6T weatherproof switch. 1 kW, 0-500 MHz; VSWR, 1.1:1 at 100 MHz; isolation, 40 dB at 100 MHz; over 1 million operations. 5¾" dia., 2¼" deep. Mtg. strap. 3 lbs. **77 Series.** Miniature SPDT relays; up to 250 watts, DC to 1000 MHz. VSWR, 1.1:1 at 400 MHz. Crosstalk, 35 dB at 400 MHz. Insertion loss, under .03 at 500 MHz. §SPDT auxiliary contacts; 5 amps @ 110 VAC. 2⅜x2⅛x1⅛". 5 oz. **78 Series.** Manual coax switches (not wafer switches) rated 1 kW to 500 MHz. VSWR, 1.05:1 at 150 MHz. Isolation, 50 dB at 500 MHz, 80 dB at 30 MHz. −55° to +85° C. Silver-plated connectors, fine silver contacts. ‡Transfer-crossover switch. Dial plates, knobs. 3" dia. x 1⅛". 12 oz.

Stock No.	Mfr's Type	Action	Coil V	Voltage Range	EACH 1-9	10-24	25-49	50
769-6703	60-2204	SPDT	12 DC	9.5-14	20.41	13.06	12.25	11
769-6709	60-2304	SPDT	28 DC	19-31	20.41	13.06	12.25	11
769-6711	60-2604	SPDT	115 AC	100-125	20.41	13.06	12.25	11
769-6706	60-2228*	SPDT	12 DC	9.5-14	22.48	14.38	13.48	12
769-6714	60-2628*	SPDT	115 AC	110-115	22.48	14.38	13.48	12
769-6717	60-222842*	SPDT	12 DC	9.5-14	24.75	15.84	14.85	13
769-6720	60-232842*	SPDT	28 DC	19-31	24.75	15.84	14.85	13
769-6724	60-262842*	SPDT	115 AC	100-125	24.75	15.84	14.85	13
769-6722	60-260442	SPDT	115 AC	100-125	22.69	14.52	13.61	12
769-6780	260-2204	DPDT	12 DC	9.5-14	34.03	21.78	20.41	19
769-6782	260-2604	DPDT	115 AC	100-125	34.03	21.78	20.41	19
769-6772	260B2604	DPDT	115 AC	100-125	32.86	21.03	19.72	18
769-6775	260B260442†	DPDT	115 AC	100-125	35.13	22.48	21.07	19
769-6728	71-260402	SP6T	115 AC	100-125	73.03	54.42	51.02	47
769-6737	77-220202#	SPDT	12 DC	9.5-14	15.81	10.12	9.49	8
769-6742	77-230202#	SPDT	28 DC	19-31	15.81	10.12	9.49	8
769-6739	77-220232§#	SPDT	12 DC	9.5-14	15.81	10.12	9.49	8
769-6745	77-230232§#	SPDT	28 DC	19-31	17.53	11.22	10.52	9
769-6751	78-0204	SPDT	.....	.....	19.25	12.32	11.55	10
769-6756	78-0304	SP3T	.....	.....	19.88	12.72	11.92	11
769-6761	78-0604	SP6T	.....	.....	21.53	13.78	12.92	12
769-6766	78-0904	‡T-C	.....	.....	22.89	14.65	13.73	12
769-6748	78-0202#	SPDT	.....	.....	21.65	13.86	12.99	12
769-6754	78-0302#	SP3T	.....	.....	23.03	14.74	13.82	12
769-6759	78-0602#	SP6T	.....	.....	27.09	17.34	16.25	15
769-6614	C-201	Male UHF panel conn. for ⅝" hole. 1 oz.			1.18	.94	.88	
769-6605	A-210	Female UHF to male phono type conn. 1 oz.			1.36	1.09	1.02	
769-6609	A-F2	Double male UHF locking type conn. 1 oz.			.84	.67	.63	
769-6607	A-211	Male UHF to male phono type conn. 1 oz.			1.45	1.16	1.09	
769-6602	A-202	Double female UHF type conn. 1 oz.			.90	.72	.67	
769-6612	C-60P	Female UHF panel conn. for ⅝" hole. 1 oz.			.76	.61	.57	

AMPHENOL COAXIAL RELAYS

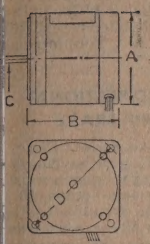


Precision coax units. Maximum time to operate and release is 20 milliseconds. Gold-plated, fine silver contacts assure reliable low-level operation. Minimum life expectancy is 1,000,000 cycles, when switch is operated at speeds of less than 10 Hz. Switches are impedance matched to 50-ohm cable, though loss is negligible with 75-ohm cable. Operation is break-before-make. Units meet applicable portions of military connector specifications as follows: B connectors, MIL-C-3608; Type N connectors, MIL-C-71. All mater used are corrosion resisting types or are suitably plated to w stand the 48-hour test condition "B" requirement of MIL-S 202. *Transfer type SA1348/U. †Miniature type with 5116 scr on connection. §Dynaform high-frequency type.

Stock No.	Mfr's Type	Termination	Action	Connectors	Freq. (MHz)	Power (W)	Coil Volts	Coil Ohms	Wt., Oz.	EACH 1-9	10-24	25-49	50-
714-0705	315-010002-3	Open	SPDT	BNC	1000	100	26 DC	280	4	25.30	18.10	15.94	14.0
714-0707	316-010082-3	Short	SPDT	BNC	2750	100	26 DC	280	4½	28.27	20.22	17.82	15.
714-0711	316-010102-8	Short	SPDT	BNC	2750	100	115 AC	550	6½	30.47	21.79	19.21	16.
714-0713	317-010202-3	Short	SPDT	BNC	2750	100	26 DC	280	4½	28.27	20.22	17.82	15.
714-0721	318-010381-0	Short	SPDT	BNC	2750	100	lever manual	.....	4½	28.27	20.22	17.82	15.
714-0723	318-010382-3	Short	SPDT	BNC	2750	100	26 DC	280	4½	28.27	20.22	17.82	15.
714-0725	318-010395-8	Short	SPDT	BNC	3000	100	115 AC	550	6½	30.47	21.79	19.21	16.
714-0727	318-010407-3	Open	SPDT	BNC	2750	100	26 DC	280	4½	28.27	20.22	17.82	15.
714-0729	318-011165-3	Res.	SPDT	BNC	2750	100	26 DC	280	4½	32.67	23.36	20.59	18.
714-0731	318-011576-8	Res.	SPDT	BNC	2750	100	115 AC	550	6½	34.87	24.94	21.98	19.
714-0733	319-011141-0	Open	SPDT	BNC	1000	100	rotary manual	.....	4½	46.20	33.03	29.11	25.
714-0735	320-010931-3	Open	SPDT	N	1200	1000	26 DC	200	20	61.38	43.89	38.68	34.
714-0739	321-011064-3	Open	DPDT	BNC	1000	100	26 DC	200	10	38.94	27.85	24.54	21.
714-0747	323-011651-3	Open	1P4T	BNC	900	100	26 DC	280	14	55.88	39.96	35.21	31.
714-0743	322-011442-0	Open	1P6T	BNC	2750	100	rotary manual	.....	12	71.50	51.13	45.05	39.
714-0745	323-011506-3	Short	1P4T	BNC	1500	100	26 DC	280	14	55.88	39.96	35.21	31.
714-0750	325-011635-3	Short	1P6T	BNC	900	100	26 DC	280	21	70.40	50.34	44.35	39.
714-0752	325-011641-3	Open	1P6T	BNC	900	100	26 DC	280	21	70.40	50.34	44.35	39.
714-0754	327-010582-3	.....	Transfer	BNC	1000	100	26 DC	280	10½	39.27	28.08	24.75	21.
714-0760	335-010871-3†	Open	SPDT	5116	1500	100	26 DC	280	3	32.78	23.44	20.66	18.
714-0780	360-11891-15§	Open	SPDT	BNC	6000	100	26 DC	.....	4	29.40	21.02	18.52	16.
714-0782	360-11892-15§	Open	SPDT	TNC	6000	100	26 DC	.....	4	29.40	21.02	18.52	16.

Motors and AC Controls

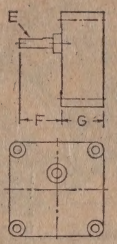
HITACHI Series M Motors



SERIES M MOTOR

S shaft for direct drive application

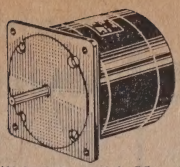
Code	Frame Size		
	6	8	10
A	2.36	3.15	4.00
B	2.56	3.07	4.06
C	.187	.250	.375
D	2.75	3.70	4.70



SERIES M GEARBOX

For P shaft only

Code	Frame Size			Model
	6	8	10	
E	.250	.375	.400	
F	1.04	1.34	1.26	
G	1.06	1.06	.....	6G5-1800
G	.....	1.30	.....	8G5-60
G	.....	1.54	.....	8G75-360
G	.....	1.89	.....	8G375-1800
G	.....	.....	1.61	10G5-36
G	.....	.....	1.97	10G50-180



MOTORS. Mfr's No. shows: 1. Type (HM) 2. Frame size (6) 3. Output drive shaft (S) 4. Watts output (1)—HM6S1—Hitachi M series boxes designed for conjunction with same frame size M series motor. GEARBOXES. Mfr's No. shows: 1. (6 G) specifies frame size six G gearbox (6 G) 2. 5 specifies gear ratio to one (6G 5—gearbox frame size 6, ratio 5 to 1). Use of M series gearbox requires motor with P(pinion) type shaft. Motor with S(straight) type shaft for use on direct drive applications. Each motor with universal mounting bracket and capacitor. Each gearbox with mounting screws and felt oil retainer and lubricant.

M6 GEARBOX

Stock No.	Mfr's. Type Ratio To-1	EACH
)8-0255	6G5	8.00
)8-0256	6G6	8.00
)8-0262	6G15	8.00
)8-0265	6G18	8.00
)8-0269	6G25	8.00
)8-0273	6G30	8.00
)8-0276	6G36	8.00
)8-0280	6G50	9.20
)8-0285	6G60	9.20
)8-0292	6G75	9.20
)8-0293	6G90	9.20
)8-0294	6G100	9.20
)8-0295	6G120	9.20
)8-0296	6G150	9.20

M6 GEARBOX (cont.)

Stock No.	Mfr's. Type Ratio To-1	EACH
808-0297	6G180	9.20
808-0298	6G225	9.20
808-0299	6G300	10.20
808-0300	6G360	10.20
808-0301	6G450	10.20
808-0303	6G900	11.40
808-0304	6G1800	11.40

M8 GEARBOX

Stock No.	Mfr's. Type Ratio To-1	EACH
808-0308	8G5	11.20
808-0309	8G6	11.20
808-0312	8G12.5	11.20
808-0314	8G15	11.20
808-0317	8G18	11.20

M8 GEARBOX (cont.)

Stock No.	Mfr's. Type Ratio To-1	EACH
808-0322	8G25	11.20
808-0326	8G30	11.20
808-0328	8G36	11.20
808-0333	8G50	12.60
808-0338	8G60	12.60
808-0342	8G75	12.60
808-0348	8G90	12.60
808-0354	8G100	12.60
808-0358	8G120	12.60
808-0362	8G150	12.60
808-0367	8G180	12.60
808-0374	8G225	12.60
808-0380	8G300	14.00
808-0387	8G360	14.00

M8 GEARBOX (cont.)

Stock No.	Mfr's. Type Ratio To-1	EACH
808-0410	8G450	14.00
808-0430	8G600	14.00
808-0448	8G900	15.40
808-0465	8G1800	15.40

M10 GEARBOX

Stock No.	Mfr's. Type Ratio To-1	EACH
808-0031	10G6	35.40
808-0034	10G12.5	35.40
808-0037	10G18	35.40
808-0040	10G30	35.40
808-0043	10G60	42.20
808-0046	10G100	42.20
808-0048	10G180	42.20

STERESIS SYNCHRONOUS

Stock No.	Mfr's Type	HM-	Torque Oz. In.	Speed rpm	EACH
3-0006	6S1		0.70	1,800	30.40
3-0005	6P1		0.70	1,800	30.40
3-0013	8S5		3.60	1,800	34.80
3-0012	8P5		3.60	1,800	34.80
3-0019	10S15		11.00	1,800	60.60
3-0018	10P15		11.00	1,800	60.60
3-0009	6SD1		0.70		38.40
3-0008	6PD1		0.70	1,800/	38.40
3-0024	10S15D7		5.50	3,600	77.80
3-0023	10P15D7		5.50		77.80

RELUCTANCE

Stock No.	Mfr's Type	Torque Oz. In.	Speed rpm	EACH
808-0111	SM6S2	1.40	1,800	30.40
808-0110	SM6P2	1.40	1,800	30.40
808-0120	SM8S5	3.50	1,800	34.80
808-0119	SM8P5	3.50	1,800	34.80
808-0129	SM8S10	7.00	1,800	34.80
808-0128	SM8P10	7.00	1,800	34.80
808-0140	SM10S15	9.60	1,800	60.60
808-0139	SM10P15	9.60	1,800	60.60
808-0156	SM10S20	14.00	1,800	60.60
808-0155	SM10P20	14.00	1,800	60.60

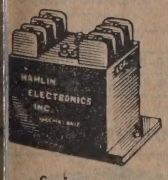
INDUCTION MOTORS

Stock No.	Mfr's Type	Torque Oz. In.	Speed rpm	EACH
808-0176	1M6S3	2.90	1,450	30.40
808-0174	1M6P3	2.90	1,450	30.40
808-0185	1M8S7	5.80	1,650	34.80
808-0183	1M8P7	5.80	1,650	34.80
808-0193	1M8S15	13.60	1,600	34.80
808-0191	1M8P15	13.60	1,600	34.80
808-0210	1M10S30	25.00	1,600	60.60
808-0209	1M10P30	25.00	1,600	60.60
808-0177	1M6S3-D1	1.40	1,600/	38.40
808-0175	1M6P3-D1	1.40	3,200	38.40

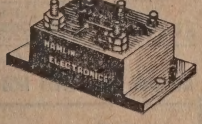
REVERSIBLE MOTORS

Stock No.	Mfr's Type	Torque Oz. In.	Speed rpm	EACH
808-0061	RM6S2	2.40	1,400	30.40
808-0060	RM6P2	2.40	1,400	30.40
808-0066	RM6S4	3.80	1,550	30.40
808-0065	RM6P4	3.80	1,550	30.40
808-0075	RM8S7	5.50	1,650	34.80
808-0074	RM8P7	5.50	1,650	34.80
808-0084	RM8S20	15.00	1,650	34.80
808-0083	RM8P20	15.00	1,650	34.80
808-0091	RM10S40	36.00	1,550	60.60
808-0090	RM10P40	36.00	1,550	60.60

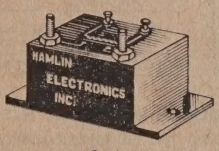
HAMLIN SELF-CONTAINED AC CONTROLLERS



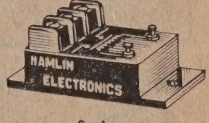
Series 612



Series 723



Series 733



Series 773

SERIES 612 2½-A/PHASE SOLID-STATE CONTROLLER

all dependable 3-phase controller for light motor control. Overds up to 80 A/phase (1 cycle). Quiet operation reduces R.F.I. l E.M.I. For use with low level logic. Contacts: 3PST—normally n. 208/240 V, 50-60 Hz AC. 2.61x1.5x1.82". 4¾ oz.

Stock No.	Mfr's Type	Coil Volts	Coil mA	EACH 1-9	10-24	25-49	50-99
)7-0040	612-11-100	5 VDC	50	37.70	33.90	32.00	30.90
)7-0041	612-11-300	24 VDC	13	37.70	33.90	32.00	30.90
)7-0042	612-11-500	24 VAC	13	37.70	33.90	32.00	30.90
)7-0043	612-11-600	Line V	13	37.70	33.90	32.00	30.90

RIES 723 ZERO-VOLTAGE 6-A SWITCHING CONTROLLER

id-state controller uses AC voltage through zero to cut R.F.I. l E.M.I. Operate time: 1 ms. Release time: ½ cycle. Contacts: ST—normally open. 723-21: 120 V, 50-60 Hz AC. 723-22: 240 50-60 Hz AC. *External contact. 2.61x1.5x1.463". 3½ oz.

)7-0044	723-21-000	*	*	20.50	18.50	17.40	16.40
)7-0045	723-21-100	5 VDC	28	23.00	20.70	19.60	18.40
)7-0046	723-21-300	24 VDC	8	23.00	20.70	19.60	18.40
)7-0047	723-22-000	*	*	23.00	20.70	19.60	18.40
)7-0048	723-22-100	5 VDC	28	25.50	23.00	21.75	20.40
)7-0049	723-22-300	24 VDC	8	25.50	23.00	21.75	20.40

SERIES 773 STANDARD 6-A SOLID-STATE CONTROLLER

Controls resistive, capacitive, inductive or incandescent loads. Zero current point turn off cuts R.F.I. and E.M.I. Contacts: SPST —normally open. 773-11: 120 V, 50-60 Hz AC. 773-12: 240 V, 50-60 Hz AC. *External contact. 2.5x1.25x1.11" 2¼ oz.

Stock No.	Mfr's Type	Coil Volts	Coil mA	EACH 1-9	10-24	25-49	50-99
807-0054	773-11-030	*	*	8.95	8.00	7.50	7.25
807-0055	773-11-130	5 VDC	28	10.75	9.75	9.25	8.80
807-0056	773-11-330	24 VDC	8	10.75	9.75	9.25	8.80
807-0057	773-12-030	*	*	10.05	9.50	8.55	8.25
807-0058	773-12-130	5 VDC	28	13.80	12.45	11.75	11.35
807-0059	773-12-330	24 VDC	8	13.80	12.45	11.75	11.35

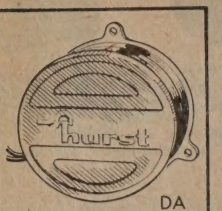
SERIES 733 LATCHING 6-A SOLID-STATE CONTROLLER

Controls AC load by pulses. DC pulses at rated voltage for 1 millisecond will set or reset controller. Contacts: SPST—normally open. 733-31-100/300: 120 V, 50-60 Hz AC. 733-32-100/300: 240 V, 50-60 Hz AC. 2.61x1.5x1.15". Wt., 2½ oz.

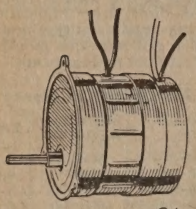
807-0050	733-31-100	5 VDC	33	10.60	9.55	9.00	8.70
807-0053	733-31-300	24 VDC	110	10.60	9.55	9.00	8.70
807-0051	733-32-100	5 VDC	33	15.05	13.55	12.80	12.35
807-0052	733-32-300	24 VDC	110	15.05	13.55	12.80	12.35

Synchronous Motors

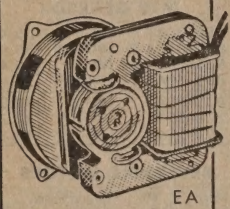
HEAVY-DUTY MOTORS WITH 40 TO 600 INCH-OUNCES OF TORQU



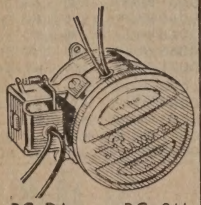
DA
SM



CA



EA



PC-DA PC-SM
AR-DA AR-SM

Rugged synchronous motors for continuous-duty use in educational training devices, lab and process controls, medical equipment, time switches, etc. Will not overheat in continuous duty or in stalled position. Operating Temp.: —40° C to +105° C;

40 INCH-OUNCE UNIDIRECTIONAL

SM Series. 40 inch-ounce at 1 rpm. Rugged shaded pole unidirectional motor with clockwise rotation. Instant start at full torque. Case: 1¾x2½" dia. Wt., 1 lb. *Specify ½, 1, 2, 3, 4, 5, 6, 10, 15, 30, or 60 rpm when ordering.

Stock No.	*rpm	EACH				
		1-9	10-24	25-49	50-99	100-Up
811C0135	½-60	13.51	12.16	11.55	10.98	10.43

100 INCH-OUNCE REVERSIBLE

CA Series. 100 in.-oz. at 1 rpm. (SPDT switching). 2½x2⅛" dia. Includes capacitor. Wt., 1¼ lbs. *Specify ⅓, ½, 1, 1½, 2, 2½, 3, 4, 5, 6, 8, 10, 12, 15, 16, 20, 24, 25, 30, 32, 33⅓, 40, 48, 50, 60, 64, 80, 100, 120, 150, 160, 200, 240, 400, 600, 800, or 1,000 rpm when ordering.

Stock No.	*rpm	EACH				
		1-9	10-24	25-49	50-99	100-Up
811C0055	⅓-1000	13.76	12.39	11.77	11.19	10.64

150 INCH-OUNCE UNIDIRECTIONAL

EA Series. 150 in.-oz. at 1 rpm. Open frame, shaded pole. Accurate timing motor, clockwise rotation. Case: 1⅝x2⅝x3 5/16". 3/16x1" Output shaft except† 3/32x¾". Wt., 1¼ lbs. *Specify 1, 2, 4, 6, 8, 10, 12, 20, 30, 60, 120, or 3600 rpm.

Stock No.	*rpm	EACH				
		1-9	10-24	25-49	50-99	100-Up
811C0065	1-120	10.29	9.25	8.79	8.35	7.93
811-0070	3600†	7.62	6.86	6.52	6.19	5.89

150 INCH-OUNCE REVERSIBLE

DA Series. 150 in.-oz. at 1 rpm. Instantly reversible (SPDT switch), highly accurate both clockwise and counter-clockwise. Effective magnetic shielding. Case: 1¾x2½" dia. 1¼ lbs. *Specify 1, 2, 4, 6, 8, 10, 12, 20, 30, 60, or 120 rpm.

Stock No.	*rpm	EACH				
		1-9	10-24	25-49	50-99	100-Up
811C0060	1-120	16.06	14.45	13.73	13.05	12.40

power required, 5 watts, 95-130V, 60 Hz AC. St less steel flatted shaft, 3/16" dia. x 1" long. Br bearings; brass gearing. Nickel plated cases. Mo ing, three #6 holes spaced 120°. Torque equa rpm rating, divided by speed.

40 INCH-OUNCE UNIDIRECTIONAL WITH CLUTCH AND BRAKE

PC-SM Positive Clutch and Brake Series. Basic motor as described at left with positive clutch instantaneous brake. Shock and vibration resist Starts in 20 milliseconds or less—stops 60 shaft in 12°; 1 rpm in 1/5°. Shpg. wt., 1¼ lbs. *S fy ½, 1, 2, 3, 4, 5, 6, 10, 15, 30, or 60 rpm when orde

Stock No.	*rpm	EACH				
		1-9	10-24	25-49	50-99	100
811C0130	½-60	19.65	17.68	16.80	15.95	15

100 INCH-OUNCE REVERSIBLE WITH POSITIVE ACTION CLUTCH

AR-DA Series. 100 inch-ounce, reversible. Feat high accuracy both clockwise and counter-cl wise. Operates as an automatic reset motor wh return spring is attached to the output shaft. W clutch is de-energized, the shaft is free for ma or automatic reset. Clutch mechanism is fully l cated and completely enclosed. Designed for he duty use and will easily handle full 100 in.-oz. ra Size and appearance same as PC series. Accu within 1/5 second at 1 rpm, more accurate at hi speeds. Maximum error in seconds 1.5625 div by the rpm. Case: 2½x2 1/16" dia. Clutch actua 7/8" height x 1 3/16" width. Shpg. wt., 1½ lbs. *Sp 1, 4, 6, 10, 30, or 60 rpm when ordering.

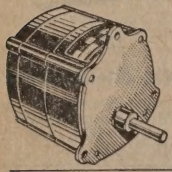
Stock No.	*rpm	EACH				
		1-9	10-24	25-49	50-99	100
811C0050	1-60	26.18	23.56	22.39	21.26	20

120 INCH-OUNCE REVERSIBLE

PC-DA Positive Brake and Clutch Series. Basic rev ible DA motor as described above, with pos clutch and instantaneous brake. Highly accu vibration and shock resistant. Starts in 20 m seconds—stops 60 rpm shaft in 1/5°. Shpg. 1½ lbs. *Specify 1, 2, 4, 6, 8, 10, 12, 20, 30, 60 or rpm when ordering.

Stock No.	*rpm	EACH				
		1-9	10-24	25-49	50-99	100
811C0125	1-120	22.20	19.98	18.98	18.03	17

MODEL GA 600-INCH-OUNCE REVERSIBLE H/S MOTORS

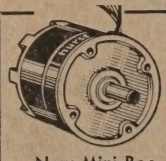


Capacitor phased hysteresis-synchronous reversible motors. Utilize full output torque without gearing damage. Lifetime lubrication. High-impact glass-reinforced Lexan housing. Stainless steel output shaft, ¼x1" (flatted) except 3600 rpm, ⅛" dia. 1.0 μF capacitor (±5%) included. Case: 2¾x2¾x3". Adapter plate (below) permits output shaft and stud locations to match many motors, 115 V, 60 Hz AC. Shpg. wt. 2¾ lbs. Specify speed.

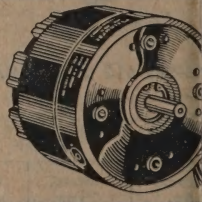
Stock No.	Speed rpm	Torque (Oz.-in.)	EACH					
			1-9	10-24	25-49	50-74	75-99	100-Up
811-0095	3600	.6	22.44	21.32	20.20	19.07	17.95	15.71
811C0090	300	2.0	29.10	27.64	26.19	24.74	23.29	20.37
811C0090	225	2.7	29.10	27.64	26.19	24.74	23.29	20.37
811C0090	180	3.3	29.10	27.64	26.19	24.74	23.29	20.37
811C0090	150	4.0	29.10	27.64	26.19	24.74	23.29	20.37
811C0090	120	5.0	29.10	27.64	26.19	24.74	23.29	20.37
811C0090	100	6.0	29.10	27.64	26.19	24.74	23.29	20.37
811C0090	60	10.0	29.10	27.64	26.19	24.74	23.29	20.37
811C0085	30	20.0	31.52	29.94	28.37	26.80	25.22	22.08
811C0085	18	33.0	31.52	29.94	28.37	26.80	25.22	22.08
811C0080	10	60.0	33.55	31.88	30.21	28.53	26.86	23.51
811C0080	6	100.0	33.55	31.88	30.21	28.53	26.86	23.51
811C0080	6	120.0	33.55	31.88	30.21	28.53	26.86	23.51
811C0080	4	150.0	33.55	31.88	30.21	28.53	26.86	23.51
811C0080	3	200.0	33.55	31.88	30.21	28.53	26.86	23.51
811C0080	2	300.0	33.55	31.88	30.21	28.53	26.86	23.51
811C0080	1	600.0	33.55	31.88	30.21	28.53	26.86	23.51

811-0075. Adapter Plate. Wt., 4 oz. ..... Each .83

MODEL HB AND MB MOTORS



New Mini-Bee
Model MB
1/100 hp



Honey-Bee
Model HB
1/50 hp

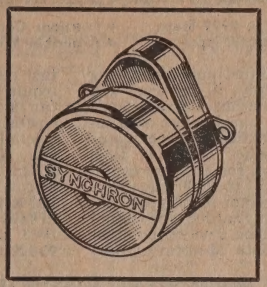
Precision 1800 rpm hysteresis-synchronous motors for accu speed. Inverted rotor design for greatly reduced flutter charact tics. Sealed ball bearings, lifetime lubrication. Temperature ri only 40° C even under full load conditions. Fully reversib capacitor included. Starting torque: Model MB, 6 inch-ou Model HB, 12 inch-ounces. Sync torque: Model MB, 5¼ i ounces; Model HB, 11 inch-ounces. Dimensions: Model MB, 2 diameter x 2⅜" length; Model HB, 3¾" diameter x 3⅜" len Mountings: Model MB, (4) #8-32 UNC 2B tapped mounting h equally spaced on 2.000" diameter B.C. 5/16" max. thread eng ment; Model HB, (4) #10-32-2B UNF tapped mounting h equally spaced on 2.625" diameter B.C. 5/16" max. thread eng ment. Both models have 5/16x1" stainless steel shaft. For volts, 60Hz AC. Shpg. wts. MB: 2 lbs. HB: 4 lbs.

Stock No.	Mfr's Type	EACH					
		1-4	5-9	10-24	25-49	50-99	100
811-0110	MB	50.00	48.00	47.50	42.89	39.45	37
811-0105	HB	65.00	62.00	57.50	48.84	45.39	43

Specify Both Stock No. and Output Speed on Mo

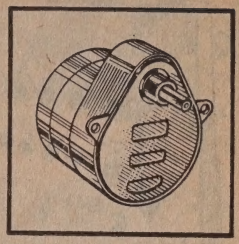
Hansen and R.M.S. Motors

HANSEN "SYNCHRON" AND "900" SERIES SYNCHRONOUS MOTORS



YNCHRON." Hysteresis timing tors. Sealed gear case, brass urs and one-piece steel pinions. o-piece field structure, shaded es. Mount in any position. At rpm or more, motor can be lled without damage. Double ring on rotor shaft, reduction in and output shaft. K12RC, watt "K" coil, 20-oz.-in. torque l rpm. I12 RC. 3 watt "I" coil, oz.-in. torque at speeds shown. have Type 12 flatted shaft, 1/8" x 3/8" long. Clockwise. Two 2" dia. mtg. holes spaced 1.875", 40° to +140° F. 110 V, 60 Hz . *Specify speed: Type K12RC, 2, 3, 4, 6, 10, 30, 50, 60 rpm; e I12 RC, 1, 2, 4, 10, or 12 revolutions per hour. 12 oz.

Stock No.	Mfr's Type	Speed* (Specify)	EACH 1-9	10-24	25-49	50-99	100-Up
9 C 0916	K12RC	1-60 rpm	5.60	4.35	3.20	2.70	2.10
9 C 0910	I12RC	1 or 2 rph	5.67	4.42	3.27	2.77	2.17
9 C 0912	I12RC	4-12 rph	5.62	4.37	3.22	2.72	2.12



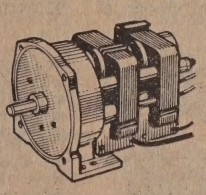
900 SERIES. Self-starting hysteresis-synchronous with positive direction of rotation. Features instrument-type gear train, thicker gears to match increased torque. Extra heavy phenolic first gear for low noise level. Patented, hardened steel Synchron rotor ring; improved Class A coil construction. Silicone life-time lubrication. Mounts in any position, may be stalled continuously without electrical or mechanical damage. Torque rating at 1 rpm, 98 oz.-in. at 8 watts. Flatted shaft, 3/8" diameter x 5/16" long. 3/8" diameter x 5/16" long bearing. Porous bronze bearing insert. Ultra-precision rotor shaft rotates on double bearings for improved reliability. Clockwise rotation. For operation from 110 volts, 60 Hz AC. *When ordering, specify choice of output speed: 1, 2, 4, 6, 10, 20, 30, or 60 rpm. †Type 9GA393RP. 12 oz.

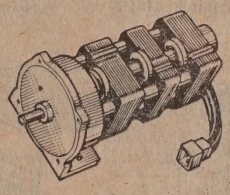
Stock No.	Series	Speed* (Specify)	EACH 1-9	10-24	25-49	50-99	100-Up
809 C 0922	900†	1 or 2 rpm	13.48	12.73	12.23	11.23	10.21
809 C 0923	900†	4-60 rpm	9.50	8.75	8.25	7.25	6.23

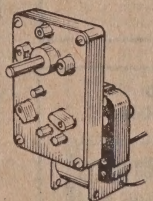
R.M.S. LOW-PRICED SHADED-POLE AC MOTORS

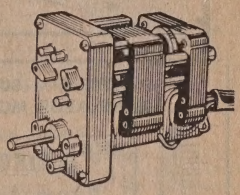
CONSTANT AND VARIABLE-SPEED TYPES

ese reliable multipurpose tors can be used as vending, otocopy, advertising display cycle controllers. Also ideal business machines, data cessing equipment, remote ntrol devices, motorized ves and many other applica-ns. Can be mounted in any ition with no lubricant loss. fan required. Permanently ricated; sintered-bronze rings, no commutators or shes; impedance protected. ° insulation; gear case lubri-ion is good from −65° to 300° F. riable speed motors provide constant que over 10 to 1 speed variation. HG Series have compact space-saver size for use where minimum mounting space and maximum durability are required. Variable types require Speed Control Box below to vary speed. All motors 115 volts, 50-60 Hz. AC. Av. motor shpg. wt. 3 lbs.


BG Unidirectional


BG Variable Speed


HG Unidirectional


HGF Tandem Reversible

CONSTANT-SPEED GEAR MOTORS

SEE TABLE BELOW FOR PRICES

m	Torque In.-Oz.	Mfr's Type Clockwise	Counter Clockwise	Reversible	Mfr's Type (Space-Savers) Clockwise	Counter Clockwise	Tandem Reversible	Clockwise
1	800	BG5R1K	BG5L1K	BG5P1K	HG5R1K	HG5L1K	HGFP1K	HGF5R1K
2	800	BG5R2K	.....	BG5P2K	HG5R2K	HG5L2K	HGFP2K	HGF5R2K
3	750	.....	.....	BG5P3K	HG5R3K	HG5L3K	HGFP3K	HGF5R3K
4	560	BG5R4K	.....	.....	HG5R4K	HG5L4K	HGFP4K	HGF5R4K
5	450	BG5R5K	.....	BG5P5K	HG5R5K	HG5L5K	HGFP5K	HGF5R5K
6	375	.....	BG5L6K	BG5P6K	HG5R6K	HG5L6K	HGFP6K	HGF5R6K
8	280	BG5R8K	.....	.....	HG5R8K	HG5L8K	HGFP8K	HGF5R8K
0	225	BG5R10K	BG5L10K	BG5P10K	HG5R10K	HG5L10K	HGFP10K	HGF5R10K
5	450	BG8R15K	.....	BG8P15K	HG5R15K	HG5L15K	HGFP15K	HGF5R15K
0	300	BG8R20K	.....	BG8P20K	HG5R20K	HG5L20K	HGFP20K	HGF5R20K
0	200	BG8R30K	.....	BG8P30K	HG5R30K	HG5L30K	HGFP30K	HGF5R30K
0	100	BG8R60K	.....	BG8P60K	HG5R60K	HG5L60K	HGFP60K	HGF5R60K
0	60	BG8R100K	BG8L100K	BG8P100K	HG5R100K	HG5L100K	HGFP100K	HGF5R100K
0	30	BG8R200K	.....	BG8P200K	HG5R200K	HG5L200K	HGFP200K	HGF5R200K
0	20	BG8R300K	.....	BG8P300K	HG5R300K	HG5L300K	HGFP300K	HGF5R300K

PRICES OF GEAR MOTORS

PECIFY TYPE AND RPM FROM ABOVE (CCW, Counter Clockwise)

Stock No.	Rotation	EACH 1-9	10-24	25-49	50-99	100-Up
C 5140	Clockwise	15.80	14.25	13.45	12.65	11.85
C 5115	CCW	15.80	14.25	13.45	12.65	11.85
C 5120	Reversible	22.40	20.20	19.05	17.95	16.80

SOLID-STATE SPEED CONTROL BOX FOR USE WITH ABOVE MOTORS

e SCTPBK. Controls speed of both the re-sible and unidirectional motors listed above. x4¼x4". Shpg. wt. 2 lbs.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
9-5165	SCTPBK	41.70	40.45	39.20	37.53	35.45

VARIABLE-SPEED GEAR MOTORS

CLOCKWISE UNIDIRECTIONAL (PRICES BELOW)

Stock No.	Mfr's Type	Torque In.-Oz.	Speed in rpm
909-5159	BG8R400C5BK	10	400-40
909-5157	BG8R100C5BK	40	100-10
909-5155	BG8R10C5BK	400	10-1
909-5153	BG5R1C4BK	800	1-0.1

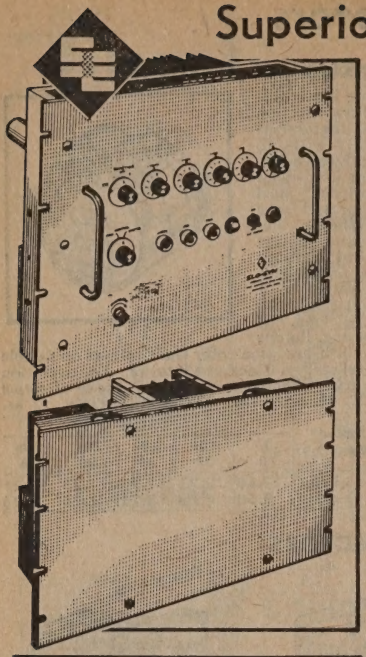
REVERSIBLE (PRICES BELOW)

909-5131	BG8P400C5BK	10	400-40
909-5129	BG8P100C5BK	40	100-10
909-5127	BG8P10C5BK	400	10-1
909-5125	BG5P1C4BK	800	1-0.1

PRICES (EACH) OF GEAR MOTORS

Rotation	1-9	10-24	25-49	50-99	100-Up
Unidirectional	23.50	22.35	21.15	20.00	18.80
Reversible	28.00	26.60	25.20	23.80	22.40

Superior-Electric Stepper Motors, Drives



MODEL HPR400R-4 *SLO-SYN* PRESET INDEXER

- Controls Indexing to 9999 Steps
- Provision for Computer Input
- Functions Can Be Controlled by Voltage Lev
- Available With or Without Stepping Motor

High-speed, rack-mounted unit for driving Slo-Syn stepping motors in indexing and other positioning operations. Decade counter controls on front panel select step increments. Will automatically drive motor the pre-selected number of steps, then actuate a relay control for external equipment. Speed range, 50 to 2000 steps/second. Has 24-pin connector for remote control from computer, external decade switches or relays, remote sensing devices, or other isolated control elements. Momentary contact closure of 150 microseconds mini required for start, stop and reset; func can also be controlled by voltage le Operating temperature range, 0° to 4 Overall size: 19x13x13³¹⁄₃₂". For 10 volt, 60 Hz AC operation. Requires HS25, HS50, or HS50L bifilar DC ste motor, listed in table below. Wt., 66

930X1005. 1-5.....Each 132

HPR400SR-4. Preset Indexer with HS 1003 stepping motor. Shpg. wt., 76

930X1015. 1-5.....Each 153

MODEL HTR400 *SLO-SYN* TRANSLATOR

- Drives Motor Up to 2000 Steps/Second
- With or Without Stepping Motor
- Triggering Pulse Can Be Supplied B Tape Reader, Oscillator, Etc.

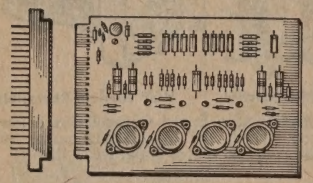
High-speed, pulse-to-step converter drives appropriate Superior Slo-Syn motor one step for each pulse received. Designed especially for use in programming, positioning, indexing, digital counters, remote meter indication, and many other digital applications. Features internal oscillator that supplies adjustable frequency, from 50 to 2000 steps per revolution, with fast and automatic motor acceleration and deceleration. Requires 10-15 volt negative change of voltage for triggering, with minimum p width of 50 microseconds. Acceleration deceleration times: 65 milliseconds. ating temperature: 0° to 40°C. Rack m 19x10¼x10¹⁵⁄₃₂". Requires Type H HS50, or HS50L bifilar DC motor (list table below). Shpg. wt., 61 lbs.

930X1076. 1-5.....Each 78

Model HTR400S. Translator with Sup HS400B stepping motor. Wt., 71 lbs.

930X1080. 1-5.....Each 99

TYPE STM1800 TRANSLATOR MODULE



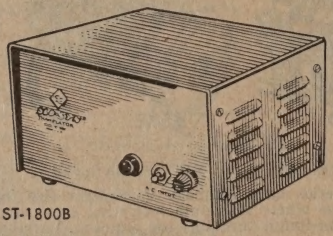
Plug-in printed circuit board has logic circuit for stepping Slo-Syn Bifilar motors in increments of 1.8°. Provides bidirection operation of motor. Requires a 30-volt center-tapped D9 power supply with maximum ripple of 5%. Draws from 1 to 8 amps, depending on motor used. Voltage may have to be varied to maintain rated motor voltage. Can be triggered by 10 to 15-volt negative voltage change with minimum pulse width of 50 microseconds. Input impedance, 500 ohms. Stepping increment, 1.8° except 5° when used with TS50 motor. Requires dropping resistor. With connector. Wt., 14 oz.

930-1253.1-5.....Each 71.50
6-24.....Each 61.20
25-Up.....Each 57.80

TYPE STM1800V TRANSLATOR MODULE

Translator module is similar to STM1800, with logic circuit for stepping Slo-Syn Bifilar motors, but includes built-in oscillator that can be adjusted to drive motor at speeds from 4 steps per second up to maximum at which motor will drive load. Requires 30-volt center-tapped D9 power supply with maximum ripple of 5%. Draws from 1 to 8 amps, depending on motor used. Voltage may have to be varied to maintain motor voltage. Provides 1.8° stepping increments, except 5° when used with TS50. Includes 500K potentiometer for speed adjust. With connector. Wt., 1 lb.

930-1256. 1-5.....Each 83.00
6-24.....Each 70.20
25-Up.....Each 66.30

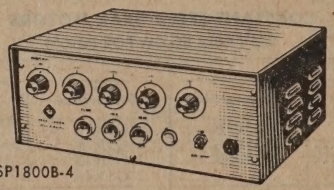


ST-1800B

SLO-SYN TRANSLATOR

ST-1800B. Pulse-to-step converter for with appropriate bifilar-type synchro stepping motors (see below). Used in grammed positioning, indexing, di counters, programmed mixing, remote r indication, many other applications. verts low-level signal impulses or sq waves into correct switching sequenc drive motor at 200 discrete steps per re tion. 1-amp input at 120 VAC. Wt., 1

930X1250. 1-5.....Each 39
6-24..Each 355.50 25-Up....Each 33



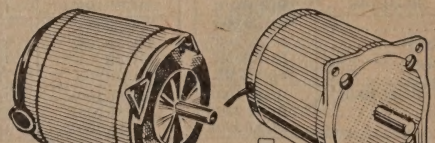
SP1800B-4

SLO-SYN PRESET INDEXERS

SP1800B-4. Excellent for control of i ing operations in applications using chronous stepping motors for positio Any indexing movement can be set on trol panel. Automatically provides co switching sequence required to drive n needed number of 1.8° steps. Can be r to cycle automatically. Controls inde up to 9999 steps. 1.25-amp input at VAC. Shpg. wt., 15 lbs.

930X1150. 1-5.....Each 86
6-24..Each 787.50 25-Up....Each 74

SLO-SYN BIFILAR DC MOTORS



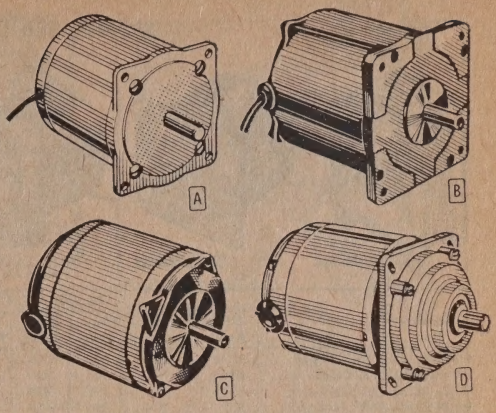
- High torque with instant stop-start-reverse
- Stepping provided in 1.8° increments
- Require Only SPDT Switch for Full Control

Synchronous motors for DC ping applications where the u push-pull circuitry and a c tapped power supply is not pos or where an increase in torq high stepping speeds is requ Only a single-ended power s and SPDT switching is neces Translator modules, shown at provide stepping in 1.8° increm Translator and preset ind shown above, provide stepping indexing for variety of program systems in a wide variety of i trial applications. Suffix "E" notes double-ended shaft.

Stock No.	Mfr's Type	Fig.	DC Volts	Amps Per Winding	Size (in.)	Wt., Lbs.	EACH 1-5	EACH 6-24	EACH 25
930-1158	SS25-1001	B	11.8	0.22	3¹¹⁄₁₆x3³⁄₈	8	91.50	78.30	7
930-1177	SS50-1009	A	5.5	1.3	2½x3³⁄₈	3½	84.50	72.00	6
930-1195	SS150-1010	A	10.0	1.25	4⅞x4¼	8	95.00	81.00	7
930-1214	SS250-1002	A	9.0	1.55	4⅞x4¼	8	117.00	99.90	9
930U1216	SS250-1027	B	4.6	3.1	4⅞x4¼	8	117.00	99.90	9
930X1225	SS400-1021	B	5.3	3.4	6¾x4¾	15	160.00	137.70	13
930-1050	HS25	A	5.4	1.5	2⅞x3¼	2	122.00	104.40	9
930-1054	HS50	A	3.0	4.0	3¹¹⁄₁₆x3³⁄₈	5	108.00	92.70	8
930-1057	HS50E	B	3.0	4.0	3¹¹⁄₁₆x3³⁄₈	8	120.00	103.50	9
930-1060	HS50L	A	4.5	3.5	5⁹⁄₁₆x3⅞	7	147.00	126.90	11
930-1063	HS50LE	B	4.5	3.5	5⁹⁄₁₆x3⅞	8	161.00	137.70	13

Motors and Tape Readers by Superior-Electric

SUPERIOR ELECTRIC *SLO-SYN* INSTANT REVERSING SYNCHRONOUS AC MOTORS



r continuous control heavy-duty applications requiring rapid starting, stop-ng, and reversing characteristics. Basic speed, 72 rpm at 120 volts, 60 Hz, AC cept ±200 rpm. Number in manufacturer's type number below indicates rque in oz.-in.; for example, SS25 has torque of 25 oz.-in. Motors with E ffix have shaft extensions to permit attaching drive at either end. *Square sign, explosion-proof, 60 Hz AC only.

Stock No.	Mfr's Type	Fig.	Max. Amps	Size L x Dia.	Wt., Lbs.	EACH 1-5	6-24	25-Up
30-1155	SS25	A	0.1	2¼x2 7/32"	1½	58.00	49.50	46.75
30-1161	SS50	A	0.3	2½X3⅜"	3½	55.00	43.20	40.80
30-1162	SS50E	A	0.3	2½x3⅜"	3½	63.00	54.00	51.00
30-1185	SS150	B	0.4	4⅞x4¼"	8	61.00	52.20	49.30
30-1186	SS150E	B	0.4	4⅞x4¼"	8	73.50	63.00	59.50
30-1210	SS250	B	0.6	4⅞x4¼"	8	83.00	71.10	67.15
30-1211	SS250E	B	0.6	4⅞x4¼"	8	95.50	81.90	77.35
30U1220	SS400	B	0.6	6¾x4¼"	15	127.00	108.90	102.85
30U1221	SS400E	B	0.6	6¾x4¼"	15	140.00	119.70	113.05
30X1268	X1500	A	3.0	6½x6½"	38	276.00	236.70	223.55
30-1265	TS50†	A	0.3	3 11/16x3⅜"	5	77.00	65.70	62.05

SLO-SYN PLANETARY GEAR AND RC MOTORS

above except types with suffix P have speed-reducing planetary ar assemblies; types with suffix RC have built-in resistor capacitor tworks; P-RC types have both. Approximate speed for motor th P1 assembly, 16.6 rpm (ratio 4⅓); P2, 3.3 (ratio 21⅔); P3, 0.665 (ratio 108⅓). Exact speed may be calculated from basic motor speed (72 rpm) and ratio. To determine shipping weights, use weight indicated for motor in table above and add 1 lb. for RC type, 2 lbs. for P type, and 3 lbs. for P-RC type.

Stock No.	Mfr's Type	Fig.	(Oz.-In.)	Size L x Dia.	EACH 1-5	6-24	25-Up
0-1163	SS50-P1	C	120	2 7/8x3⅜"	77.00	65.70	62.05
0-1167	SS50-P2	C	600	2 7/8x3⅜"	77.00	65.70	62.05
0-1171	SS50-P3	C	2000	3 3/16x3⅜"	87.50	74.70	70.55
0-1175	SS50-RC	....	50	5 5/32x3⅜"	73.50	63.00	59.50
0-1165	SS50-P1RC	....	120	5 19/32x3⅜"	100.00	85.50	80.75
0-1167	SS50-P2RC	....	600	5 19/32x3⅜"	100.00	85.50	80.75
0-1173	SS50-P3RC	....	2000	5 29/32x3⅜"	110.50	94.50	89.25
930X1187	SS150-P1	D	400	6¼x4¼"	83.00	74.70	70.55
930X1189	SS150-P2	D	2000	6¼x4¼"	83.00	74.70	70.55
930X1193	SS150-RC	....	150	7½x4¼"	80.00	72.00	68.00
930X1191	SS150-P2RC	....	400	8⅞x4¼"	105.00	94.50	89.25
930-1212	SS250-P1	....	650	6¼x4¼"	104.00	93.60	88.40
930X1222	SS400-P1	....	1000	6¼x4¼"	150.00	135.00	127.50

RESISTORS FOR ABOVE

xed, wirewound resistors for use with capacitors (right) in phase ifting networks for motors listed in tables above (except RC types nich have network built in). *U.L. Recog. Tol., ±5%. 2 oz.

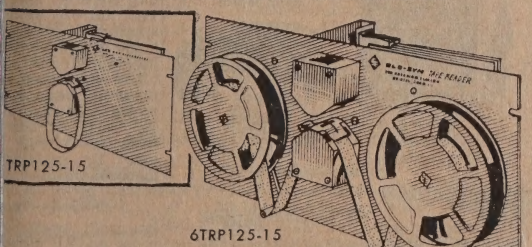
Stock No.	Mfr's Type	Use With Motor	Ohms	Watts	EACH 1-5	6-24	25-Up
0-1104	R-SS25	SS25	500	5	1.75	1.58	1.49
0-1105	R-SS50	SS50	400	25	1.75	1.58	1.49
0-1108	SS150	SS150	250	25	1.75	1.58	1.49
0-1111	R-SS250/SS400	SS250/SS400	150	50	3.25	2.93	2.76
0-1116	R-X1500*	X1500	55	375	8.50	7.65	7.23
0-1120	R-TS50	TS50	300	25	1.75	1.58	1.49

CAPACITORS FOR ABOVE

Can-type electrolytics for use in phase shifting networks for motors listed above (except RC types which have network built in). Rated at 330 volts, AC. C-X1500 is Recognized Under the Component Program of U.L. Laboratories, Inc. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Use With Motor	μF	EACH 1-5	6-24	25-99
930-0400	C-SS25	SS25	.75	4.25	3.83	3.61
930-0402	C-SS50	SS50	2.25	6.00	5.40	5.10
930-0408	C-SS150/-TS50	SS150/-TS50	3.75	4.75	4.28	4.04
930-0412	C-SS250/SS400	SS250/SS400	6.5	6.00	5.40	5.10
930-0418	C-X1500	X1500	55.0	24.00	21.60	20.40

ELECTRIC PHOTOELECTRIC TAPE READERS



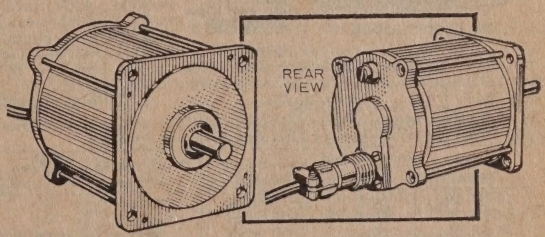
afures asynchronous
eed of up to 125
aracters per second

or computers, numerical control systems, etc. Silicon photo diodes nse light as it passes through perforated tape. Holes in Signals are aplified into full "on" or "off" voltage levels. Each combination data channels represents coded number. Reads all tapes from aque metallized mylar to oiled-translucent paper with 40% maxi-um light transmission. Handles tapes up to 1" wide with 5, 6, 7, 8 data channels. Reading rate is 0-125 characters per second ynchronous. Temperature range, 0° to 50°C. For 19" rack mount. 3/32x19x9 7/16". 4.7 V version on Special Order.

'PES TRP125-15, 6TRP125-15. Input: 2-channel, 12-15 volt pulse 30 μsec minimum width; 1000 ohm impedance. Output: (normal) ole; 16.5 V, source resistance, 1.5k ohms, no hole; 0.5 V, 10 mA ax.: (inverted) hole; 0.5 V, 10 mA max., no hole, 14.5 V, source sistance 1.5k ohms, min. load resistance, 3k ohms.

Stock No.	Type	Description	EACH
930F1262	TRP125R-15	Basic tape reader	650.00
930F1274	6TRP125R-15	Reader with reel assembly	820.00
930-1298	1298	Extra 6" Reel	3.00

SLO-SYN VISCOUS DAMPED MOTOR



- Precision DC Stepping Motor
- .06° Maximum Error
- Internally Viscous Damped To Minimize Shaft Oscillation

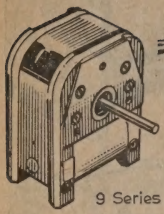
TYPE HS50D. For DC stepping applications in a variety of uses. Features a unique fluid system that results in a step function approaching critical damping. The properties of the internally contained silicone viscous damping fluid have no effect on the overall speed of response or running characteristics of the motor. With damping, typical time for motor shaft settling to within 0.1° is approximately 17 milliseconds. Can be operated over an ambient temperature range of +10°C to +35°C, and can be mounted either horizontally or vertically with the shaft facing down. Special vent on motor housing must be opened before operating.

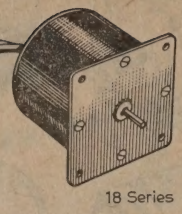
Using proper drive circuitry, the HS50D can achieve speeds of 1000 steps per second or higher. Steps per revolution: 200, 1.8 per step. Maximum error: (non-cumulative), 06°. Amperes per winding, 4. DC volts, 3. Input volts, 120. Frequency, 60 Hz. Maximum moment of inertia (rigidly attached load), 0.5.-in.^{2} Resistor, 800 ohms, ±25%, 25 watts. Capacitor, 1, 5 μF, 6%, 330. VAC. (Ratings and specs for AC). 3⅜x3⅜x5⅛". Shpg. wt. 5 lbs.

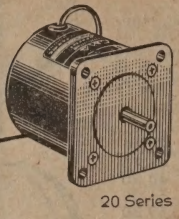
930-1056 ..... 147.00

Motors and Motor Controllers

SIGMA SERIES 9, 18 AND 20 MOTORS


9 Series


18 Series


20 Series

Series 9. Converts digital pulse input to analog shaft outp Operates from any drive input with successive DC pulses of alt nating polarity. Angular accuracy, 15 minutes. Bi-polar c struction with PM stator, dual windings. Use 9F02 Drive Packa two needed for bi-directional operation. Damper over 50 ste second. Rated continuous duty at 24 VDC nominal. **Series 18.** T phase inductor stepping motors. Bi-directional operation with A2 drive. 28 VDC. †Value of external resistor. Drive Packages on l board. 1 lb.

917-0292. 9F02. For Series 9. 8-20-V; 6 μsec (min)..... 78.

917-0015. A202. For Series 18. 4-10-V; 1 μsec (min)..... 75.

917-0095. AT-214-1 Damper. For Series 9. Wt. 6 oz..... 45.

Stock No.	Mfr's Type	Step Angle	Max. Steps/ Second	Torque, Gm./cm Max. Step	Torque, Gm./cm Min. Hold	Torque, Gm./cm Min. Detent	Ohms/ Winding	Amps/ Winding	External Resistor† Ohms	External Resistor† W	Size, Inches H.xW.xD.	Shpg. wt. Oz.	EACH 1-24	EACH 25-49	EACH 50-Up
917-0280	9AG4J2-.18	18°	425	360	750	375	.18	6.2	3.7	150	2 7/16x1 13/16x1 5/32	12	89.00	80.10	76.(
917-0283	9AH4D2-.18	18°	300	345	720	360	.18	6.2	3.7	150	2 7/16x1 13/16x2 5/16	23	118.00	106.20	100.2
917-0286	9AK4J2-.18	15°	475	420	950	475	.18	6.2	3.7	150	2 7/16x1 13/16x1 5/32	12	89.00	80.10	76.(
917-0289	9AL4D2-.18	15°	400	395	880	440	.18	6.2	3.7	150	2 7/16x1 13/16x2 5/16	23	118.00	106.20	100.2
917-0365	18-1408D40-195	9°	800	35	100	8	195	.055	145	5	1.418dia.x.787	3	19.50	17.55	15.5
917-0369	18-2013D32-75	11.25°	300	210	500	18	75	.155	51.6	10	1.969dia.x1.26	8	28.00	25.20	23.(
917-0373	18-2520D16-35	22.5°	700	190	75	75	35	.320	25	20	2.52x2.52x1.969	16	43.00	38.60	36.5

SERIES 20 1.8° STEPPING MOTORS

2 or 4 phase, converts digital pulse input to analog shaft output of 1.8° steps. ±3%. Size, 1st 4 digits of Mfr's Type; e.g., 2223=2.2"x 2.3" (DxL). Listed torques rated with Bipolar Chopper Driver.†

917-0458. †RL Driver. Input ±30 VDC. Pulse trigger..... 127.00

917-0020. Uni-polar Driver. 5 amp. 24 VDC. 5 VDC trigger 113.00

Stock No.	Mfr's Type 20-	Torque @ 50 step/sec.	Current Amps	Wt., Oz.	EACH 1-9
917-0377	2223D200-F6	53	1.3	24	90.00
917-0378	3424D200-F1.8	110	2.4	50	84.00
917-0381	3437D200-F.75	265	5.7	90	106.00
917-0383	4256TD200-F.44	550	7.1	128	116.00
917-0385	4275D200-F1.2	1000	4.8	225	175.00
917-0386	4275TD200-F0.6	1500	7.5	225	375.00

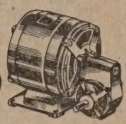
SERIES 20 SYNCHRONOUS AC MOTORS

Bidirectional, heavy-duty motors have extremely efficient magne circuit for increased torque. Outperform other motors of sa frame size. Static detent torque present when unenergized. Spe 72 rpm at 120 VAC. 60 Hz. Size of unit is indicated by 1st 4 dig of Mfr's Type; e.g., 2223=2.2x2.3" (DxL).

Stock No.	Mfr's Type 20-	Torque (oz./in.)	Phase Shift R.	Phase Shift C.M.F.	Current Amps	EAC 1-9
917-0378	2223S72-A120	44	100	1	.105	55.
917-0380	3424S72-A120	90	250	2	.165	48.
917-0382	3437S72-A120	210	200	4	.35	80.
917-0384	4256TS72-A120	350	0	4	.35	80.
917-0387	4275-A120	575	50	6.5	.6	125.

G. K. HELLER MOTORS AND SOLID-STATE CONTROLLERS

Type S20 Controller


Type 54 RL

MSB1815

S20 SCR Controller. Dual-Speed range for infinitely variable speed control of DC shunt-wound or PM motors. Zener diode feedback circuit keeps constant speed. Reversible, with automatic dynamic braking. Magnetic circuit breaker. Full starting torque in high range, full torque at all speeds in low. Full-wave filtered armature supply. For 1/40 to 1/8 hp motors. 7x5x4". 117 VAC.

809-2617. 5 lbs..... 1-4 Ea. 80.00..... 5-Up. Ea. 72.60

1/8 HP Geared Motors. Single-reduction variable-speed motors. 9 13/32x 6 1/64x5 19/32" dia. With base. 22 lbs. Specify Gear Ratio.†

Mfr's Type	Gear Ratio	Low-Speed Range	High-Speed Range	Torque In.-Lbs.
54 RL 10	10:1	0-180 rpm	280 rpm	32
54 RL 20	20:1	0-90 rpm	140 rpm	54
54 RL 30	30:1	0-60 rpm	90 rpm	66
54 RL 40	40:1	0-45 rpm	70 rpm	73

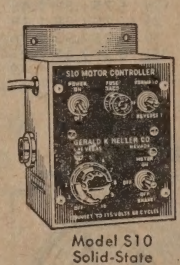
809C2675.†..... 1-4 Ea. 118.00..... 5-Up. Ea. 107.25

1/15 HP Non-Geared Motor. Variable-speed, double-shaft, 0-1800 rpm low range, 0-3000 rpm high. With base. 7 3/4x4x4 1/4" dia. 8 1/2 lbs.

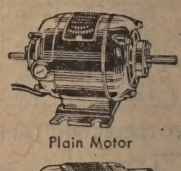
809-2615. Type MSB1815.... 1-4 Ea. 66.00..... 5-Up. Ea. 59.40

1/8 HP Non-Geared Motor. Self-ventilated, variable-speed. Double shaft. Same rpm ranges as above. Base. 8 3/4x4 1/4x4" dia. 11 1/2 lbs.

809-2610. Type MSB188.... 1-4 Ea. 73.50..... 5-Up. Ea. 66.00



Model S10 Solid-State Controller


Plain Motor

Right-Angle Gear Motor

S10 Controller and 2T Plain Motor. Shu wound 1/40 hp mo with full-wave filte DC from SCR circu 100-3000 rpm spe with stepless contin ous control. Torq 11.2 in./oz. at a speed. Switches: po er off/on lowspeed/ high speed; forwar off/reverse(automa dynamic braking motor in off positio 5/16" shaft extends from both ends open, fan-ventilat motor. Controller, 5 x4 3/4x3 1/8"; motor, 4 1/2x3 7/16x3 21/32". 115 V, 50-60 Hz single-phase A

809-2655. 10 lbs..... 1-4 Ea. 111.00..... 5-Up. Ea. 99.

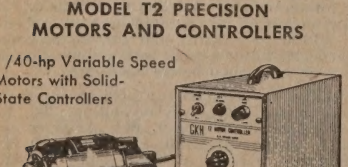
S10 Controller and 2T60 Gear Motor. 1/40 hp, right angle. ball-bearing armature shaft extends 1 5/16" from one end for mou ing pulley. Gear motor is enclosed and dust proof for long-li except for cable bushing. All-bronze heavy-duty construction gear trains. Gear shafts have precision sleeve bearing, with grea seals. Gear head is easily adjustable to choice of any 12 positions. Si 3 11/32x3 7/16x6 1/16". Controller for 115 V, 50-60 Hz single-phase A

809C2160. Specify Choice of Gear Ratio: 6, 10, 18 or 30 to 10 lbs..... Both: 1-4 Ea. 125.00..... 5-Up. Ea. 112.

809C2665. Specify Choice of Gear Ratio: 36, 60, 110, 300, 540, 9 or 1110 to 1. 10 lbs.... Both 1-4 Ea. 128.00..... 5-Up. Ea. 115.

MODEL T2 PRECISION MOTORS AND CONTROLLERS

1/40-hp Variable Speed Motors with Solid-State Controllers

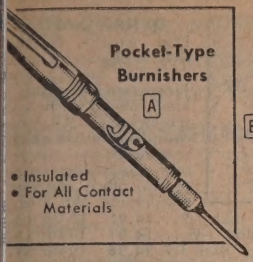


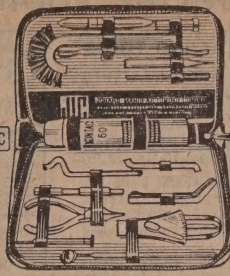
Precision-made totally enclosed motor, with solid-state controller. Provides continuously variable speed over 2000:1 range with constant torque. Type T2-1MC has range from less than 1 to 1800 rpm; other models have reduction gear heads. ±0.5% accuracy, even with overloads to 350%. Torque limiting and thermal overload protection. Reverse instantly without damaging surg or overshoots. Socket for external meter recorder. Controller has silicon transisto and linear ICs; concentric coarse and fi speed controls. Motor has oversize brush dynamically balanced armature, die-c housing. Controller, 5x6x12". 110-130 V, 5 60 Hz AC. Prices include motor and controll

Stock No.	Type T2-	Max. rpm	Torq. Lbs.	EACH 1-4	EACH 5-Up	Stock No.	Type T2-	Max. rpm	Torq. Lbs.	EACH 1-4	EACH 5-U
809-2630	300MC	6	7	270.00	234.30	809-2624	10MC	180	4.2	266.00	231.(
809-2628	60MC	30	8	270.00	234.30	809-2622	6MC	300	3.2	266.00	231.(
809-2626	30MC	60	3.5	266.00	234.30	809-2620	1MC	1800	0.63	259.00	224.(

Specify Stock No., Mfr's Type and Speed When Ordering Moto

Jonard Relay Adjusting Tools and Gauges





P-4 and P-6 Pocket Burnishers. Leave no residue on contact. Replaceable blades. ulated. Pocket clip. ⅜x5½".
Burnisher. With 12 RB4 (¼x1¼") blades.
)-0366. Wt. 5 oz. 3.90
Burn. With 12 RB6 (3/16x1¾") blades.
)-0370. Wt. 5 oz. 3.90
)-0375. RB4 Blades. 2 oz. . . . Pkg. 25/3.75
)-0377. RB6 Blades. . . . . Pkg. 25/3.75

KR-6 Compact 8-Piece Tool Kit. For setting, adjusting, testing relays. Carbon el, polished finish. Includes: spring adter; armature arm bender; armature stop nder; duckbill plier; contact burnisher; 0 gram spring tension gauge; swivel id scwdvr; fine point tweezer. Case.
)-0354. . . . . 22.00

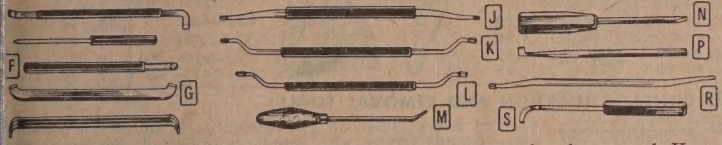
C Model K-55 15-Piece Master Tool Kit. Precision-made and professionally-designed group of tools for adjusting and maintaining relays, contactors, switches, controls, and other components for the telecommunication and similarly related electronic industries. Complete 15-piece kit includes: two spring adjustors (SA-7, SA-17); duckbill plier; inspection mirror; armature arm bender; Penfile contact burnisher; tension measuring gauge; screwdriver; 4-in-one tool; back-stop bender; angle thickness gauge; tweezer; selector switch contact cleaning brush; twelve replacement burnisher blades; can of "Kontact 60" spray. Supplied complete with leather storage case for all tools. Shpg. wt., 3½ lbs.
830-0344. . . . . 37.60

DIAMOND-FACED CONTACT CLEANING SPATULAS

Clean with only gentle pressure, do not disturb contact gap. Type 200. .019" diamond grain. Type 300. .017" diamond grain. Have two diamond faces. Type 400. .011" diamond grain. Type K-234. Set of one each in plastic case. 6" long. *Per set. Wt., 2 oz.

Stock No.	Type	For Relays	EACH
830-0240	D-200	Industrial	4.95
830-0244	D-300	Intermediate	4.95
830-0248	D-400	Sensitive	4.95
830-0349*	K-234	Set of 3	*14.85

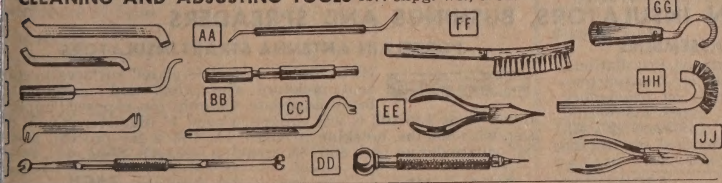
RELAY SPRING ADJUSTING TOOLS



ality made of plated and polished high carbon steel, heat treated and tempered. Have ulated handles for use with "live" equipment. Av. shpg. wt., 3 oz.

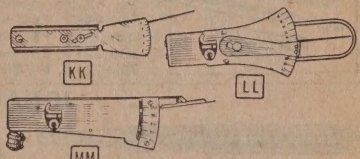
Stock No.	Mfr's Type	Fig.	Description	Slot Width	Lgth.	EACH 1-9	EACH 10-Up
0-0396	SA-6A	D	Cross, lengthwise slots	.030"	5½"	3.25	2.95
0-0404	SA-7	E	For miniature relays	.015"	4½"	1.93	1.75
0-0406	SA-8	F	For heavy springs	.045"	4½"	3.78	2.98
0-0384	S-201	G	Aid spring adjuster	.034"	4¼"	3.49	3.18
0-0420	SA-24	H	Crosswise slots .040"x.028"	.....	5½"	3.17	2.88
0-0412	SA-17	J	For all relay types	.023"	8"	4.22	3.84
0-0410	SA-16	K	Lengthwise slot	.018"	6½"	3.60	3.28
0-0392	SA-2	L	Gen. type, chisel edge	.032"	7"	3.28	2.98
0-0426	SA-143	M	Bent; single saw slot	.025"	8"	3.14	2.86
0-0430	SA-163	N	Straight driver; cross slot	.038"	5½"	3.04	2.77
0-0434	SA-175	P	Close-set saw slot	.031"	5¼"	3.21	2.92
0-0416	SA-20	R	For closely-set springs	.022"	7"	4.29	3.90
0-0422	SA-25	S	Angled; single saw slot	.032"	6½"	3.28	2.98

CLEANING AND ADJUSTING TOOLS Av. shpg. wt., 2 oz.



ock No.	Type	Fig.	Description	1-9 EA.	10-Up EA.
30-0205	AB-20	T	Arm bender armature, 3 slots .114"	2.17	1.98
30-0206	AB-21	W	Arm bender wrench, .120" slot	2.06	1.88
30-0339	J-34	X	Pole piece adjuster, 3" lg.	1.84	1.68
30-0380	S-187	Y	Double dog adjuster, .114" slots	2.35	2.14
30-0259	DW-16	Z	Offset wrench, 3/16" open.	3.82	3.48
30-0263	DW-32	Z	Offset wrench, 7/32" open.	3.82	3.48
30-0255	DW-4	Z	Offset wrench, ¼" open.	3.82	3.48
30-0388	S-457	AA	Wire and Spring aid, 5½" lg.	3.70	3.40
30-0275	FW-24	BB	Wrench/Screwdriver; 7/32", ¼"	3.43	3.10
30-0440	SB-22	CC	Armature stop adj., slot .033"	2.17	1.98
30-0335	J-23	DD	Screwdriver guide pin, 4½" lg.	3.96	3.60
30-0358	PL-8	EE	Duck bill pliers, 5½" lg.	5.87	5.34
30-0480	WB-65	FF	Nickel-silver wire brush, 9" lg.	2.64	2.40
30-0220	BC-23	GG	Bank cleaner; 6" lg., 1½" dia.	3.93	3.58
30-0331	HB-75	HH	Curved hair brush; 8" lg., 1¾" radius	2.97	2.70
30-0362	PLS-9	JJ	Bent nose duck bill pliers, 5½" lg.	6.55	5.96

TENSION GAUGES



HEAVY DUTY TYPE

KK G-700 Spring Tension Gauge. 50 gram steps, both sides from 0-700 grams. 5 oz.
830-0310. 1-9. . Ea. 9.85 10-Up. . Ea. 8.96

CENTER-ZERO TYPES

LL G-10 Spring Tension Gauge. 1 gram steps, both sides from 0-10 grams. 5 oz.
830-0285. 1-9. . Ea. 8.22 10-Up. . Ea. 7.48

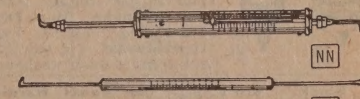
LL G-30 Spring Tension Gauge. 2 gram steps, both sides from 0-30 grams. 5 oz.
830-0290. 1-9. . Ea. 8.22 10-Up. . Ea. 7.48

LL G-50 Spring Tension Gauge. 5 gram steps, both sides from 0-50 grams. 5 oz.
830-0294. 1-9. . Ea. 8.22 10-Up. . Ea. 7.48

LL G-150 Spring Tension Gauge. 10 gram steps, both sides from 0-150 grams. 5 oz.
830-0305. 1-9. . Ea. 8.22 10-Up. . Ea. 7.48

PRESET TYPE

MM GP-50 Preset Spring Tension Gauge. 5 gram steps, both sides 0-50 gm. 3 oz.
830-0327. 1-9. . Ea. 8.78 10-Up. . Ea. 8.78

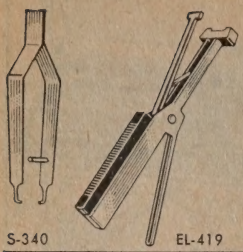


NN GPP-1 0-1000 GRAMS. Specially designed for use where accurate measurement of tension and compression of spring loaded devices is required. Measures spring tension of relays, switches, contacts, and other spring loaded devices. Also measures triggers, pull pins, pushbuttons and may be used for fine wire pull tests. Has easy-to-read scale calibrated in 50 gram steps. Diameter, ⅝-inch, length, 9¼ inches.
830-0328. Shpg. wt. 6 oz. 29.80

PP GPP-2 0-110 GRAMS. Measures tension and compression of spring loaded devices with tension of from 0 to 110 grams. 5 gram steps. Diameter, ⅜", length, 11".
830-0329. Shpg. wt. 2 oz. 14.50

SEE NEXT PAGE 272 FOR OTHER JONARD TOOLS

Gauges, Special Tools and Insulators

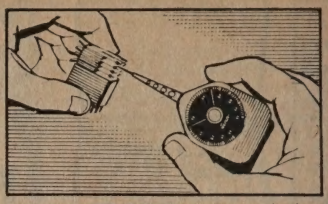


S-340 EL-419

JONARD EXTRACTING TOOLS

EL-419 INSERTING AND EXTRACTING TOOL. For PC boards, connector assemblies, etc. Precision made, with leaf spring to remain open. Nickel-chrome plated. Length, 6½". 830-0268. 1-9. . 9.79 10-Up. . 8.90

S-340 MINIATURE TWEEZER TYPE EXTRACTOR. Has stop guide to prevent damage to miniature lamps, components, etc. Nickel-chrome plated steel. Length, 3½". 830-0386. 1-9. . 3.52 10-Up. . 3.20



DYNAMOMETERS

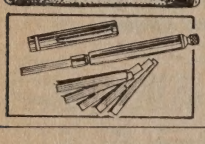
Dial gauges determ force necessary to actu delicate mechanisn Measurements can made clockwise or co terclockwise. All gau equipped with maxim reading pointer. Ideal relays, switches, contac central office equipme motors, etc. Wt. 5 oz.

830-0314. GD-5. 5-50 grams. 1½" dial. 1-9. . . 14.91 10-Up. 13.
830-0318. GD-15. 15-150 g. 1½" dial. 1-9. . . . 14.91 10-Up. 13.
830-0322. GD-100. 100-1000 g. 2½" dial. 1-9. 34.38 10-Up. 31.

JONARD ELECTRONIC SERVICE TOOLS

K-600 20-PIECE ELECTRONIC TOOL SET

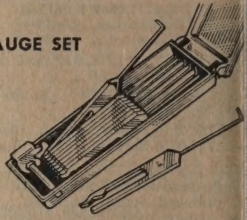
Designed and specially produced for assembly, service, and repair of electronic equipment. Speeds up handling of complex components. Set contains chain-nose, groove-grip, and diagonal cutting pliers; standard and Phillips screwdrivers; magnifier; soldering iron; straight and bent-nose tweezers; solder aid; alignment tool; 2 needle files; pin vise; solder core; 3/16" and ¼" nut drivers; 2 jewelers screwdrivers; and pen burnisher with 12 blades. Durable leather zippered-case for easy portability.
830-0350. Shpg. wt. 2 lbs. 32.90



POCKET-TYPE CONTACT BURNISHERS

Six blades stored in plastic pen. 4½x3/8" dia.
830-0357. P8-7 Pen and 6-0.007" Blades. . . 3.78
830-0356. PB-3 Pen and 6-0.0035" Blades. . 3.98
830-0212. B-7 Blades for PB-7. . . Pkg. of 25 3.55
830-0211. B-3 Blades for PB-3. . . Pkg. of 25 3.65

WIRE THICKNESS GAUGE SET



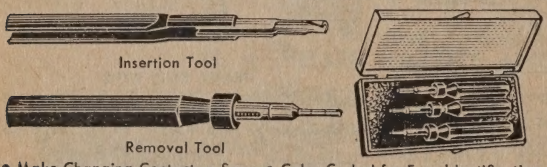
Specially designed for use in restricted places. Blades bend 90° 3/16" from tip. Supplied with nine blades marked in metric scale from 0.1 mm. to 1.5 mm. Press blade selector guide and blade pops up for use, or selected blade may be pulled out for tight spaces. Blades, 3"; case, 1¼ x½x4".
830-0462. T-271 Gauge Set. 1-9. . . 21.35 10-Up. . . . 19.

JONARD THICKNESS GAUG

A T-225 ANGLES GAUGE. 9 blad .009" to .026". 5 oz.
830-0460. 1-9. 2.46 10-Up. 2.

B T-720N STRAIGHT GAUGE. blades, .0015" to .025". 4 oz.
830-0470. 1-9. 4.29 10-Up. 3.

JONARD CONTACT INSERTION AND REMOVAL TOOLS



Jonard contact insertion and removal tools are precision-made give reliable service with standard Amphenol, Bendix, Canno Cinch, etc., connectors. Designed specifically for ease of operati and handling. Light and well-shaped aluminum handles assu proper gripping and manipulation of tool-steel probes. Probe ti are highly finished and polished to protect connectors and contac All tools are color-coded to provide easy identification of differe size contacts. Visual indicator bands for easy guidance of conta removal and insertion on connectors. Protective probe guards pr vent accidental damage when tools are not in use. Kits consist the three different size tools in a sturdy protective case. Confor to Federal and Military standards.

- Make Changing Contacts a Snap • Color-Coded for Easy Identification
- Can Be Used With All Standard Connectors • Protective Probe Guards

INSERTION TOOLS

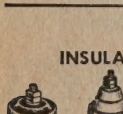
Stock No.	Type No.	MS-	Description	EACH 1-9	EACH 10-Up
830-0201	A-12	24256A12	Green, for #12 contact	16.39	14.90
830-0202	A-16	24256A16	Blue, for #16 contact	15.95	14.50
830-0203	A-20	24256A20	Red, for #20 contact	15.40	14.00
830-0352	KA-260	Kit, incl. one each of above		42.50	39.50

REMOVAL TOOLS

Stock No.	Type No.	MS-	Description	EACH 1-9	EACH 10-U
830-0367	R-12	24256R12	Green, for #12 contact	21.89	19.9
830-0368	R-16	24256R16	Blue, for #16 contact	20.79	18.9
830-0369	R-20	24256R20	Red, for #20 contact	20.35	18.5
830-0355	KR-260	Kit, incl. one each of above		53.50	51.5

E. F. JOHNSON INSULATORS, BUSHINGS AND SPREADERS

INSULATED THRU-PANEL BUSHING ASSEMBLIES



Used in transmitter and antenna installations. Serve as antenna terminals on transmitters, and as high-voltage terminals on heavy-duty power supplies. Max. Dia.: Types 135-50 and 135-55, ¾"; 135-51, 1¼"; 135-52, 1¾". All types consist of a pair of identical steatite insulators, cushion washers, hardware. 8 oz.

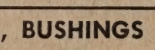
Stock No.	Mfr's Type	Fig.	Top Ht.	Panel Hole	Hardware	EACH 1-49	EACH 50-99	EACH 100-Up
828-0074	135-50	D	½"	15/32"	6-32	.50	.44	.39
828-0075	135-51	D	13/16"	27/32"	10-32	.80	.70	.62
828-0076	135-52	D	1⅛"	17/32"	¼"-20	1.15	1.01	.88
828-0078	135-55	C	¼"	15/32"	6-32	.35	.31	.27

ULTRA-STEATITE CONE INSULATORS

(Not illus.) Non-ribbed high-grade steatite insulators. For mounting coils, capacitors, etc. Threads tapped directly into the steatite. Width shown is max. (base). With 2 nickel-plated brass machine screws and washers, cork cushion washer. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Height	Width	EACH 1-49	EACH 50-99	EACH 100-Up
828-0085	135-500	⅝"	⅝"	.26	.23	.21
828-0086	135-501	1"	¾"	.35	.30	.27
828-0087	135-502	1½"	1"	.65	.57	.50
828-0088	135-503	2"	1⅛"	1.00	.88	.77
828-0089	135-504	3"	1½"	2.00	1.70	1.50

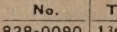
PORCELAIN ANTENNA STRAIN INSULATORS



Have heavily porcelain-glazed surfaces to pr vent moisture absorption, and nickel-plat brass hardware suitable for exposed applic tions. Type 136-107 is wet process, glazed 1" diameter round d sign with 800 lbs. breaking strength. 136-104 is dry process, glaz 5/8" square design with 400 lbs. breaking strength. Shpg. wt., 10 o

Stock No.	Mfr's Type	Size	EACH 1-49	EACH 50-99	EACH 100-U
828-0090	136-104	4" long by 5/8" square	.35	.31	.28
828-0091	136-107	7" long by 1" diameter	1.75	1.55	1.35

PORCELAIN ANTENNA-FEEDER SPREADERS



Feeder insulators of high-grade, low-absorptio porcelain for lowest leakage loss. All are designed f open-wire antenna feeders and transmission lin with impedances of approximately 200 to 600 ohms. Unglazed-po celain bars with a 3/8x½" cross-section treated with "Silaneal," silicone product resistant to moisture. Surfaces suitable for expose applications. In choice of 3 lengths. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Length	EACH 1-49	EACH 50-99	EACH 100-Up
828-0092	136-122	2"	.20	.17	.15
828-0093	136-124	4"	.35	.31	.27
828-0094	136-126	6"	.55	.47	.41

MAKE ALLIED YOUR COMPLETE SOURCE FOR . . .

★ Connectors—Commercial and Military Types
★ Electronics Hardware
★ Dial and Graphics Kits
★ Printed Circuit Boards, Packaging
★ Breadboard Components, Accessories

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AMPHENOL MS CONNECTORS ASSEMBLED TO YOUR ORDER

ELCO PRINTED CIRCUIT CONNECTORS ASSEMBLED TO YOUR ORDER

ast delivery is assured when our assembly dept. makes up and positions to your specifications any MS Amphenol connectors listed. Type Nos. stamped on part when specified.

Now 7 contact styles are available from stock in any of the following Elco Printed Circuit Connectors Series: 5007, 5009, 7001, 7008 and 7024.

Amphenol MS Connector Insert Arrangements

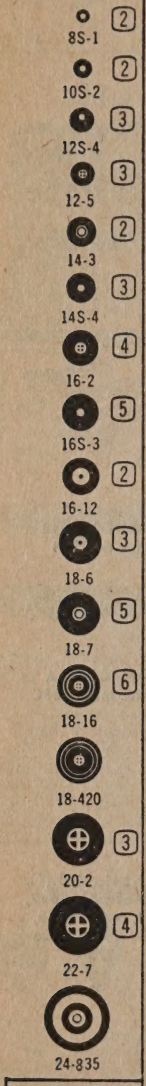
SERVICE RATINGS

SERVICE	1	2	3	4	5	6
Max. Operating Sea Level Volts DC	250	700	1250	1750	2450	4200
Max. Operating Sea Level Volts AC (rms)	200	500	900	1250	1750	3000

CURRENT RATINGS

CONTACT SIZE	20	16	12	8	4	0
AMPERES	10	22	41	73	135	24

1 Contact



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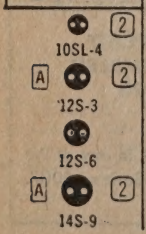

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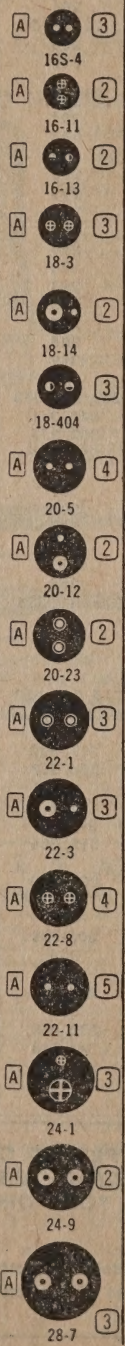

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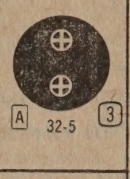
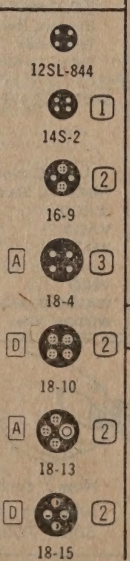


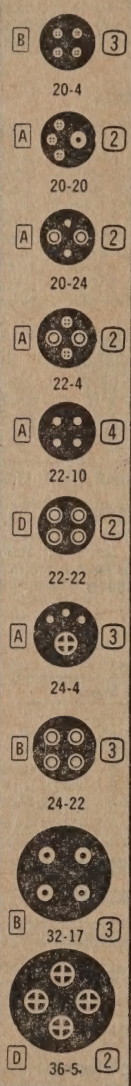
3 Contact

3 Contact

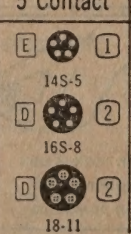
4 Contact



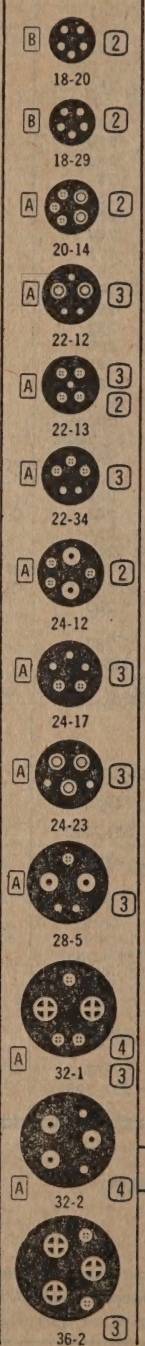
4 Contact



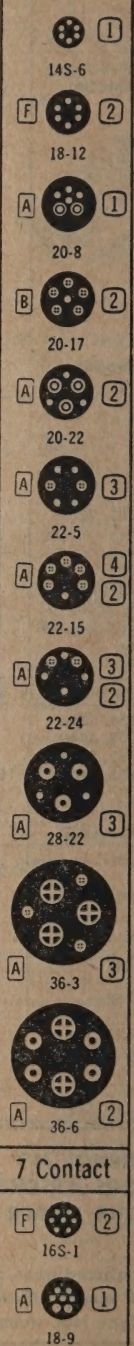
5 Contact



5 Contact

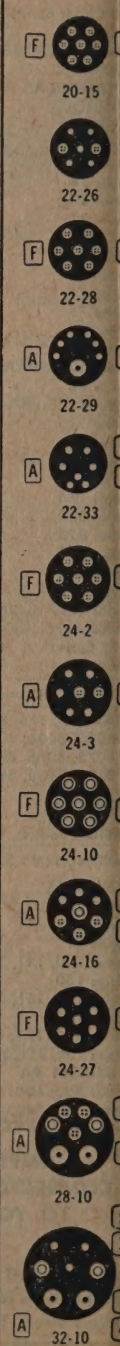


6 Contact



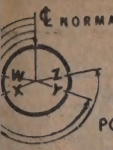
7 Contact

7 Contact



See Following Pages for Amphenol MS Connector Listin

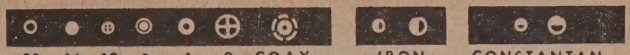
Amphenol MS Connector Insert Arrangements



FRONT VIEW OF POSITIONS

See Pages 276-281, 283 for Connector Listings. Contact sizes correspond in number coding to wire sizes.

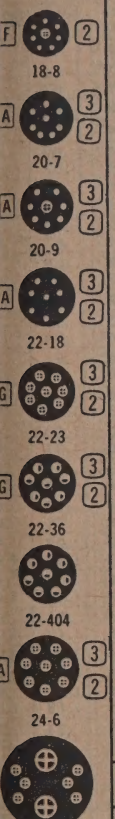
CODE OF WIRE SIZES



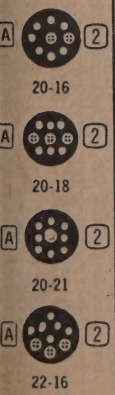
ALTERNATE INSERT POSITIONS AVAILABLE

A W, X, Y or Z	B W, X or Y	C W, Y or Z	D X or Y	E X	F W or Z	G W or Y	

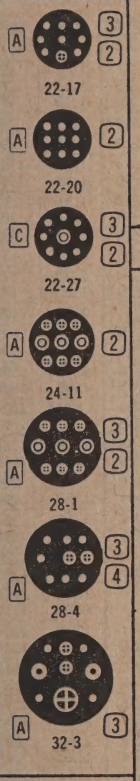
; Contact



9 Contact



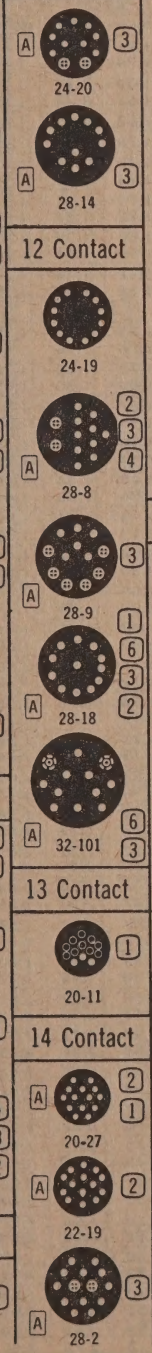
9 Contact



10 Contact

11 Contact

11 Contact

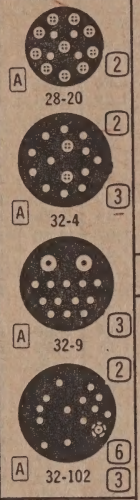


12 Contact

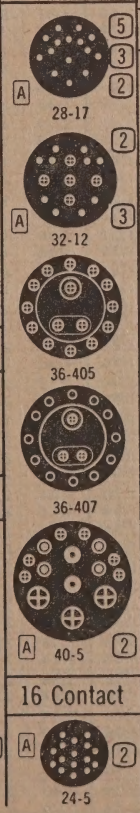
13 Contact

14 Contact

14 Contact

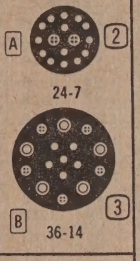


15 Contact



16 Contact

16 Contact



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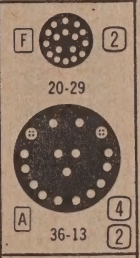
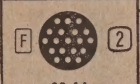


19 Contact



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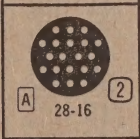
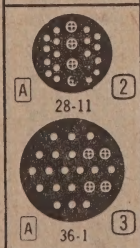
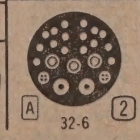


22 Contact



23 Contact



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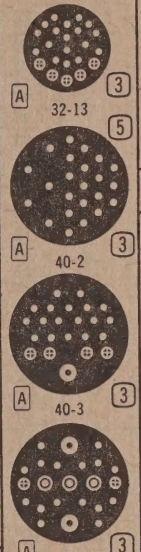
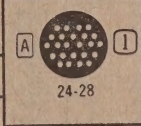
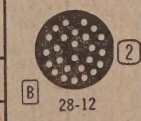


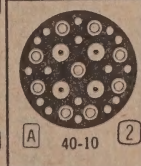
24 Contact



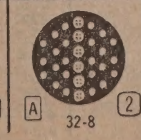
26 Contact



29 Contact



30 Contact



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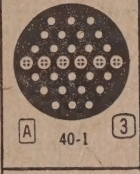
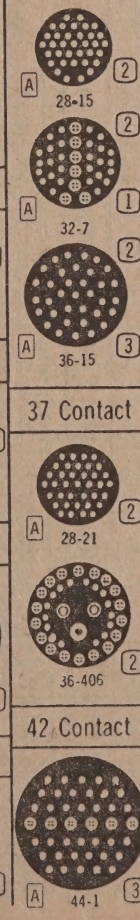
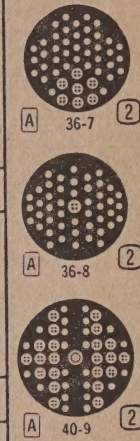


31 Contact

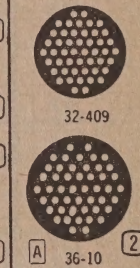
35 Contact



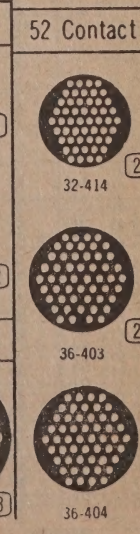
47 Contact



48 Contact



52 Contact



ee Following Pages for Amphenol MS Connector Listings

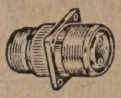
Amphenol MS Receptacles

Explanation of Series Nos. E.g.: 3102A-18-11P. "A" stands for solid shell ("B" split shell). "18" indicates shell size in 16ths of 1". "P"—pin; "S"—socket type. Mates for 3100A, 3101A and 3102A are directly opposite, on facing page. Require cable clamp (see page 280) except 3102A. Contacts are silver plated, and solder cups tinned. Aluminum shells with cadmium plate and O.D. conversion. Meet MIL-C-5015D.

HOW TO ORDER

Specify Stock Number, then add connect Type Number. For example, 712 A XX (stock no.)—3100A-8S-1P (type no.).

Positions W, X, Y, Z Available from Stock as indicated, below. Add 5c Extra Per Connector



3100A Wall Receptacle

3101A Cable Receptacle

3102A Recepta

Shell Style Insert	No. Contacts	Positions W	X	Y	Z	MS 3100A EACH 1-9	10-49	50-99	100-Up	MS 3101A EACH 1-9	10-49	50-99	100-Up	MS 3102A EACH 1-9	10-49	50-99	100
8S-1P	1					3.88	1.90	1.69	1.53	2.85	1.76	1.56	1.41	1.60	1.17	.94	
8S-1S	1					3.08	1.90	1.69	1.53	2.85	1.76	1.56	1.41	1.71	1.06	.94	
10S-2P	1					3.15	1.94	1.73	1.56	2.56	1.59	1.41	1.28	1.17	.73	65	
10S-2S	1					3.10	1.97	1.75	1.59	2.61	1.62	1.44	1.30	1.23	.76	.67	
10SL-3P	3					1.99	1.23	1.09	.99	2.96	1.83	1.63	1.47	1.53	.94	.84	
10SL-4P	2					1.97	1.22	1.08	.98	2.80	1.73	1.54	1.39	1.53	.94	.84	
12-5P	1					2.61	1.62	1.44	1.20	2.89	1.79	1.59	1.44	1.63	1.00	.89	
12-5S	1					2.80	1.73	1.54	1.39	3.12	1.93	1.71	1.55	1.85	1.14	1.02	
12S-2P	2					2.40	1.49	1.32	1.20	2.78	1.70	1.51	1.37	1.36	.84	.75	
12S-2S	2					2.50	1.54	1.37	1.24	2.76	1.72	1.52	1.38	1.39	.86	.76	
12S-3P	2	X	X	X	X	2.15	1.33	1.18	1.07	2.50	1.56	1.38	1.25	1.16	.72	.64	
12S-3S	2	X	X	X	X	2.20	1.39	1.21	1.09	2.56	1.59	1.41	1.28	1.23	.76	.67	
12S-4P	1					2.23	1.37	1.22	1.10	2.61	1.62	1.44	1.30	1.25	.77	.69	
12S-4S	1					2.23	1.37	1.22	1.10	2.61	1.62	1.44	1.30	1.25	.77	.69	
12SL-844P	4					.....	.....	.....	.....	.....	.....	.....	.....	2.78	1.72	1.52	1.
14S-1P	3					2.29	1.42	1.26	1.14	2.80	1.73	1.54	1.39	1.50	.93	.83	
14S-1S	3					2.34	1.44	1.28	1.16	1.85	1.76	1.56	1.41	1.53	.94	.84	
14S-2P	4					2.26	1.40	1.24	1.13	2.78	1.72	1.52	1.38	1.48	.92	.81	
14S-2S	4					2.45	1.52	1.35	1.22	2.91	1.80	1.60	1.45	1.63	1.00	.89	
14S-5P	5		X			2.53	1.56	1.38	1.25	3.03	1.87	1.66	1.51	1.71	1.06	.94	
14S-5S	5		X			2.61	1.62	1.44	1.30	3.13	1.93	1.71	1.55	1.83	1.13	1.00	
14S-6P	6					2.61	1.62	1.44	1.30	3.13	1.93	1.71	1.55	1.83	1.18	1.00	
14S-6S	6					2.66	1.64	1.46	1.32	3.19	1.97	1.75	1.59	1.88	1.16	1.03	
14S-7P	3	X	X	X		2.29	1.42	1.26	1.14	2.80	1.73	1.54	1.39	1.50	.93	.83	
14S-7S	3	X	X	X		2.34	1.44	1.28	1.16	2.85	1.76	1.56	1.41	1.53	.94	.84	
14S-9P	2	X	X	X	X	2.18	1.34	1.19	1.08	2.66	1.64	1.46	1.32	1.36	.84	.75	
14S-9S	2	X	X	X	X	2.20	1.36	1.21	1.09	2.73	1.69	1.50	1.36	1.39	.86	.76	
16-9P	4					3.21	1.99	1.77	1.60	3.31	2.04	1.82	1.64	1.96	1.22	1.08	
16-9S	4					3.59	2.22	1.97	1.78	3.73	2.30	2.04	1.85	2.40	1.49	1.32	1.
16-10P	3					2.13	1.93	1.71	1.55	3.21	1.99	1.77	1.60	1.88	1.16	1.03	
16-10S	3					3.48	2.15	1.91	1.73	3.56	2.20	1.96	1.77	2.23	1.37	1.22	1.
16-11P	2	X	X	X	X	2.89	1.79	1.59	1.44	3.03	1.87	1.66	1.51	1.69	1.04	.93	
16-11S	2	X	X	X	X	3.26	2.02	1.79	1.62	3.38	2.09	1.85	1.68	2.04	1.26	1.12	1.
16-13P	2	X	X	X	X	7.08	4.38	3.89	3.52	7.19	4.45	3.95	3.58	5.85	3.62	3.21	2.
16-13S	2	X	X	X	X	8.19	5.06	4.50	4.07	8.28	5.12	4.55	4.12	6.94	4.29	3.81	3.
16S-1P	7	X			X	2.89	1.79	1.59	1.44	3.15	1.94	1.73	1.56	1.85	1.14	1.02	
16S-1S	7	X			X	3.22	1.99	1.77	1.60	3.45	2.13	1.89	1.71	2.15	1.33	1.18	1.
16S-4P	2	X	X	X	X	2.56	1.59	1.41	1.28	2.80	1.73	1.54	1.39	1.50	.93	.83	
16S-4S	2	X	X	X	X	2.66	1.64	1.46	1.32	2.89	1.79	1.59	1.44	1.60	.99	.88	
16S-5P	3	X	X	X	X	2.75	1.70	1.51	1.37	2.96	1.83	1.63	1.47	1.69	1.04	.93	
16S-5S	3	X	X	X	X	2.80	1.73	1.54	1.39	3.08	1.90	1.69	1.53	1.76	1.09	.97	
16S-8P	5		X	X		2.85	1.76	1.56	1.41	3.10	1.92	1.70	1.54	1.80	1.12	.99	
16S-8S	5		X	X		2.91	1.80	1.60	1.45	3.19	1.97	1.75	1.59	1.88	1.16	1.03	
18-1P	10	X	X	X	X	3.59	2.22	1.97	1.78	4.05	2.50	2.22	2.01	2.50	1.54	1.37	1.
18-1S	10	X	X	X	X	3.91	2.42	2.15	1.94	4.38	2.70	2.40	2.17	2.78	1.72	1.52	1.
18-3P	2	X	X	X	X	2.86	1.77	1.57	1.43	3.31	2.04	1.82	1.64	1.76	1.09	.97	
18-3S	2	X	X	X	X	3.54	2.19	1.94	1.76	4.00	2.47	2.20	1.99	2.43	1.50	1.33	1.
18-4P	4	X	X	X	X	2.89	1.79	1.59	1.44	3.35	2.07	1.84	1.67	1.80	1.12	.99	
18-4S	4	X	X	X	X	3.15	1.94	1.73	1.56	3.56	2.20	1.96	1.77	1.99	1.23	1.09	
18-5P	3	X	X	X	X	2.78	1.72	1.52	1.38	3.21	1.99	1.77	1.60	1.63	1.00	.89	
18-5S	3	X	X	X	X	3.15	1.94	1.73	1.56	3.56	2.20	1.96	1.77	1.99	1.23	1.09	
18-8P	8	X			X	3.59	2.22	1.97	1.78	4.05	2.50	2.22	2.01	2.50	1.54	1.37	1.
18-8S	8	X			X	3.84	2.37	2.11	1.91	4.25	2.63	2.34	2.12	2.73	1.69	1.50	1.
18-9P	7	X	X	X	X	3.43	2.12	1.88	1.70	3.84	2.37	2.11	1.91	2.26	1.40	1.24	1.
18-9S	7	X	X	X	X	3.70	2.29	2.03	1.84	4.11	2.55	2.26	2.05	2.55	1.57	1.40	1.
18-10P	4		X	X		3.48	2.15	1.91	1.73	3.91	2.42	2.15	1.94	2.34	1.44	1.28	1.
18-10S	4		X	X		3.84	2.37	2.11	1.91	4.25	2.63	2.34	2.12	2.73	1.69	1.50	1.
18-11P	5		X	X		3.48	2.15	1.91	1.73	3.91	2.42	2.15	1.94	2.34	1.44	1.28	1.
18-11S	5		X	X		3.59	2.22	1.97	1.78	4.05	2.50	2.22	2.01	2.50	1.54	1.37	1.
18-12P	6	X			X	3.24	2.00	1.78	1.61	3.70	2.29	2.03	1.84	2.10	1.30	1.16	1.
18-12S	6	X			X	3.48	2.15	1.91	1.73	3.91	2.42	2.15	1.94	2.34	1.44	1.28	1.
18-15P	4		X	X		11.51	7.12	6.32	5.73	11.98	7.41	6.58	5.96	10.41	6.44	5.72	5.
18-15S	4		X	X		11.81	7.31	6.49	5.88	12.26	7.58	6.73	6.10	10.71	6.62	5.88	5.
18-16P	1					3.15	1.94	1.73	1.56	3.56	2.20	1.96	1.77	1.99	1.23	1.09	
18-16S	1					3.37	2.29	2.03	1.84	4.11	2.55	2.26	2.05	2.55	1.57	1.40	1.
20-4P	4	X	X	X		3.61	2.23	1.98	1.79	3.89	2.40	2.13	1.93	2.29	1.42	1.26	1.
20-4S	4	X	X	X		4.14	2.56	2.27	2.06	4.40	2.72	2.41	2.19	2.80	1.73	1.54	1.
20-7P	8	X	X	X	X	3.61	2.23	1.98	1.79	3.89	2.40	2.13	1.93	2.29	1.42	1.26	1.
20-7S	8	X	X	X	X	3.94	2.43	2.16	1.96	4.16	2.57	2.29	2.07	2.61	1.62	1.44	1.
20-8P	6	X	X	X	X	4.14	2.56	2.27	2.06	4.40	2.72	2.41	2.19	2.80	1.73	1.54	1.
20-8S	6	X	X	X	X	4.81	2.97	2.64	2.39	5.06	3.13	2.78	2.52	3.48	2.15	1.91	1.

SPECIFY IF CONNECTORS ARE TO BE STAMPED WITH MFR'S TYPE NO.

nd Mating Plugs

PLIFIED ORDERING

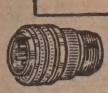
lect desired insert (pg. 4-275), then shell le; receptacles on op-site page. Mating gs, below. Paired-off ing places, mating gs and receptacles the same line.

Insert 18-4 → 4 No. 16 contacts, 22 amps, 900 VAC

Panel Recept. MS 3102A-18-4P → Pin Contacts Cold Circuit

Straight Plug MS-3106A-18-4S → Socket Contacts Hot Circuit

Cable Clamp MS 3057-10A → Clamps on Page 280


3106A

3106B

3108A

3108B

Shell Style Insert	Series 3106A EACH				Series 3106B EACH				Series 3108A EACH				Series 3108B EACH			
	1-9	10-49	50-99	100-Up	1-9	10-49	50-99	100-Up	1-9	10-49	50-99	100-Up	1-9	10-49	50-99	100-Up
-1S	1.96	1.22	1.08	.98	.....	.....	.....	.....	3.37	2.09	1.85	1.68	.....	.....	.....	.....
-1P	1.96	1.22	1.08	.98	.....	.....	.....	.....	3.37	2.09	1.85	1.68	.....	.....	.....	.....
S-2S	2.77	1.72	1.52	1.38	.....	.....	.....	.....	4.37	2.70	2.40	2.17	.....	.....	.....	.....
S-2P	2.75	1.70	1.51	1.37	.....	.....	.....	.....	4.30	2.66	2.36	2.14	.....	.....	.....	.....
SL-3S	2.40	1.49	1.32	1.20	.....	.....	.....	.....	4.25	2.63	2.34	2.12	2.22	1.37	1.22	1.10
SL4S	2.33	1.44	1.28	1.16	.....	.....	.....	.....	4.23	2.62	2.32	2.10	2.17	1.34	1.19	1.08
-5S	2.85	1.76	1.56	1.41	.....	.....	.....	.....	4.97	3.07	2.73	2.47	3.02	1.87	1.66	1.51
-5P	2.63	1.63	1.45	1.31	.....	.....	.....	.....	4.76	2.95	2.62	2.37	2.80	1.73	1.54	1.39
S-2S	2.26	1.40	1.24	1.13	.....	.....	.....	.....	5.11	3.16	2.81	2.54	2.86	1.77	1.57	1.43
S-2P	2.22	1.37	2.22	1.10	.....	.....	.....	.....	5.08	3.15	2.79	2.53	2.85	1.76	1.56	1.41
S-3S	2.08	1.29	1.14	1.04	.....	.....	.....	.....	4.86	3.00	2.67	2.42	2.66	1.64	1.46	1.32
S-3P	1.98	1.23	1.09	.99	.....	.....	.....	.....	4.81	2.97	2.64	2.39	2.61	1.62	1.44	1.30
S-4S	2.10	1.30	1.16	1.05	.....	.....	.....	.....	4.87	3.02	2.68	2.43	2.72	1.69	1.50	1.36
S-4P	2.10	1.30	1.16	1.05	.....	.....	.....	.....	4.87	3.02	2.68	2.43	2.72	1.69	1.50	1.36
SL-844S	5.16	3.19	2.83	2.56	.....	.....	.....	.....	7.75	4.79	4.25	3.85	.....	.....	.....	.....
S-1S	2.33	1.44	1.28	1.16	2.80	1.73	1.54	1.39	4.76	2.95	2.62	2.37	2.61	1.62	1.44	1.30
S-1P	2.28	1.42	1.26	1.14	2.77	1.72	1.52	1.38	4.73	2.93	2.60	2.36	2.56	1.59	1.41	1.28
S-2S	2.45	1.52	1.35	1.22	2.88	1.79	1.59	1.44	4.86	3.00	2.67	2.42	2.72	1.69	1.50	1.36
S-2P	2.26	1.40	1.24	1.13	2.75	1.70	1.51	1.37	4.71	2.92	2.59	2.35	2.55	1.57	1.40	1.27
S-5S	2.61	1.62	1.44	1.30	3.10	1.92	1.70	1.54	5.06	3.13	2.78	2.52	2.86	1.77	1.57	1.43
S-5P	2.52	1.56	1.38	1.25	2.96	1.83	1.63	1.47	4.95	3.06	2.72	2.46	2.77	1.72	1.52	1.38
S-6S	2.66	1.64	1.46	1.32	3.15	1.92	1.73	1.56	5.11	3.16	2.81	2.54	2.91	1.80	1.60	1.45
S-6P	2.61	1.62	1.44	1.30	3.10	1.92	1.70	1.54	5.06	3.13	2.78	2.52	2.86	1.77	1.57	1.43
S-7S	2.33	1.44	1.28	1.16	2.80	1.73	1.54	1.39	4.76	2.95	2.62	2.37	2.61	1.62	1.44	1.30
S-7P	2.28	1.42	1.26	1.14	2.77	1.72	1.52	1.38	4.73	2.93	2.60	2.36	2.56	1.59	1.41	1.28
S-9S	2.20	1.36	1.21	1.09	1.66	1.64	1.46	1.32	4.65	2.87	2.55	2.31	2.50	1.54	1.37	1.24
S-9P	2.17	1.34	1.19	1.08	2.63	1.63	1.45	1.31	4.62	2.86	2.54	2.30	2.45	1.52	1.35	1.22
-9S	3.45	2.13	1.89	1.71	.....	.....	.....	.....	6.26	3.88	3.44	3.12	4.16	2.57	2.29	2.07
-9P	3.07	1.90	1.69	1.53	.....	.....	.....	.....	5.90	3.65	3.24	2.93	3.78	2.35	2.08	1.89
-10S	3.31	2.04	1.82	1.64	.....	.....	.....	.....	6.12	3.79	3.37	3.05	4.05	2.50	2.22	2.01
-10P	2.91	1.80	1.60	1.45	.....	.....	.....	.....	5.78	3.58	3.18	2.88	3.70	2.29	2.03	1.84
-11S	3.12	1.93	1.71	1.55	.....	.....	.....	.....	5.96	3.69	3.28	2.97	3.86	2.37	2.11	1.91
-11P	2.75	1.70	1.51	1.37	.....	.....	.....	.....	5.57	3.45	3.06	2.77	3.47	2.15	1.91	1.73
-13S	8.00	4.95	4.39	3.98	.....	.....	.....	.....	10.85	6.71	5.96	5.39	8.76	5.42	4.81	4.36
-13P	6.91	4.28	3.80	3.44	.....	.....	.....	.....	9.78	6.05	5.37	4.86	7.63	4.72	4.19	3.80
S-1S	2.88	1.79	1.59	1.44	3.16	2.23	1.98	1.79	6.38	3.95	3.51	3.17	3.42	2.18	1.88	1.70
S-1P	2.61	1.62	1.44	1.30	3.35	2.07	1.84	1.67	6.08	3.76	3.34	3.02	3.12	1.93	1.71	1.55
S-4S	2.40	1.49	1.32	1.20	3.12	1.93	1.71	1.55	5.85	3.62	3.21	2.91	2.86	1.77	1.54	1.43
S-4P	2.26	1.40	1.24	1.13	3.02	1.87	1.66	1.51	5.76	3.56	3.16	2.80	2.77	1.72	1.52	1.38
S-5S	2.52	1.56	1.38	1.25	3.23	2.00	1.78	1.61	5.98	3.70	3.29	2.98	3.02	1.87	1.66	1.51
S-5P	2.45	1.52	1.35	1.22	3.18	1.97	1.75	1.59	5.92	3.66	3.25	2.94	2.91	1.80	1.60	1.45
S-8S	2.63	1.63	1.45	1.31	3.37	2.09	1.85	1.68	6.10	3.78	3.35	3.04	3.15	1.94	1.73	1.56
S-8P	2.55	1.57	1.40	1.27	3.26	2.02	1.79	1.62	6.01	3.72	3.30	2.99	3.07	1.90	1.69	1.53
-1S	3.77	2.33	2.07	1.87	4.41	2.73	2.43	2.20	7.28	4.50	4.00	3.62	4.57	2.83	2.51	2.28
-1P	3.45	2.13	1.89	1.71	4.11	2.55	2.26	2.05	6.96	4.30	3.82	3.46	4.25	2.63	2.34	2.12
-3S	3.37	2.09	1.85	1.68	4.05	2.50	2.22	2.11	6.91	4.28	3.80	3.44	4.18	2.59	2.30	2.08
-3P	2.72	1.69	1.50	1.36	3.37	2.09	1.85	1.68	6.25	3.86	3.43	3.11	3.53	2.19	1.94	1.76
-4S	2.96	1.83	1.63	1.47	3.61	2.23	1.98	1.79	6.55	4.05	3.59	3.25	3.81	2.36	2.10	1.90
-4P	2.75	1.70	1.51	1.37	3.42	2.12	1.88	1.70	6.26	3.88	3.44	3.12	3.56	2.20	1.96	1.77
-5S	2.96	1.83	1.63	1.47	3.61	2.23	1.98	1.79	6.55	4.05	3.59	3.25	3.81	2.36	2.10	1.90
-5P	2.61	1.62	1.44	1.30	3.26	2.02	1.79	1.62	6.12	3.79	3.37	3.05	3.45	2.13	1.89	1.71
-8S	3.70	2.29	2.03	1.84	4.37	2.70	2.40	2.17	7.23	4.48	3.98	3.60	4.51	2.79	2.48	2.24
-8P	3.45	2.13	1.89	1.71	4.11	2.55	2.26	2.05	6.96	4.30	3.82	3.46	4.25	2.63	2.34	2.12
-9S	3.48	2.16	1.92	1.74	4.16	2.57	2.29	2.07	7.05	4.36	3.87	3.51	4.37	2.70	2.40	2.17
-9P	3.23	2.00	1.78	1.61	3.91	2.42	2.15	1.94	6.77	4.19	3.72	3.37	4.07	2.52	2.24	2.02
-10S	3.70	2.29	2.03	1.84	4.37	2.70	2.40	2.17	7.23	4.48	3.98	3.60	4.51	2.79	2.48	2.24
-10P	3.31	2.04	1.82	1.64	4.00	2.47	2.20	1.99	6.85	4.23	3.76	3.40	4.13	2.56	2.27	2.06
-11S	3.45	2.13	1.89	1.71	4.11	2.55	2.29	2.05	6.96	4.30	3.82	3.46	4.25	2.63	2.34	2.12
-11P	3.31	2.04	1.82	1.64	4.00	2.47	2.20	1.99	6.85	4.23	3.76	3.40	4.13	2.56	2.27	2.06
-12S	3.31	2.04	1.82	1.64	4.00	2.47	2.20	1.99	6.85	4.23	3.76	3.40	4.13	2.56	2.27	2.06
-12P	3.10	1.92	1.70	1.54	3.77	2.33	2.07	1.87	6.61	4.09	3.63	3.29	3.91	2.42	2.15	1.94
-15S	11.65	7.21	6.40	5.80	12.32	7.62	6.77	6.13	15.21	9.41	8.36	7.57	12.48	7.72	6.86	6.21
-15P	11.35	7.02	6.24	5.65	12.02	7.44	6.60	5.98	14.88	9.21	8.18	7.41	12.16	7.52	6.68	6.05
-16S	3.48	2.16	1.92	1.74	4.16	2.57	2.29	2.07	7.05	4.36	3.87	3.51	4.37	2.70	2.40	2.17
-16P	2.96	1.83	1.63	1.47	3.61	2.23	1.98	1.79	6.55	4.05	3.59	3.25	3.81	2.36	2.10	1.90
-4S	4.51	2.79	2.48	2.24	5.03	3.12	2.77	2.51	8.16	5.05	4.48	4.06	5.27	3.26	2.90	2.62
-4P	4.02	2.49	2.21	2.00	4.51	2.79	2.48	2.24	7.63	4.72	4.19	3.80	4.73	2.93	2.60	2.36
-7S	4.30	2.66	2.36	2.14	4.81	2.97	2.64	2.39	7.95	4.92	4.37	3.96	5.06	3.13	2.78	2.52
-7P	4.02	2.49	2.21	2.00	4.51	2.79	2.48	2.24	7.63	4.72	4.19	3.80	4.73	2.93	2.60	2.36
-8S	5.17	3.20	2.84	2.58	5.68	3.52	3.12	2.83	8.81	5.45	4.84	4.38	5.92	3.66	3.25	2.94
-8P	4.51	2.79	2.48	2.24	5.03	3.12	2.77	2.51	8.16	5.05	4.48	4.06	5.27	3.26	2.90	2.62

SPECIFY IF CONNECTORS ARE TO BE STAMPED WITH MFR'S TYPE NO.

Amphenol MS Receptacles

HOW TO ORDER. Specify Stock No., then connector Type No. Example: 712AXXXX (stock no.)—3100A-20-9P (type no.)

Shell Style Insert	No. of Contacts	Positions W	X	Y	Z	Series 3100A EACH 1-9	10-49	50-99	100-Up	Series 3101A EACH 1-9	10-49	50-99	100-Up	Series 3102A EACH 1-9	10-49	50-99	100
20-9P	8	X	X	X	X	3.91	2.42	2.15	1.94	4.13	2.56	2.27	2.06	2.56	1.59	1.41	1.
20-9S	8	X	X	X	X	4.00	2.47	2.20	1.99	4.18	2.59	2.30	2.08	2.63	1.63	1.45	1.
20-14P	5	X	X	X	X	4.37	2.70	2.40	2.17	4.57	2.83	2.51	2.28	3.02	1.87	1.66	1.
20-14S	5	X	X	X	X	5.62	3.47	3.09	2.79	5.85	3.62	3.21	2.91	4.25	2.63	2.34	2.
20-15P	7	X				4.02	2.49	2.21	2.00	4.23	2.62	2.32	2.10	2.66	1.64	1.46	1.
20-15S	7	X			X	5.43	3.36	2.98	2.70	5.68	3.52	3.12	2.83	4.11	2.55	2.26	2.
20-16P	9	X	X	X	X	4.05	2.50	2.22	2.01	4.25	2.63	2.34	2.12	2.72	1.69	1.50	1.
20-16S	9	X	X	X	X	4.30	2.66	2.36	2.14	4.53	2.80	2.49	2.25	2.96	1.83	1.63	1.
20-17P	6	X	X	X		4.00	2.47	2.20	1.99	4.18	2.59	2.30	2.08	2.63	1.63	1.45	1.
20-17S	6	X	X	X		4.83	2.99	2.65	2.40	5.08	3.15	2.79	2.53	3.48	2.16	1.92	1.
20-18P	9	X	X	X	X	4.18	2.59	2.30	2.08	4.46	2.76	2.45	2.22	2.86	1.77	1.57	1.
20-18S	9	X	X	X	X	4.65	2.87	2.55	2.31	4.86	3.00	2.67	2.42	3.31	2.04	1.82	1.
20-21P	9	X	X	X	X	3.91	2.42	2.15	1.94	4.13	2.56	2.27	2.06	2.56	1.59	1.41	1.
20-21S	9	X	X	X	X	4.11	2.55	2.26	2.05	4.37	2.70	2.40	2.17	2.77	1.72	1.52	1.
20-22P	6	X	X	X	X	4.62	2.86	2.54	2.30	4.83	2.99	2.65	2.40	3.26	2.02	1.79	1.
20-22S	6	X	X	X	X	5.43	3.36	2.98	2.70	5.68	3.52	3.12	2.83	4.11	2.55	2.26	2.
20-23P	2	X	X	X	X	3.88	2.40	2.13	1.93	4.11	2.55	2.26	2.05	2.55	1.57	1.40	1.
20-23S	2	X	X	X	X	4.23	2.62	2.32	2.10	4.48	2.77	2.46	2.23	2.88	1.79	1.59	1.
20-24P	4	X	X	X	X	4.00	2.47	2.20	1.99	4.18	2.59	2.30	2.08	2.63	1.63	1.45	1.
20-24S	4	X	X	X	X	4.95	3.06	2.72	2.46	5.17	3.20	2.84	2.58	3.58	2.22	1.97	1.
20-27P	14	X	X	X	X	4.13	2.56	2.27	2.06	4.40	2.72	2.41	2.19	2.80	1.73	1.54	1.
20-27S	14	X	X	X	X	4.53	2.80	2.49	2.25	4.76	2.95	2.62	2.37	3.21	1.99	1.77	1.
20-29P	17	X			X	4.48	2.77	2.46	2.23	4.71	2.92	2.59	2.35	3.15	1.94	1.73	1.
20-29S	17	X			X	4.97	3.07	2.73	2.47	5.20	3.22	2.86	2.59	3.61	2.23	1.98	1.
20-33P	11					4.46	2.76	2.45	2.22	4.70	2.90	2.58	2.33	3.12	1.93	1.71	1.
20-33S	11					4.57	2.83	2.51	2.28	4.81	2.97	2.64	2.39	3.23	2.00	1.78	1.
22-2P	3	X	X	X	X	4.40	2.72	2.41	2.19	4.57	2.83	2.51	2.28	2.80	1.73	1.54	1.
22-2S	3	X	X	X	X	5.33	3.30	2.93	2.66	5.52	3.42	3.04	2.75	3.78	2.35	2.08	1.
22-4P	4	X	X	X	X	4.53	2.80	2.49	2.25	4.73	2.93	2.60	2.36	2.96	1.83	1.63	1.
22-4S	4	X	X	X	X	5.16	3.19	2.83	2.56	5.33	3.30	2.93	2.66	3.56	2.20	1.96	1.
22-5P	6	X	X	X	X	4.23	2.62	2.32	2.10	4.46	2.76	2.45	2.22	2.66	1.64	1.46	1.
22-5S	6	X	X	X	X	4.25	2.63	2.34	2.12	4.48	2.77	2.46	2.23	2.72	1.69	1.50	1.
22-9P	3	X	X	X	X	3.77	2.33	2.07	1.87	3.93	2.43	2.16	1.96	2.17	1.34	1.19	1.
22-9S	3	X	X	X	X	4.76	2.95	2.62	2.37	4.97	3.07	2.73	2.47	3.21	1.99	1.77	1.
22-10P	4	X	X	X	X	3.77	2.33	2.07	1.87	3.93	2.43	2.16	1.96	2.17	1.34	1.19	1.
22-10S	4	X	X	X	X	3.91	2.42	2.15	1.94	4.11	2.55	2.26	2.05	2.33	1.44	1.28	1.
22-11P	2	X	X	X	X	3.47	2.15	1.91	1.73	3.70	2.29	2.03	1.84	1.92	1.19	1.05	.9
22-11S	2	X	X	X	X	3.77	2.33	2.07	1.87	3.93	2.43	2.16	1.96	2.17	1.34	1.19	1.
22-12P	5	X	X	X	X	4.53	2.80	2.49	2.25	4.73	2.93	2.60	2.36	2.96	1.83	1.63	1.
22-12S	5	X	X	X	X	5.27	3.26	2.90	2.62	5.43	3.36	2.98	2.70	3.70	2.29	2.03	1.
22-14P	19	X	X	X	X	5.03	3.12	2.77	2.51	5.20	3.22	2.86	2.59	3.45	2.13	1.89	1.
22-14S	19	X	X	X	X	5.76	3.56	3.16	2.86	5.96	3.69	3.28	2.97	4.16	2.57	2.29	2.
22-15P	6	X	X	X	X	4.48	2.77	2.46	2.23	4.70	2.90	2.58	2.33	2.88	1.79	1.59	1.
22-15S	6	X	X	X	X	5.46	3.37	3.00	2.71	5.68	3.52	3.12	2.83	3.91	2.42	2.15	1.
22-17P	9	X	X	X	X	4.48	2.77	2.46	2.23	4.70	2.90	2.58	2.33	2.88	1.79	1.59	1.
22-17S	9	X	X	X	X	4.62	2.86	2.54	2.30	4.81	2.97	2.64	2.39	3.07	1.90	1.69	1.
22-18P	8	X	X	X	X	4.16	2.57	2.29	2.07	4.40	2.72	2.41	2.19	2.61	1.62	1.44	1.
22-18S	8	X	X	X	X	4.23	2.62	2.32	2.10	4.46	2.76	2.45	2.22	2.66	1.64	1.46	1.
22-19P	14	X	X	X	X	4.95	3.06	2.72	2.46	5.16	3.19	2.83	2.56	3.37	2.09	1.85	1.
22-19S	14	X	X	X	X	5.03	3.12	2.77	2.51	5.20	3.22	2.86	2.59	3.45	2.13	1.89	1.
22-22P	4		X	X		5.06	3.13	2.78	2.52	5.27	3.26	2.90	2.62	3.47	2.15	1.91	1.
22-22S	4		X	X		6.36	3.93	3.49	3.16	6.56	4.06	3.61	3.27	4.76	2.95	2.62	2.
22-23P	8	X		X		4.83	2.99	2.65	2.40	5.06	3.13	2.78	2.52	3.26	2.02	1.79	1.
22-23S	8	X		X		6.22	3.85	3.42	3.09	6.42	3.98	3.53	3.20	4.65	2.87	2.55	2.
22-36P	8	X		X		21.87	13.53	12.01	10.88	22.06	13.64	12.12	10.97	20.30	12.56	11.15	10.
22-36S	8	X		X		23.93	14.80	13.14	11.90	24.13	14.93	13.26	12.01	22.38	13.84	12.29	11.
24-2P	7	X		X		5.08	3.15	2.79	2.53	5.11	3.16	2.81	2.54	3.23	2.00	1.78	1.
24-2S	7	X		X		6.12	3.79	3.37	3.05	6.15	3.80	3.38	3.06	4.30	2.66	2.36	2.
24-5P	16	X	X	X	X	5.63	3.49	3.10	2.81	5.68	3.52	3.12	2.83	3.81	2.36	2.10	1.
24-5S	16	X	X	X	X	6.36	3.93	3.49	3.16	6.38	3.95	3.51	3.17	4.51	2.79	2.48	2.
24-6P	8	X	X	X	X	5.30	3.27	2.91	2.63	5.32	3.29	2.92	2.65	3.45	2.13	1.89	1.
24-6S	8	X	X	X	X	6.88	4.26	3.78	3.43	6.91	4.28	3.80	3.44	5.06	3.13	2.78	2.
24-7P	16	X	X	X	X	5.90	3.65	3.24	2.93	5.92	3.66	3.25	2.94	4.05	2.50	2.22	2.
24-7S	16	X	X	X	X	6.36	3.93	3.49	3.16	6.38	3.95	3.51	3.17	4.51	2.79	2.48	2.
24-10P	7	X			X	7.35	4.55	4.04	3.66	7.37	4.56	4.05	3.67	5.50	3.40	3.02	2.
24-10S	7	X			X	8.43	5.22	4.64	4.20	8.46	5.23	4.65	4.21	6.91	4.28	3.80	3.
24-11P	9	X	X	X	X	6.26	3.88	3.44	3.12	6.31	3.90	3.47	3.14	4.46	2.76	2.45	2.
24-11S	9	X	X	X	X	7.97	4.93	4.38	3.97	8.00	4.95	4.39	3.98	6.12	3.79	3.37	3.
24-12P	5	X	X	X	X	6.56	4.06	3.61	3.27	6.58	4.08	3.62	3.28	4.71	2.92	2.59	2.
24-12S	5	X	X	X	X	7.86	4.86	4.32	3.91	7.88	4.88	4.33	3.92	6.01	3.72	3.30	2.
24-20P	11	X	X	X	X	5.27	3.26	2.90	2.62	5.30	3.27	2.91	2.63	3.42	2.12	1.88	1.
24-20S	11	X	X	X	X	5.32	3.29	2.92	2.65	5.33	3.30	2.93	2.66	3.47	2.15	1.91	1.
24-27P	7	X			X	4.51	2.79	2.48	2.24	4.53	2.80	2.49	2.25	2.66	1.64	1.46	1.
24-27S	7	X			X	4.65	2.87	2.55	2.31	4.70	2.90	2.58	2.33	2.80	1.73	1.54	1.
24-28P	24	X	X	X	X	6.15	3.80	3.38	3.06	6.22	3.85	3.42	3.09	4.37	2.70	2.40	2.
24-28S	24	X	X	X	X	6.96	4.30	3.82	3.46	7.02	4.35	3.86	3.50	5.16	3.19	2.83	2.
28-2P	14	X	X	X	X	5.78	3.58	3.18	2.88	6.42	3.98	3.53	3.20	4.05	2.50	2.22	2.
28-2S	14	X	X	X	X	6.15	3.80	3.38	3.06	6.80	4.20	3.73	3.38	4.46	2.76	2.45	2.
28-9P	12	X	X	X	X	6.10	3.78	3.35	3.04	6.72	4.16	3.70	3.35	4.40	2.72	2.41	2.
28-9S	12	X	X	X	X	6.68	4.13	3.67	3.32	7.31	4.52	4.01	3.63	4.95	3.06	2.72	2.

See Page 280 For Cable Clamps and Accessorie

and Mating Plugs

HOW TO ORDER. Specify Stock No. (712AXXXX), then connector Type No. Example: 712AXXXX (stock no.)—3106A-20-9S (type no.)

Shell Style Insert	Series 3106A EACH				Series 3106B EACH				Series 3108A EACH				Series 3108B EACH			
	1-9	10-49	50-99	100-Up	1-9	10-49	50-99	100-Up	1-9	10-49	50-99	100-Up	1-9	10-49	50-99	100-Up
-9S	4.37	2.70	2.40	2.17	4.83	2.99	2.65	2.40	7.97	4.93	4.38	3.97	5.08	3.15	2.79	2.53
-9P	4.25	2.63	2.34	2.12	4.76	2.95	2.62	2.37	7.93	4.90	4.36	3.94	5.03	3.12	2.77	2.51
-14S	5.98	3.70	3.29	2.98	6.47	4.00	3.56	3.22	9.60	5.93	5.27	4.77	6.71	4.15	3.68	3.34
-14P	4.71	2.92	2.59	2.35	5.20	3.22	2.86	2.59	8.35	5.16	4.58	4.15	5.43	3.36	2.98	2.70
-15S	5.80	3.59	3.19	2.89	6.31	3.90	3.47	3.14	9.46	5.85	5.19	4.70	6.56	4.06	3.61	3.27
-15P	4.40	2.72	2.41	2.19	4.86	3.00	2.67	2.42	8.00	4.95	4.39	3.98	5.11	3.16	2.81	2.54
-16S	4.70	2.90	2.58	2.33	5.17	3.20	2.84	2.58	8.30	5.13	4.56	4.13	5.41	3.35	2.97	2.69
-16P	4.41	2.73	2.43	2.20	4.87	3.02	2.68	2.43	8.05	4.98	4.42	4.00	5.16	3.19	2.83	2.56
-17S	5.20	3.22	2.86	2.59	5.73	3.55	3.15	2.85	8.86	5.48	4.86	4.40	5.96	3.69	3.28	2.97
-17P	4.37	2.70	2.40	2.17	4.83	2.99	2.65	2.40	7.97	4.93	4.38	3.97	5.08	3.15	2.79	2.53
-18S	5.03	3.12	2.77	2.51	5.50	3.40	3.02	2.74	8.65	5.35	4.75	4.30	5.68	3.52	3.12	2.83
-18P	4.57	2.83	2.51	2.28	5.08	3.15	2.79	2.53	8.21	5.08	4.51	4.08	5.32	3.29	2.92	2.65
-21S	4.48	2.77	2.46	2.23	4.97	3.07	2.73	2.47	8.11	5.02	4.46	4.04	5.20	3.22	2.86	2.59
-21P	4.25	2.63	2.34	2.12	4.76	2.95	2.62	2.37	7.93	4.90	4.36	3.94	5.03	3.12	2.77	2.51
-22S	5.80	3.59	3.19	2.89	6.31	3.90	3.47	3.14	9.46	5.85	5.19	4.70	6.56	4.06	3.61	3.27
-22P	4.95	3.06	2.72	2.46	5.46	3.37	3.00	2.71	8.62	5.33	4.74	4.29	5.73	3.55	3.15	2.85
-23S	4.62	2.86	2.54	2.30	5.11	3.16	2.81	2.54	8.23	5.09	4.52	4.09	5.33	3.30	2.93	2.66
-23P	4.23	2.62	2.32	2.10	4.73	2.93	2.60	2.36	7.88	4.88	4.33	3.92	4.97	3.07	2.73	2.47
-24S	5.32	3.29	2.92	2.65	5.80	3.59	3.19	2.89	8.92	5.52	4.90	4.44	6.03	3.73	3.31	3.00
-24P	4.37	2.70	2.40	2.17	4.83	2.99	2.65	2.40	7.97	4.93	4.38	3.97	5.08	3.15	2.79	2.53
-27S	4.87	3.02	2.68	2.43	5.41	3.35	2.97	2.69	8.56	5.29	4.70	4.26	5.63	3.49	3.10	2.81
-27P	4.51	2.79	2.48	2.24	5.03	3.12	2.77	2.51	8.16	5.05	4.48	4.06	5.27	3.26	2.90	2.62
-29S	5.33	3.30	2.93	2.66	5.85	3.62	3.21	2.91	8.97	5.55	4.93	4.46	6.08	3.76	3.34	3.02
-29P	4.83	2.99	2.65	2.40	5.33	3.30	2.93	2.66	8.51	5.26	4.67	4.23	5.57	3.45	3.06	2.77
-33S	4.95	3.06	2.72	2.46	5.43	3.36	2.98	2.70	8.57	5.31	4.71	4.27	5.68	3.52	3.12	2.83
-33P	4.81	2.97	2.64	2.39	5.32	3.29	2.92	2.65	8.46	5.23	4.65	4.21	5.52	3.42	3.04	2.75
-2S	5.33	3.30	2.93	2.66	5.98	3.70	3.29	2.98	9.33	5.78	5.13	4.65	6.26	3.88	3.44	3.12
-2P	4.40	2.72	2.41	2.19	5.03	3.12	2.77	2.51	8.40	5.19	4.61	4.17	5.32	3.29	2.92	2.65
-4S	5.16	3.19	2.83	2.56	5.78	3.58	3.18	2.88	9.16	5.66	5.03	4.55	6.08	3.76	3.34	3.02
-4P	4.56	2.80	2.49	2.25	5.17	3.20	2.84	2.58	8.56	5.29	4.70	4.26	5.46	3.37	3.00	2.71
-5S	4.25	2.63	2.34	2.12	4.87	3.02	2.68	2.43	8.27	5.12	4.55	4.12	5.20	3.22	2.86	2.59
-5P	4.23	2.62	2.32	2.10	4.86	3.00	2.67	2.42	8.23	5.09	4.52	4.09	5.17	3.20	2.84	2.58
-9S	4.76	2.95	2.62	2.37	5.41	3.35	2.97	2.69	8.78	5.43	4.83	4.37	5.73	3.55	3.15	2.85
-9P	3.77	2.33	2.07	1.87	4.40	2.72	2.41	2.19	7.75	4.79	4.25	3.85	4.70	2.90	2.58	2.33
-10S	3.91	2.42	2.15	1.94	4.53	2.80	2.49	2.25	7.93	4.90	4.36	3.94	4.83	2.99	2.65	2.40
-10P	3.77	2.33	2.07	1.87	4.40	2.72	2.41	2.19	7.75	4.79	4.25	3.85	4.70	2.90	2.58	2.33
-11S	3.77	2.33	2.07	1.87	4.40	2.72	2.41	2.19	7.75	4.79	4.25	3.85	4.70	2.90	2.58	2.33
-11P	3.47	2.15	1.91	1.73	4.11	2.55	2.26	2.05	7.48	4.63	4.11	3.73	4.41	2.73	2.43	2.20
-12S	5.27	3.26	2.90	2.62	5.90	3.65	3.24	2.93	9.25	5.72	5.08	4.60	6.15	3.80	3.38	3.06
-12P	4.53	2.80	2.49	2.25	5.17	3.20	2.84	2.58	8.56	5.29	4.70	4.26	5.46	3.37	3.00	2.71
-14S	5.76	3.56	3.16	2.86	6.38	3.95	3.51	3.17	9.78	6.05	5.37	4.86	6.68	4.13	3.67	3.32
-14P	5.03	3.12	2.77	2.51	5.63	3.49	3.10	2.81	9.02	5.58	4.95	4.49	5.96	3.69	3.28	2.97
-15S	5.46	3.37	3.00	2.71	6.10	3.78	3.35	3.04	9.48	5.86	5.21	4.72	6.42	3.98	3.53	3.20
-15P	4.48	2.77	2.46	2.23	5.11	3.16	2.81	2.54	8.51	5.26	4.67	4.23	5.41	3.35	2.97	2.69
-17S	4.62	2.86	2.54	2.30	5.27	3.26	2.90	2.62	8.62	5.33	4.74	4.29	5.52	3.42	3.04	2.75
-17P	4.48	2.77	2.46	2.23	5.11	3.16	2.81	2.54	8.51	5.26	4.67	4.23	5.41	3.35	2.97	2.69
-18S	4.23	2.62	2.32	2.10	4.86	3.00	2.67	2.42	8.23	5.09	4.52	4.09	5.17	3.20	2.84	2.58
-18P	4.16	2.57	2.29	2.07	4.81	2.97	2.64	2.39	8.18	5.06	4.50	4.07	5.11	3.16	2.81	2.54
-19S	5.03	3.12	2.77	2.51	5.63	3.49	3.10	2.81	9.02	5.58	4.95	4.49	5.96	3.69	3.28	2.97
-19P	4.95	3.06	2.72	2.46	5.57	3.45	3.06	2.77	8.92	5.52	4.90	4.44	5.90	3.65	3.24	2.93
-22S	6.36	3.93	3.49	3.16	6.96	4.30	3.82	3.46	10.38	6.42	5.70	5.16	7.28	4.50	4.00	3.62
-22P	5.06	3.13	2.78	2.52	5.68	3.52	3.12	2.83	9.08	5.62	4.99	4.52	5.98	3.70	3.29	2.98
-23S	6.22	3.85	3.42	3.09	6.85	4.23	3.76	3.40	10.20	6.31	5.60	5.07	7.17	4.43	3.94	3.57
-23P	4.83	2.99	2.65	2.40	5.46	3.37	3.00	2.71	8.86	5.48	4.86	4.40	5.78	3.58	3.18	2.88
-36S	23.93	14.80	13.14	11.90	24.58	15.20	13.50	12.22	27.96	17.29	15.35	13.90	24.86	15.37	13.65	12.36
-36P	21.87	13.53	12.01	10.88	22.52	13.93	12.37	11.20	25.87	16.00	14.21	12.87	22.80	14.10	12.52	11.34
-2S	6.25	3.86	3.43	3.11	7.37	4.56	4.05	3.67	10.55	6.52	5.79	5.24	6.80	4.20	3.73	3.38
-2P	5.17	3.20	2.84	2.58	6.31	3.90	3.47	3.14	9.48	5.86	5.21	4.72	5.76	3.56	3.16	2.86
-4S	6.45	3.99	3.54	3.21	7.58	4.69	4.17	3.77	10.75	6.65	5.91	5.35	7.02	4.35	3.86	3.50
-4P	5.76	3.56	3.16	2.86	6.88	4.26	3.78	3.43	10.06	6.22	5.52	5.00	6.31	3.90	3.47	3.14
-6S	6.96	4.30	3.82	3.46	8.11	5.02	4.46	4.04	11.31	6.99	6.21	5.62	7.53	4.66	4.14	3.75
-6P	5.38	3.33	2.96	2.68	6.55	4.05	3.59	3.25	9.71	6.01	5.33	4.83	5.96	3.69	3.28	2.97
-7S	6.45	3.99	3.54	3.21	7.58	4.69	4.17	3.77	10.75	6.65	5.91	5.35	7.02	4.35	3.86	3.50
-7P	5.98	3.70	3.29	2.98	7.12	4.40	3.91	3.54	10.26	6.35	5.64	5.11	6.56	4.06	3.61	3.27
-10S	8.53	5.28	4.69	4.24	9.62	5.95	5.28	4.78	12.81	7.92	7.04	6.37	9.11	5.63	5.00	4.53
-10P	7.42	4.59	4.08	3.69	8.57	5.31	4.71	4.27	11.77	7.28	6.46	5.85	8.00	4.95	4.39	3.98
-11S	8.07	4.99	4.43	4.01	9.22	5.71	5.07	4.59	12.40	7.66	6.81	6.16	8.65	5.35	4.75	4.30
-11P	6.38	3.95	3.51	3.17	7.51	4.65	4.13	3.74	10.71	6.62	5.88	5.32	6.93	4.29	3.81	3.45
-12S	7.95	4.92	4.37	3.96	9.11	5.63	5.00	4.53	12.26	7.58	6.73	6.10	8.53	5.28	4.69	4.24
-12P	6.66	4.12	3.66	3.31	7.81	4.83	4.29	3.89	10.93	6.76	6.01	5.44	7.23	4.48	3.98	3.60
-20S	5.41	3.35	2.97	2.69	6.56	4.06	3.61	3.27	9.73	6.02	5.35	4.84	5.98	3.70	3.29	2.98
-20P	5.33	3.30	2.93	2.66	6.47	4.00	3.56	3.22	9.62	5.95	5.28	4.78	5.92	3.66	3.25	2.94
-27S	4.73	2.93	2.60	2.36	5.90	3.65	3.24	2.93	9.08	5.62	4.99	4.52	5.32	3.29	2.92	2.65
-27P	4.62	2.86	2.54	2.30	5.76	3.56	3.16	2.86	8.90	5.51	4.89	4.43	5.17	3.20	2.84	2.58
-28S	7.07	4.38	3.89	3.52	8.21	5.08	4.51	4.08	11.40	7.05	6.26	5.67	7.63	4.72	4.19	3.80
-28P	6.26	3.88	3.44	3.12	7.35	4.55	4.04	3.66	10.58	6.55	5.82	5.27	6.85	4.23	3.76	3.40
-2S	6.42	3.98	3.53	3.20	7.02	4.35	3.86	3.50	10.71	6.62	5.88	5.32	7.07	4.38	3.89	3.52
-2P	6.03	3.73	3.31	3.00	6.61	4.09	3.63	3.29	10.26	6.35	5.64	5.11	6.68	4.13	3.67	3.32
-9S	6.91	4.28	3.80	3.44	7.51	4.65	4.13	3.74	11.18	6.92	6.15	5.57	6.58	4.69	4.17	3.77
-9P	6.36	3.93	3.49	3.16	6.93	4.29	3.81	3.45	10.61	6.56	5.83	5.28	7.02	4.35	3.86	3.50

SPECIFY IF CONNECTORS ARE TO BE STAMPED WITH TYPE NO.

Amphenol Power Connectors and Accessories

HOW TO ORDER: Specify Stock No., then connector Type No. Example 712AXXXX A (stock no.) 3100A-11-16P (type no.)

MS RECEPTACLES (Cont'd)

Shell Insert	No. of Contacts	Positions W	X	Y	Z	Series 3100A EACH 1-9	10-49	50-99	100-Up	Series 3101A EACH 1-9	10-49	50-99	100-Up	Series 3102A EACH 1-9	10-49	50-99	100
28-11P	22	X	X	X	X	6.56	4.06	3.61	3.27	7.18	4.45	3.95	3.58	4.81	2.97	2.64	2.
28-11S	22	X	X	X	X	7.95	4.92	4.37	3.96	8.57	5.31	4.71	4.27	6.22	3.85	3.42	3.
28-12P	26	X	X	X		7.05	4.20	3.73	3.38	7.42	4.59	4.08	3.69	5.08	3.15	2.79	2.
28-12S	26	X	X	X		7.95	4.92	4.37	3.96	8.57	5.31	4.71	4.27	6.22	3.85	3.42	3.
28-15P	35	X	X	X	X	7.63	4.72	4.19	3.80	8.27	5.12	4.55	4.12	5.92	3.66	3.25	2.
28-15S	35	X	X	X	X	8.81	5.45	4.84	4.38	9.46	5.85	5.19	4.70	7.07	4.38	3.89	3.
28-16P	20	X	X	X	X	6.72	4.16	3.70	3.35	7.37	4.56	4.05	3.67	5.03	3.12	2.77	2.
28-16S	20	X	X	X	X	6.80	4.20	3.73	3.38	7.42	4.59	4.08	3.69	5.08	3.15	2.79	2.
28-17P	15	X	X	X	X	5.73	3.55	3.15	2.85	6.36	3.93	3.49	3.16	4.00	2.47	2.20	1.
28-17S	15	X	X	X	X	6.10	3.78	3.35	3.04	6.72	4.16	3.70	3.35	4.40	2.72	2.41	2.
28-18P	12	X	X	X	X	5.52	3.42	3.04	2.75	6.15	3.80	3.38	3.06	3.78	2.35	2.08	1.
28-18S	12	X	X	X	X	6.03	3.73	3.31	3.00	6.68	4.13	3.67	3.32	4.30	2.66	2.36	2.
28-20P	14	X	X	X	X	6.61	4.09	3.63	3.29	7.26	4.49	3.99	3.61	4.86	3.00	2.67	2.
28-20S	14	X	X	X	X	7.35	4.55	4.04	3.66	7.97	4.93	4.38	3.97	5.62	3.47	3.09	2.
28-21P	37	X	X	X	X	7.88	4.88	4.33	3.92	8.53	5.28	4.69	4.24	6.12	3.79	3.37	3.
28-21S	37	X	X	X	X	8.92	5.52	4.90	4.44	9.57	5.92	5.26	4.76	7.23	4.48	3.98	3.
32-7P	35	X	X	X	X	8.35	5.16	4.58	4.15	8.90	5.51	4.89	4.43	6.45	3.99	3.54	3.
32-7S	35	X	X	X	X	10.61	6.56	5.83	5.28	11.18	6.92	6.15	5.57	8.70	5.38	4.78	4.
32-13P	23	X	X	X	X	7.53	4.66	4.14	3.75	8.11	5.02	4.46	4.04	5.63	3.49	3.10	2.
32-13S	23	X	X	X	X	8.62	5.33	4.74	4.29	9.20	5.69	5.05	4.58	6.71	4.15	3.68	3.
36-7P	47	X	X	X	X	11.86	7.34	6.52	5.90	12.11	7.49	6.65	6.03	9.02	5.58	4.95	4.
36-7S	47	X	X	X	X	13.08	8.09	7.19	6.51	13.36	8.27	7.34	6.65	10.25	6.33	5.63	5.
36-10P	48	X	X	X	X	11.33	7.01	6.22	5.64	11.56	7.15	6.35	5.75	8.51	5.26	4.67	4.
36-10S	48	X	X	X	X	12.21	7.55	6.71	6.07	12.48	7.72	6.86	6.21	8.39	5.81	5.16	4.
36-405P	15					18.73	11.58	10.29	9.32	18.98	11.74	10.43	9.44	15.91	9.84	8.74	7.
36-405S	15					23.50	14.53	12.90	11.68	23.80	14.71	13.07	11.83	20.67	12.78	11.35	10.

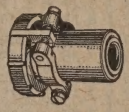
Stepdown Regular

CABLE CLAMP

SERIES 3057. Supports at plug or receptacle. *Stepdown. 3½ oz.

MS Type 3057	Fits Shell	EACH 1-9	10-49	50-99	100-Up
3057-3	8S, 10S	.70	.57	.51	.46
3057-4	12, 12S	.64	.53	.47	.42
3057-6	14, 14S	.64	.53	.47	.42
3057-8	16, 16S	.68	.56	.50	.45
3057-10	18	.71	.57	.50	.47
97-3057-10-6*	18	1.24	1.08	.90	.71
3057-12	20, 22	.76	.70	.63	.50
97-3057-12-6*	20, 22	1.32	1.13	.95	.76
3057-16	24, 28	.94	.85	.76	.62
3057-20	32	1.31	1.13	.95	.86
3057-24	36	1.75	1.56	1.28	1.15
3057-28	40	2.25	1.99	1.75	1.60

MS3057A CABLE CLAMP AND BOOT



Both cable halves move, automatically centering cable. AN3420 boot provides support and weather-proofing. Extra boots may be used for small cable O.D. Wt., 5 oz.

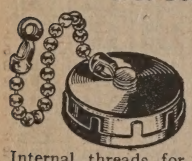
MS Type	Fits Shell	EACH 1-9	10-49	50-99	100-Up
3057-4A	10SL, 12, 12	.94	.84	.75	.61
3057-6A	12SL, 14, 14	.96	.85	.76	.62
3057-8A	16, 16S	.97	.86	.77	.63
3057-10A	18	1.01	.89	.80	.66
3057-12A	20, 22	1.12	.99	.89	.73
3057-16A	24, 28	1.41	1.24	1.11	.92
3057-20A	32	1.85	1.62	1.24	1.20
3057-24A	36	2.28	1.99	1.77	1.48

AN3420 TELESCOPING BOOTS

Boots telescope wi each other for use v cable that is too s in relation to the connector used. We erproof ends. 1½ o

Type No.	Cable O.D.	EACH 1-9	10-49	50-99	1
9779-513-3	0.130	.10	.09	.08	.
9779-513-4	0.220	.10	.09	.08	.
9779-513-6	0.312	.12	.10	.09	.
9779-513-8	0.437	.12	.10	.09	.
9779-513-10	0.562	.16	.13	.12	.
9779-513-12	0.625	.16	.13	.12	.
9779-513-16	0.750	.20	.16	.15	.
9779-513-20	0.937	.29	.24	.21	.
9779-513-24	1.250	.35	.28	.25	.

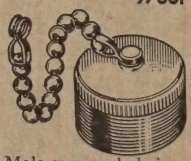
9760 DUST CAPS FOR RECEPTACLES



Internal threads for use with Amphenol MS3100A, MS3101A, and MS3102A, receptacles. Includes beaded chains for mounting. Av. wt., 2 oz.

MS Type	Fits Shell	EACH 1-9	10-49	50-99	100-Up
9760-10	10S, 10SL	.64	.55	.45	.36
9760-12	12, 12S, 12SL	.70	.62	.51	.41
9760-14	14, 14S	.78	.66	.55	.44
9760-16	16, 16S	.84	.73	.61	.48
9760-18	18	1.00	.86	.72	.57
9760-20	20	1.10	.95	.78	.63
9760-22	22	1.26	1.08	.89	.72
9760-24	24	1.46	1.25	1.05	.84
9760-28	28	1.74	1.51	1.25	1.00
9760-32	32	2.02	1.75	1.45	1.17
9760-36	36	2.24	1.94	1.61	1.29

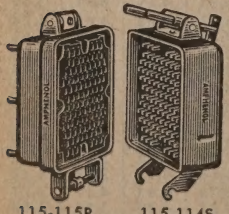
9760P DUST CAPS FOR PLUGS



Male caps and chains for plugs MS3106 and MS3108 listed on facing page. Has external threads, provides tight dust-free cover. Av. wt., 2 oz.

MS Type	Fits Shell	EACH 1-9	10-49	50-99	1
9760-10P	10S, 10SL	.96	.83	.69	
9760-12P	12, 12S, 12SL	1.06	.91	.76	
9760-14P	14, 14S	1.22	1.05	.87	
9760-16P	16, 16S	1.38	1.19	.99	
9760-18P	18	1.40	1.22	1.02	
9760-20P	20	1.46	1.25	1.05	
9760-22P	22	1.82	1.57	1.31	1
9760-24P	24	2.18	1.88	1.57	1
9760-28P	28	2.28	1.98	1.65	1
9760-32P	32	3.36	2.90	2.42	1
9760-36P	36	3.48	3.00	2.51	2

SERIES 115 50-CONTACT AND 100-CONTACT VISE-LOCKED CABLE CONNECTORS



115-115P 115-114S

Accommodate 50 or 100 #16 wires. Vise action of screw lock provides leverage for attaching and detaching plug. Inserts have molded-in numbers to facilitate wiring and checking of circuits. Solder-cup contacts are free-floating for alignment in mating but cannot rotate. AN-type cable clamps with aluminum housings also listed. Approx. size of shells: 100-contact, 3½x3½x1 11/32"; 50-contact, 2 31/32x2¼x1 11/32". Rated at 750 V, 60 Hz AC max. at sea level. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Description and Number of Contacts	EACH 1-9	10 Up
47 E 3017	115-30P-1000	Male Plug—100	27.65	25.
47 E 3019	115-31S-1000	Female Receptacle—100	35.03	32.
47 E 3021	115-32P	Male Receptacle—100	27.19	24.
47 E 3022	115-114P	Male Plug—50	18.91	17.
47 E 3024	115-115S	Female Receptacle—50	23.48	21.
47 E 3031	115-115P	Male Receptacle—50	19.50	17.
47 E 3030	115-114S	Female Plug—50	22.89	20.
47 E 3032	115-949	Cable Clamp—100	7.64	6.
47 E 3038	115-1391	Cable Clamp—50	4.88	4.

Depend on Allied Electronics for Reliable Nationwide Servi

Amphenol MS Plugs, Astro 348 Connectors

HOW TO ORDER: Specify Stock No., then connector Type No. Example: 712 A XXXX (stock no.)—3106A-28-11S (type no.)

AND MS MATING PLUGS (Cont'd)

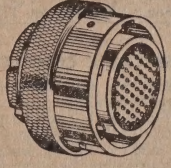
hell sert	Position				Series 3106A EACH				Series 3106B EACH				Series 3108A EACH				Series 3108B EACH			
	W	X	Y	Z	1-9	10-49	50-99	100-Up	1-9	10-49	50-99	100-Up	1-9	10-49	50-99	100-Up	1-9	10-49	50-99	100-Up
-11S	X	X	X	X	8.18	5.06	4.50	4.07	8.78	5.43	4.83	4.37	12.46	7.71	6.85	6.20	8.86	5.48	4.86	4.40
-11P	X	X	X	X	6.77	4.19	3.72	3.37	7.37	4.56	4.05	3.67	11.07	6.85	6.08	5.51	7.42	4.59	4.08	3.69
-12S	X	X	X		8.18	5.06	4.50	4.07	8.78	5.43	4.83	4.37	12.46	7.71	6.85	6.20	8.86	5.48	4.86	4.40
-12P	X	X	X		7.05	4.36	3.87	3.51	7.63	4.72	4.19	3.80	11.33	7.01	6.22	5.64	7.72	4.78	4.24	3.84
-15S	X	X	X	X	9.08	5.62	4.99	4.52	9.62	5.95	5.28	4.78	13.32	8.24	7.32	6.62	9.73	6.02	5.35	4.84
-15P	X	X	X	X	7.88	4.88	4.33	3.92	8.51	5.26	4.67	4.23	12.13	7.51	6.67	6.04	8.56	5.29	4.70	4.26
-16S	X	X	X	X	7.05	4.36	3.87	3.51	7.63	4.72	4.19	3.80	11.33	7.01	6.22	5.64	7.72	4.78	4.24	3.84
-16P	X	X	X	X	6.96	4.30	3.82	3.46	7.58	4.69	4.17	3.77	11.23	6.95	6.17	5.59	7.63	4.72	4.19	3.80
-17S	X	X	X	X	6.36	3.93	3.49	3.16	6.93	4.29	3.81	3.45	10.61	6.56	5.83	5.28	7.02	4.35	3.86	3.50
-17P	X	X	X	X	5.96	3.69	3.28	2.97	6.56	4.06	3.61	3.27	10.20	6.31	5.60	5.07	6.56	4.06	3.61	3.27
-18S	X	X	X	X	6.26	3.88	3.44	3.12	6.88	4.26	3.78	3.43	10.55	6.52	5.79	5.24	6.93	4.29	3.81	3.45
-18P	X	X	X	X	5.78	3.58	3.18	2.88	6.28	3.95	3.51	3.17	10.06	6.22	5.52	5.00	6.45	3.99	3.54	3.21
-20S	X	X	X	X	7.58	4.69	4.17	3.77	8.18	5.06	4.50	4.07	11.86	7.34	6.52	5.90	8.23	5.09	4.52	4.09
-20P	X	X	X	X	6.85	4.23	3.76	3.40	7.42	4.59	4.08	3.69	11.12	6.88	6.11	5.53	7.51	4.65	4.13	3.74
-21S	X	X	X	X	9.20	5.69	5.05	4.58	9.80	6.06	5.38	4.88	13.43	8.31	7.38	6.68	9.85	6.09	5.41	4.90
-21P	X	X	X	X	8.11	5.02	4.46	4.04	8.70	5.38	4.78	4.32	12.40	7.66	6.81	6.16	8.78	5.43	4.83	4.37
-7S	X	X	X	X	12.02	7.44	6.60	5.98	12.10	7.48	6.64	6.01	17.06	10.55	9.37	8.49	12.60	7.70	6.92	6.27
-7P	X	X	X	X	9.78	6.05	5.37	4.86	9.82	6.08	5.40	4.89	14.75	9.12	8.10	7.34	10.28	6.36	5.65	5.12
-13S	X	X	X	X	10 03	6.21	5.51	4.99	10.08	6.23	5.54	5.01	15.03	9.30	8.26	7.48	10.58	6.55	5.82	5.27
-13P	X	X	X	X	8.92	5.52	4.90	4.44	9.02	5.58	4.95	4.49	13.96	8.64	7.67	6.95	9.50	5.88	5.22	4.73
-7S	X	X	X	X	14.22	8.79	7.81	7.07	14.47	8.95	7.95	7.20	19.63	12.14	10.78	9.76	15.12	9.35	8.31	7.52
-7P	X	X	X	X	12.97	8.02	7.12	6.45	13.25	8.19	7.28	6.59	18.41	11.38	10.11	9.15	13.87	8.58	7.62	6.90
-10S	X	X	X	X	13.36	8.27	7.34	6.65	13.60	8.41	7.47	6.76	18.75	11.60	10.30	9.33	14.22	8.79	7.81	7.07
-10P	X	X	X	X	12.43	7.69	6.83	6.19	12.70	7.85	6.97	6.31	17.87	11.05	9.82	8.89	13.32	8.24	7.32	6.62
-405S					24.65	15.24	13.54	12.26	24.86	15.37	13.65	12.36	30.06	18.59	16.51	14.95	25.51	15.77	14.01	12.68
-405P					19.88	12.30	10.92	9.89	20.10	12.43	11.04	9.99	25.30	15.64	13.89	12.58	20.72	12.81	11.38	10.30

ASTRO 348 SUBMINIATURE CONNECTORS

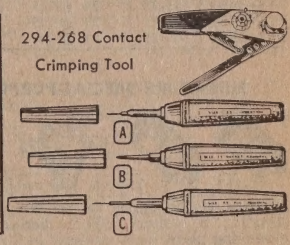
40E
SQUARE FLANGE

41E
CABLE RECEPTACLE

43E
"D" HOLE RECEPTACLE



46E PLUG



ASTRO 348 CONNECTORS

ovide user with 0.085" contact spacing. perior design qualifies these connectors use even where size may not be a decid- factor. Positive coupling, triple-track yonet system with coupling ring mechan- lly captivated; front release, rear service- le contacts. 100% "No-Scoop" design on ng style 30E and 36E; balance are 50% No-Scoop". Prevents accidental damage pin contacts, even when blind mating. ong and standard sizes do not intermate.) round fingers for added EMI protection. rimp contacts are held in the molded re- ntion disc by the rear nut; a twist of the t releases them for wiring changes, a cond twist locks them securely in place. nvironmental performance is equivalent to L-C-81511B. Contacts are size AWG 22; cept solid or stranded wires, AWG sizes , 24, and 26. Wire sealing range, .030" to 54" dia. Av. shpg. wt. 2½ oz.

CONNECTOR ACCESSORY TOOLS

294-278 Pin/Socket Insertion Tool.
713-7472. Shpg. wt. 12 oz. **Each 12.31**

294-286 Pin Contact Removal Tool
713-7474. Shpg. wt. 12 oz. . . . **Each 8.53**

294-287 Socket Contact Removal Tool.
713-7476. Shpg. wt. 9 oz. . . . **Each 20.29**

94-268 Contact Crimping Tool.
13-7478. Shpg. wt. 1 lb. . . . . **Each 116.32**

94-1551 Contact Locator.
13-7480. Shpg. wt. 8 oz. . . . . **Each 15.72**

TABLE OF LISTINGS

Stock No.	Type 348-	EACH 1-9	10-24	25-Up
713-7500	30E10-12P1	21.86	19.93	18.00
713-7501	30E10-12S1	22.02	20.08	18.14
713-7502	30E14-37P1	25.32	23.09	20.85
713-7503	30E14-37S1	29.62	27.01	24.39
713-7504	30E16-55P1	29.79	27.16	24.53
713-7505	30E16-55S1	35.62	32.48	29.33
713-7506	30E18-85P1	34.49	31.44	28.40
713-7507	30E18-85S1	44.25	40.34	36.44
713-7508	30E22-121P1	45.82	41.77	37.73
713-7509	30E22-121S1	63.60	57.99	52.37
713-7510	30E24-155P1	52.96	48.28	43.61
713-7511	30E24-155S1	75.91	69.21	62.51
713-7512	36E10-12P1	23.49	21.42	19.35
713-7513	36E10-12S1	24.79	22.60	20.42
713-7514	36E14-37P1	29.02	26.46	23.90
713-7515	36E14-37S1	33.32	30.38	27.44
713-7516	36E16-55P1	31.99	29.16	26.34
713-7517	36E16-55S1	40.08	36.55	33.01
713-7518	36E18-85P1	37.05	33.78	30.51
713-7519	36E18-85S1	49.78	45.39	41.00
713-7522	36E22-122P1	47.62	43.42	39.21
713-7523	36E22-122S1	65.40	59.63	53.86
713-7524	36E24-155P1	54.76	49.93	45.09
713-7525	36E24-155S1	77.71	70.85	63.99
713-7335	40E10-12P1	18.51	16.88	15.25
713-7536	40E10-12S1	18.94	17.27	15.60
713-7539	40E14-37P1	22.35	20.38	18.41
713-7540	40E14-37S1	26.26	23.95	21.63
713-7543	40E16-55P1	26.05	23.75	21.45
713-7544	40E16-55S1	31.46	28.69	25.91
713-7547	40E18-85P1	30.24	27.58	24.91
713-7548	40E18-85S1	39.14	35.69	32.23

Stock No.	Type 348-	EACH 1-9	10-24	25-Up
713-7556	41E10-12P1	19.20	17.50	15.81
713-7557	41E10-12S1	19.63	17.89	16.16
713-7560	41E14-37P1	22.17	20.22	18.26
713-7561	41E14-37S1	23.54	21.46	19.38
713-7564	41E16-55P1	27.48	25.06	22.63
713-7565	41E16-55S1	32.90	30.00	27.09
713-7568	41E18-85P1	30.32	27.64	24.97
713-7569	41E18-85S1	39.18	35.72	32.26
713-7576	43E10-12P1	20.74	18.91	17.08
713-7577	43E10-12S1	21.20	19.33	17.46
713-7580	43E14-37P1	23.36	21.30	19.24
713-7581	43E14-37S1	27.16	24.76	22.37
713-7584	43E16-55P1	27.73	25.29	22.84
713-7585	43E16-55S1	33.11	30.19	27.27
713-7588	43E18-85P1	31.43	28.65	25.88
713-7589	43E18-85S1	40.29	36.73	33.18
713-7600	46E10-12P1	19.52	17.80	16.07
713-7601	46E10-12S1	19.88	18.12	16.37
713-7604	46E14-37P1	22.60	20.61	18.62
713-7605	46E14-37S1	26.15	23.85	21.54
713-7608	46E16-55P1	26.23	23.91	21.60
713-7609	46E16-55S1	31.36	28.59	25.82
713-7612	46E18-85P1	30.57	27.87	25.17
713-7613	46E18-85S1	38.96	35.52	32.09

Amphenol Audio Connectors

MINIATURE TYPE AN CONNECTORS

Pressureproof and weatherproof miniature AN connectors. Widely used in instrumentation and miniaturized electronic equipment. Connectors are available in two shell sizes.

Contacts are gold over silver plating. Aluminum shells feature quick bayonet coupling. Small receptacles mount in 13/16" hole; secure through four 1/8" holes on 25/32" centers. Large receptacles require 1 1/16" hole with four 1/8" holes on 1 5/16" centers. Plugs are 2 1/16" long. Small plugs are 57/64" dia.; large plugs are 1 9/64" in dia. Rated: 500 volts rms, except *600 volts. All have strain relief clamps. Shells are aluminum with neutral-color chromium finish. Dielectric material is diallyl phthalate. All have "O" ring seals. Av. shpg. wt., 3 oz.

SMALL SHELL—5 No. 20 CONTACTS

Stock No.	Type No.	Contacts and Ampere Rating	Description	EACH 1-49	EACH 50-Up
713-5570	165-33	*5 @ 7.5	Male Plug	4.10	3.23
713-5573	165-34	*5 @ 7.5	Female Plug	5.56	4.43
713-5576	165-35	*5 @ 7.5	Male Receptacle	2.90	2.32
713-5579	165-36	*5 @ 7.5	Female Receptacle	3.52	2.79

SMALL SHELL—9 No. 20 CONTACTS

713-5526	165-13	9 @ 7.5	Male Plug	4.26	3.40
713-5529	165-14	9 @ 7.5	Female Plug	6.55	5.21
713-5532	165-15	9 @ 7.5	Male Receptacle	3.16	2.51
713-5535	165-16	9 @ 7.5	Female Receptacle	4.04	3.22

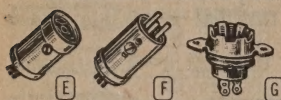
SMALL SHELL—12 No. 20 CONTACTS

713-5516	165-9	12 @ 7.5	Male Plug	4.49	3.58
713-5518	165-10	12 @ 7.5	Female Plug	6.69	5.32
713-5520	165-11	12 @ 7.5	Male Receptacle	3.38	2.68
713-5523	165-12	12 @ 7.5	Female Receptacle	5.54	4.40

LARGE SHELL—24 No. 20 CONTACTS

713-5550	165-25	24 @ 7.5	Male Plug	7.69	6.12
713-5553	165-26	24 @ 7.5	Female Plug	10.11	8.04
713-5556	165-27	24 @ 7.5	Male Receptacle	5.30	4.24
713-5559	165-28	24 @ 7.5	Female Receptacle	7.05	5.61

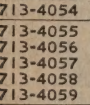
MINIATURE SPECIAL-PURPOSE CABLE CONNECTORS



Series 91: For shielded or unshielded cables. Black phenolic elements in cadmium-plated brass shells, held by set screws in side. Polarized contact spacing prevents incorrect insertion. Accommodates cables to 1/4" dia. Suffix "L" in Type No.—long (1 3/16"); "S"—short (13/16"). Series 78: Receptacles, drawn-steel mounting plate. Last numeral in Type No. denotes number of contacts. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-4050	91-MPF3L	E	.63	.51	.44	.38	.34	.30
713-4051	91-MPF3S	E	.62	.50	.43	.37	.33	.30
713-4052	91-MPF4L	E	.69	.55	.47	.41	.36	.33
713-4053	91-MPF4S	E	.65	.53	.46	.40	.35	.32
713-4054	91-MPM3L	F	.52	.42	.36	.32	.28	.25
713-4055	91-MPM3S	F	.52	.42	.36	.32	.28	.25
713-4056	91-MPM4L	F	.59	.47	.41	.35	.31	.28
713-4057	91-MPM4S	F	.59	.47	.41	.35	.31	.28
713-4058	91-MPM5L	F	.61	.49	.42	.36	.32	.29
713-4059	91-MPM6L	F	.60	.48	.41	.36	.31	.28
713-2906	78-PCG3	G	.62	.50	.41	.37	.286	.286
713-2907	78-PCG4	G	.75	.60	.50	.45	.344	.344
713-2908	78-PCG5	G	.78	.62	.52	.47	.361	.361
713-2909	78-PCG6	G	.80	.64	.53	.48	.366	.366

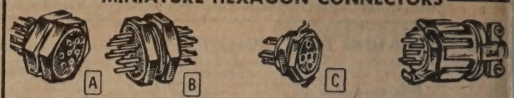
MINIATURE TYPE CP PLUGS—FOR TUBE SOCKETS



Molded from diallyl phthalate dielectric; incorporates a molded-in strain relief post. Utilizes retainer-ring mounting. Contacts gold over silver plating. Also available with rubber plug caps in end and side cable outlet styles. Voltage rating: 1500 V rms at 5 amps. Overall seated height, 13/16". Overall width: Type 86-896, 1 1/16"; 86-895, 55/32"; 86-897, 7/8"; 86-894, 3/4". Pin circle diameter: for 7 pin plugs, 3/8"; for 9 pin plugs, 15/32". Wt., 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-49	50-99	100-249	250-499	500-Up
713-3641	86-896	7-Pin	1.14	.96	.86	.663	.663
713-3640	86-895	7-Pin with Cap	1.28	1.07	.96	.742	.742
713-3642	89-897	9-Pin with Cap	1.40	1.16	1.04	.807	.807
713-3639	86-894	7-Pin Side Output Cap	1.58	1.32	1.19	.920	.920

MINIATURE HEXAGON CONNECTORS



HEX NUT TYPE — LOCKING CLIP (Socket Type) — HOOD & CLAMP (Pin Type)

Molded of Amphenol Blue 1-501 dielectric (diallyl phthala Silver-base-plated contacts are gold-finished to prevent tarnish or corrosion. All hardware is nickel-plated brass. Voltage bre down: 2000 volts rms, 60 Hz at sea level; 700 volts rms, 60 H 50,000 feet. Current rating, 7.5 amps. Hex-nut types are for p mounting in 33/64" hole. Hex-nut locking-clip type requires 25/64" mounting hole in panel. Locking-clip types mate with hood cable-clamp types where the locking feature is required to pro strain relief for soldered connections. Locking ring on cable cla swivels 30° for engaging with panel-mounted locking clip. Dia. hex-nut types, 5/8"; cable-clamp types, 3/4" (length, 1 15/16"). Wt., 5

Stock No.	Mfr's Type	Contacts	Fig.	EACH 1-49	50-99	100-L
713-4500	126-010	5-Pin	B	.73	.59	.4
713-4515	126-191	7-Pin	B	.86	.58	.5
713-4502	126-012	9-Pin	B	.99	.79	.6
713-4526	126-217	5-Pin	D	1.60	1.27	1.0
713-4517	126-195	7-Pin	D	1.76	1.40	1.1
713-4529	126-220	9-Pin	D	1.90	1.50	1.2
713-4525	126-216	5-Pin	C	.78	.62	.5
713-4519	126-197	7-Pin	C	92	73	.6
713-4528	126-219	9-Pin	C	1.06	.85	.7
713-4501	126-011	5-Socket	A	1.16	.92	.7
713-4516	126-192	7-Socket	A	1.47	1.16	.9
713-4503	126-013	9-Socket	A	1.82	1.44	1.2
713-4532	126-223	5-Socket	D	2.07	1.64	1.3
713-4518	126-196	7-Socket	D	2.38	1.88	1.5
713-4531	126-222	9-Socket	D	2.72	2.16	1.7
713-4527	126-218	5-Socket	C	1.24	.98	.8
713-4520	126-198	7-Socket	C	1.55	1.23	1.0
713-4530	126-221	9-Socket	C	1.90	1.50	1.2

SERIES 78 AND 86 MULTI-WIRE CONNECTORS

Matching male and female protected terminals with unbreakable metal caps. Accommodate cables up to 3/8". Cap can be removed with a screwdriver. PF and PM 8 are octal. PF9, PM9, PF11, PM11, octal style. PF and PM 7S have small contacts. 86-PM12 fits Amphe 77M1P12 socket; use 3-13 plug cap. 1 3/16x1 3/32". Av. wt., 3 oz.

FEMALE

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-499	500-U
713-2915	78-PF4	4	.62	.50	.44	.38	.30	.3
713-2916	78-PF5	5	.65	.52	.45	.39	.31	.3
713-2917	78-PF6	6	.67	.54	.47	.41	.32	.3
713-2918	78-PF7S	7S	.71	.57	.49	.43	.33	.3
713-2919	78-PF8	8	.62	.50	.44	.38	.30	.3
713-2920	78-PF9	9	.67	.54	.46	.41	.32	.3
713-2921	78-PF11	11	.72	.58	.50	.43	.34	.3

MALE

713-3613	86-PM4	4	.69	.55	.47	.42	.32	.3
713-3615	86-PM5	5	.69	.55	.47	.42	.33	.3
713-3617	86-PM6	6	.71	.57	.49	.43	.34	.3
713-3619	86-PM7S	7S	.72	.58	.50	.44	.34	.3
713-3621	86-PM8	8	.72	.58	.49	.44	.34	.3
713-3623	86-PM9	9	.72	.58	.50	.44	.35	.3
713-3625	86-PM11	11	.74	.59	.51	.45	.35	.3
713-3627	86-PM12	12	.75	.60	.52	.46	.35	.3

Amphenol Cable Clamp Type 79-CC4. For above connectors. Relieve strain on soldered connections. Shpg. wt., 1 oz.
713-3004. 1-24.....Ea. .11 25-49.....Ea. .09 50-99.....Ea. .0
100-249.....Ea. .07 250-499.....Ea. .05 500-Up.....Ea. .0

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Best Percentage of Orders Filled in the Countr

Amphenol Cable and Chassis Connectors

SERIES 220 "MICRO-RAC" CONNECTORS

or 104 contacts in smallest possible space. Float mounting; ing-loaded alignment posts. Polarized mono-block construction; itact identification numbers molded in. 52 contact size, 1.888" g by .677" wide; 1.492" mounting centers. 104 contact, 3.017 x 7"; 2.611" mounting centers. Less contacts, right. Av. wt., 1½ oz.

Stock No.	Mfr's Type	Con-tacts	Descrip-tion	EACH 1-9	10-49	50-99	100-Up
3-5807	220-1N052	52	Plug	1.67	1.38	1.11	.95
3-5809	220-2N052	52	Receptacle	1.02	.83	.67	.58
3-5811	220-5	52	Cable Clamp	1.95	1.61	1.29	1.17
3-5808	220-1N104	104	Plug	1.95	1.59	1.38	1.10
3-5810	220-2N104	104	Receptacle	1.35	1.11	.91	.78
3-5812	220-6	104	Cable Clamp	2.00	1.66	1.33	1.19

SERIES 221 MICRO-MINIATURE STRIP CONNECTORS

e full length as is, or cut to specific length. Almost any con-uration can be produced quickly and easily by cutting and cking strips. Two or more strips can be staked or epoxied to-her for multi-row connector. When stacked, layer to layer, itact centers are .100" for both connectors. Use guide pins at st every 3 inches for mating alignment as well as keying. Guide s replace both a pin and socket contact; also one contact hole utilized when staking or cutting connector. Supplied less con-ts and guide pins. See listing, right. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Con-tacts	Descrip-tion	Spac-ing	EACH 1-9	10-49	50-99	100-Up
3-5860	221-1160	60	6" Plug	.100"	1.02	.85	.69	.58
3-5861	221-1260	60	6" Recept.	.100"	.70	.57	.46	.39
3-5862	221-2153	53	4" Plug	.075"	1.65	1.38	1.11	.94
3-5864	221-2253	53	4" Recept.	.075"	1.22	1.02	.83	.70

SERIES 222 "MIGHTY MITE" CIRCULAR CONNECTORS

ghly reliable micro-miniature connectors for cable-to-cable or le-to-chassis applications. .085" centers. Five keys are molded o connector to insure proper alignment. Contact identification mbers molded into the polycarbonate resin dielectric. 19-contact e, .621" dia. x 2.618" long; 31-contact, .746" x 2.948"; 61-contact, 6" x 3.530". Less contacts, right. Av. shpg. wt., 1½ oz.

Stock No.	Mfr's Type	Con-tacts	Descrip-tion	EACH 1-9	10-49	50-99	100-Up
3-5901	222-11N19	19	Plug	1.00	.83	.67	.57
3-5904	222-12N19	19	Receptacle	.80	.67	.54	.46
3-5920	222-518	19	Cable Clamp	1.68	1.39	1.13	.96
3-5902	222-11N31	31	Plug	1.00	.82	.66	.57
3-5906	222-12N31	31	Receptacle	.80	.66	.54	.46
3-5921	222-519	31	Cable Clamp	1.80	1.48	1.20	1.02
3-5907	222-12N61	61	Receptacle	.85	.71	.57	.49
3-5922	222-520	61	Cable Clamp	4.10	3.39	2.74	2.33

RIES 223 "TINY TIM" RACK AND PANEL CONNECTORS

r circuit modules, either potted-in or surface mounted; micro-niature cable-to-cable use. Meet MIL-C-8384B. Contact spacing, 0" centers on each row. Screw mount. Less contacts, right. 1½ oz.

Stock No.	Mfr's Type	Con-tacts	Descrip-tion	Mtg. Ctrs.	EACH 1-9	10-49	50-99	100-Up
3-5950	223-1105	5	Plug	.593"	.60	.50	.41	.35
3-5955	223-1205	5	Recept.	.593"	.57	.48	.38	.33
3-5951	223-1109	9	Plug	.793"	.53	.44	.35	.30
3-5956	223-1209	9	Recept.	.793"	.57	.48	.38	.33
3-5952	223-1117	17	Plug	1.193"	.62	.52	.42	.36
3-5957	223-1217	17	Recept.	1.193"	.60	.49	.39	.34

MULTICONTACT PLUGS AND SOCKETS

ielded cable and chassis connectors. Non-ating gold over silver-plated contacts. erlocking barriers prevent shorting. 900 60 Hz AC. *Insert only; all others with a. "A" in desc. column—cable type, "B" hassis type. Av. shpg. wt., 3 oz.

11 CONTACTS

Stock No.	Mfr's Type	Contacts #16	Contacts #20	Desc.	EACH 1-24	25-49	50-99	100-Up
3-4535	126-804*	2	9	B—plug	1.14	.91	.72	.59
3-4536	126-805*	2	9	B—socket	1.18	.94	.74	.62
3-4540	126-809	2	9	A—plug	1.86	1.49	1.17	.97
3-4539	126-808	2	9	A—socket	1.90	1.52	1.20	1.00

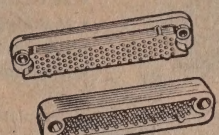
15 CONTACTS

3-4507	126-151*	3	12	B—plug	1.50	1.20	.95	.78
3-4506	126-150*	3	12	B—socket	1.14	.91	.72	.59
3-4508	126-152	3	12	A—plug	2.91	2.33	1.84	1.52
3-4509	126-153	3	12	A—socket	2.26	1.81	1.43	1.19

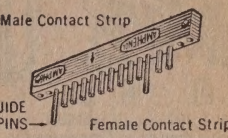
20 CONTACTS

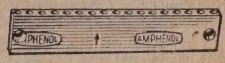
3-4537	126-806*	4	16	B—plug	1.80	1.44	1.13	.94
3-4538	126-807*	4	16	B—socket	1.44	1.15	.90	.75
3-4542	126-811	4	16	A—plug	2.89	2.31	1.82	1.51
3-4541	126-810	4	16	A—socket	2.53	2.02	1.59	1.32

CHOOSE FROM THESE MICRO-MINIATURE SHELLS THEN PICK THE CONTACT YOU NEED



220 MICRO-RAC CONNECTORS





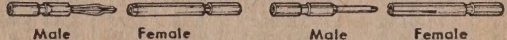
221 MULTI-PURPOSE STRIP CONNECTORS

TYPE 222 PLUG AND JACK

ILLUSTRATED WITH WIRE FORM CONTACTS

223 TINY TIM RACK AND PANEL CONNECTORS

ALL CONNECTORS SUPPLIED LESS CONTACTS



"WIRE-FORM" "RELIA-TAC"

INDIVIDUAL "WIRE-FORM" AND "RELIA-TAC" CONTACTS

For Series 220-223; rated 3 amps. Both types take 22, 24, 26 solid wire; 24, 26 stranded wire. Relia-Tac also takes 28 solid wire. Wire-Form male, gold-clad copper alloy wire members in copper sleeves; both male and female, electroless gold plated over copper. Size, .403 x .050". Relia-Tac, gold-over-nickel on copper alloy body. Male, .389 x .050"; female, .404 x .050". Guide pins will fit either type. Note: Relia-Tac does not mate with Wire-Form. Av. shpg. wt. per pkg., 1 oz. Sold in multiples of 100.

Stock No.	Mfr's Type	Description	PRICE PER 100 100-900	1000-9900	10,000-Up
713-5801	220-P01	Wire-Form Male	6.10	4.90	4.20
713-5804	220-S01	Wire-Form Female	2.80	2.20	1.90
713-5802	220-P02	Relia-Tac Male	3.70	2.90	2.60
713-5805	220-S02	Relia-Tac Female	8.90	7.10	6.10

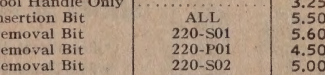
713-5853. 221-535 Universal Guide Pins.....10-Up...Each .114

"WIRE-FORM" AND "RELIA-TAC" CONTACT TOOLS

Hand crimping tool, adjustable 4-indent miniature to MIL-T-22520. Requires contact locator bushing for specific contact used. Tool handle requires insertion bit or correct removal bit to accommodate desired contact. See Table below. Av. shpg. wt., 12 oz.

Stock No.	Mfr's Type	Description	For Contact	EACH
713-8105	357-100	Hand Crimp Tool	.....	95.00
713-8113	357-300-1	Contact Locator	220-S01/S02/P01	18.50
713-8120	357-300-8	Contact Locator	220-P02	18.50
713-8005	356-200	Tool Handle Only	.....	3.25
713-8017	356-400-11	Insertion Bit	ALL	5.50
713-8018	356-400-12	Removal Bit	220-S01	5.60
713-8019	356-400-13	Removal Bit	220-P01	4.50
713-8020	356-400-14	Removal Bit	220-S02	5.00
713-8021	356-400-15	Removal Bit	220-P02	4.75

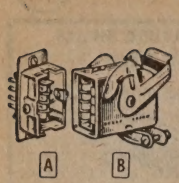
AC CONNECTOR ASSEMBLIES

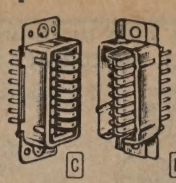


For Amphenol 61, 160, 78S and 86CP plugs and sockets. All are sturdy, drawn steel except 61-61, cadmium-plated steel shell. 61-61 shell fits 1 7/16" hole; has 5/32" mtg. holes on 1¾" ctrs.; lowers bottom of sockets, plugs and connectors 1 3/16" below surface. Caps permit cable-to-chassis and cable-to-cable applications for 61, 78S and 86CP plugs and sockets. 3-13 has end rubber grommet for up to 7/16" cable. 3-24 has clamp for up to ⅜" cable. 3-13 and 3-24 have black Japan finish; are 1 1/16" long. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-24	25-49	50-249	250-499	500-Up
713-0013	3-13	A	Black plug cap	.18	.14	.11	.098	.084
713-0024	3-24	B	Black plug cap	.29	.23	.19	.161	.138
713-2123	61-61	C	Recessing shell	.18	.14	.12	.101	.086

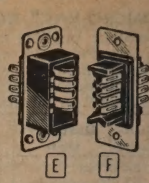
Amphenol and Cinch Jones Connectors

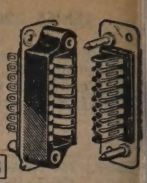

A B


C D

BLUE RIBBON CONNECTORS

- Self-Cleaning Spring Contacts
- Matching Positive Polarization
- Low Insertion, Removal Forces
- For Heavy-Duty Applications


E F


G

For multi-circuit connection, switching and re-routing. Gold-plated spring contacts. Low insertion and removal forces. Diallyl phthalate dielectric meets government specs. Stainless steel mounting plates.

*End cable outlet; †side cable outlet. S in Type No. indicates soc contacts; P indicates plug contacts. For wire up to No. 16, Ra 5 amps at 750 volts DC. Av. shpg. wt., 4 oz.

A B SERIES 26 BARRIER POLARIZED CONNECTORS WITH KEYED LATCH SHELLS

(Fig. A) MALE							(Fig. B) FEMALE						
Contacts	Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-Up	Contacts	Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-
8	713-0629	26-4301-8S*	6.90	5.81	4.71	4.24	8	713-0637	26-4401-8P	3.42	2.88	2.34	2.1
8	713-0647	26-4501-8S†	6.39	5.37	4.37	3.92							
8	713-0628	26-4301-8P*	5.68	4.77	3.87	3.49	8	713-0638	26-4401-8S	4.17	3.51	2.84	2.5
8	713-0646	26-4501-8P†	5.68	4.77	3.87	3.49							
16	713-0631	26-4301-16S*	7.70	6.47	5.25	4.72	16	713-0639	26-4401-16P	4.51	3.78	3.07	2.7
16	713-0649	26-4501-16S†	7.70	6.47	5.25	4.72							
16	713-0630	26-4301-16P*	7.12	5.99	4.87	4.38	16	713-0640	26-4401-16S	5.10	4.28	3.48	3.1
16	713-0648	26-4501-16P†	7.12	5.99	4.87	4.38							
24	713-0633	26-4301-24S*	8.98	7.56	6.14	5.51	24	713-0641	26-4401-24P	5.07	4.26	3.47	3.1
24	713-0651	26-4501-24S†	8.69	7.31	5.94	5.33							
24	713-0632	26-4301-24P*	7.98	6.71	5.44	4.90	24	713-0642	26-4401-24S	5.76	4.84	3.93	3.5
24	713-0629	26-4501-24P†	7.98	6.71	5.44	4.90							
32	713-0635	26-4301-32S*	9.72	8.17	6.64	5.97	32	713-0643	26-4401-32P	5.63	4.74	3.84	3.4
32	713-0653	26-4501-32S†	9.59	8.07	6.54	5.88							
32	713-0634	26-4301-32P*	8.89	7.48	6.06	5.46	32	713-0644	26-4401-32S	6.49	5.46	4.43	3.9
32	713-0652	26-4501-32P†	8.89	7.48	6.06	5.46							

C D SERIES 26 BARRIER POLARIZED CONNECTORS—KEYED SHELLS

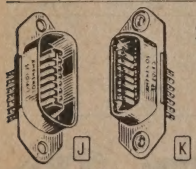
(Fig. C) MALE							(Fig. D) FEMALE						
Contacts	Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-Up	Contacts	Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-
8	713-0614	26-4101-8P	2.20	1.86	1.51	1.36	8	713-0623	26-4201-8S	2.54	2.14	1.74	1.5
16	713-0615	26-4101-16P	3.33	2.81	2.27	2.05	16	713-0624	26-4201-16S	3.46	2.92	2.36	2.1
24	713-0616	26-4101-24P	3.84	3.23	2.63	2.36	24	713-0625	26-4201-24S	4.14	3.49	2.83	2.5
32	713-0617	26-4101-32P	4.41	3.71	3.01	2.70	32	713-0626	26-4201-32S	4.80	4.05	3.28	2.9

E F SERIES 26 BARRIER POLARIZED CONNECTORS

(Fig. E) MALE							(Fig. F) FEMALE						
Contacts	Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-Up	Contacts	Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-
8	713-0603	26-182	1.23	1.04	.84	.75	8	713-0604	26-183	1.94	1.62	1.33	1.1
8	713-0610	26-4100-8P	1.12	.94	.76	.69	8	713-0618	26-4200-8S	1.81	1.55	1.26	1.1
16	713-0611	26-4100-16P	2.10	1.77	1.43	1.29	16	713-0619	26-4200-16S	2.67	2.25	1.82	1.6
24	713-0612	26-4100-24P	2.52	2.13	1.73	1.53	24	713-0620	26-4200-24S	3.16	2.66	2.16	1.9
32	713-0613	26-4100-32P	2.94	2.47	2.00	1.80	32	713-0621	26-4200-32S	3.77	3.17	2.58	2.3

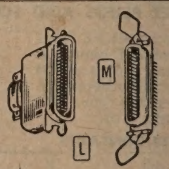
G H SERIES 26 PIN-POLARIZED CONNECTORS

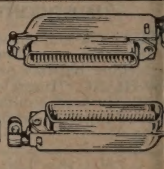
(Fig. G) MALE							(Fig. H) FEMALE						
Contacts	Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-Up	Contacts	Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-
16	713-0600	26-159-16	2.25	1.90	1.54	1.38	16	713-0605	26-190-16	2.86	2.41	1.96	1.7
24	713-0601	26-159-24	2.54	2.13	1.73	1.56	24	713-0606	26-190-24	3.42	2.88	2.34	2.1
32	713-0602	26-159-32	3.20	2.69	2.19	1.97	32	713-0607	26-190-32	4.04	3.39	2.76	2.4


J K

SERIES 57 MICRO-RIBBON® CONNECTORS

- Precision Molded Diallyl Phthalate Inserts
- Self-Cleaning Ribbon Contacts for Long Life
- Gold-Plated Contacts Rated 5 Amps at 700 VDC
- High-Impact Strength for Positive Connections


M L


N P

Make possible routing of many circuits through one small connector. Inserts molded of diallyl phthalate with high-impact strength and excellent dielectric. Self-cleaning ribbon contacts gold-plated over silver. Float bushings allow .020". Rated 5 amps, 700 VDC.

J K **Chassis-to-Chassis Connectors.** Clear iridite-finished brass shells. Wire up to #22. Description above. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-9	10-49	50-99	100-Up
713-1700	57-10140	14-Contact Plug	1.96	1.64	1.34	1.21
713-1711	57-20140	14-Contact Socket	2.01	1.70	1.37	1.24
713-1702	57-10240	24-Contact Plug	2.62	2.19	1.90	1.60
713-1713	57-20240	24-Contact Socket	2.67	2.25	1.83	1.64
713-1704	57-10360	36-Contact Plug	3.00	2.52	2.05	1.84
713-1715	57-20360	36-Contact Socket	3.17	2.59	2.10	1.89
713-1706	57-10500	50-Contact Plug	4.69	3.95	3.21	2.78
713-1717	57-20500	50-Contact Socket	4.00	3.38	2.73	2.46

L M **Cable-to-Chassis Latching Connectors.** Cadmium-plated br shells; clear chromate finish. Description above. Av., 2 oz.

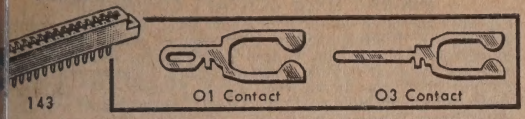
Stock No.	Mfr's Type	Description	EACH 1-9	10-49	50-99	100-
713-1722	57-30140	14-Contact Plug	3.76	3.16	2.57	2.3
713-1726	57-40140	14-Contact Socket	2.47	2.09	1.70	1.5
713-1723	57-30240	24-Contact Plug	4.13	3.48	2.81	2.5
713-1727	57-40240	24-Contact Socket	2.95	2.47	2.01	1.8
713-1724	57-30360	36-Contact Plug	5.16	4.26	3.44	3.1
713-1728	57-40360	36-Contact Socket	3.18	2.67	2.16	1.9
713-1725	57-30500	50-Contact Plug	5.54	4.66	3.79	3.4
713-1729	57-40500	50-Contact Socket	4.16	3.50	2.82	2.5

N P **Cable-to-Cable Connectors.** Right-angle hoods with cable clam and dust caps. Mate with 50-contact units above. Av., 2 o

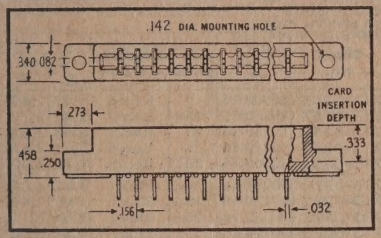
713-1708	57-10500-7	50-Cont. Plug	4.69	3.95	3.21	2.7
713-1719	57-20500-7	50-Cont. Socket	4.98	4.10	3.41	3.0

mphenol Printed Circuit Card—Edge Connectors

SERIES 143 .156″ CENTER PC CONNECTORS

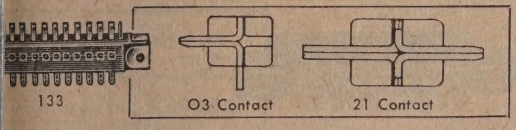


e with standard to .070″ PC d and Series 133 s below. Com- t bodies are ded of diallyl alate dielectric. llent insertion racteristics. g spring base of act prevents ing". Drop at ips is approx. 5 volts. May be rized by 143-953 when used with 133 Series. Last 2 digits in Type No. indicate style. Type 01, eyelet contact; Type 03, .040x.400″ pin contact. l-flashed albaloy contacts. Rated 600 V rms at 5 amps. Break- n voltage, 5400 VDC at sea level. Av. shpg. wt., 3 oz.

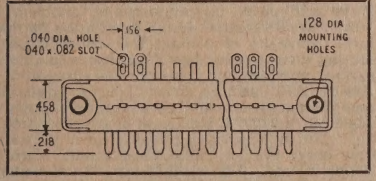


Stock No.	Mfr's Type	Contacts	EACH 1-49	50-99	100-249	250-999	1000-Up
-4800	143-006-01	6	1.04	.87	.73	.63	.56
-4809	143-010-01	10	1.16	.97	.82	.70	.62
-4816	143-012-01	12	1.21	1.01	.85	.73	.64
-4825	143-015-01	15	1.25	1.04	.88	.75	.67
-4833	143-018-01	18	1.44	1.20	1.01	.86	.77
-4841	143-022-01	22	1.68	1.41	1.18	1.01	.90
-4802	143-006-03	6	1.14	.96	.80	.69	.61
-4811	143 010-03	10	1.29	1.08	.91	.78	.69
-4818	143-012-03	12	1.33	1.11	.93	.80	.71
-4827	143-015-03	15	1.37	1.15	.96	.83	.73
-4835	143-018 03	18	1.58	1.32	1.11	.95	.84
-4843	143-022-03	22	1.87	1.57	1.31	1.13	1.00
-4895	143-953	Polar Key	.02	.02	.02	.02	.015

SERIES 133 .156″ CENTER PC PLUGS

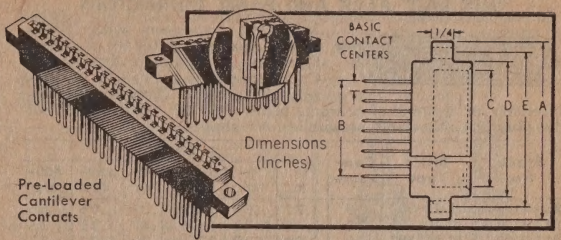


e with 143 Se- shown above. ded of diallyl alate dielectric; e brass, cadmi- -plated guide s; cadmium- ed end caps and l-over-albaloy- ed brass con- ts. Two .128″ s for bolting to ng board. Contacts are not subject to damage by mating or ating at angle. Last two digits in Type No. indicate tail style. e 03 with .042″ dia. contact may be dip soldered to a board for lications similar to using the board itself for mating. Type 21 plug has eyelet tail for easy cable plug-in to printed circuit rd. Operating voltage rating: 600 volts rms at sea level. Current ng: 5 amps. Average contact breakdown voltage: 3250 volts DC ea level. Average shpg. wt. 2 oz.



Stock No.	Mfr's Type	Contacts	EACH 1-49	50-99	100-249	250-999	1000-Up
-4702	133-006-21	6	1.77	1.48	1.24	1.06	.94
-4712	133-010-21	10	2.00	1.67	1.40	1.20	1.07
-4723	133-012-21	12	2.45	2.05	1.72	1.48	1.31
-4729	133-015-21	15	2.39	2.00	1.68	1.44	1.28
-4735	133-018-21	18	2.70	2.26	1.90	1.63	1.44
-4743	133-022-21	22	2.93	2.45	2.06	1.76	1.57
-4700	133-006-03	6	1.73	1.44	1.21	1.04	.92
-4710	133-010-03	10	1.93	1.62	1.36	1.16	1.03
-4721	133-012-03	12	2.23	1.86	1.56	1.34	1.19
-4727	133-015-03	15	2.27	1.90	1.59	1.36	1.21
-4733	133-018-03	18	2.64	2.21	1.85	1.59	1.41
-4741	133-022-03	22	2.77	2.31	1.94	1.66	1.48

SERIES 261 WIRE-WRAP PC CONNECTORS



Dual readout of double-sided printed circuit boards. Pre-loaded cantilever-type contacts are assembled into dielectric with precise spacing for automatic solderless wrap terminations. Tail length is sufficient for three wire wraps plus space for bussing or PC board next to block. Contacts are confined in dielectric to determined pre-load force for fixed, definite separation eliminating possibility of shorts. Gold-plated phosphor bronze contacts rated at 5.0 amps. Voltage rating: 300 V rms at sea level. Minimum voltage breakdown: 1800 V rms. Contact resistance: 6.0 milliohms max. .025″ square tail, with 50001-type contact. Key replaces one pair of contacts. See dimensions in tables below. Av. shpg. wt. 3 oz.

.100 CENTER*

Contacts	A	B	C	D	E
15	2.474	1.400	1.720	1.874	2.156
18	2.774	1.700	2.020	2.174	2.456
22	3.174	2.100	2.420	2.574	2.856
30	3.974	2.900	3.220	3.374	3.656
36	4.574	3.500	3.820	3.974	4.256
43	5.274	4.200	4.520	4.674	4.956

.125″ CENTER†

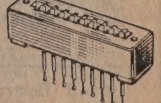
15	2.824	1.750	2.070	2.224	2.506
18	3.199	2.125	2.445	2.599	2.881
22	3.699	2.625	2.945	3.099	3.381
28	4.449	3.375	3.695	3.849	4.131
36	5.449	4.375	4.695	4.849	5.131
43	6.324	5.250	5.570	5.724	6.006

.156″ CENTER‡

15	3.258	2.184	2.504	2.658	2.940
18	3.726	2.652	2.972	3.126	3.408
22	4.350	3.276	3.596	3.750	4.032
28	5.286	4.212	4.532	4.686	4.968
36	6.534	5.460	5.780	5.934	6.216
43	7.626	6.552	6.872	7.026	7.308

Stock No.	Mfr's Type	No. Contacts	EACH 1-49	50-99	100-249	250-999	1000-Up
713-7206	261-10015-2D1	15*	2.16	1.81	1.52	1.30	1.15
713-7207	261-10018-2D1	18*	2.48	2.07	1.74	1.49	1.32
713-7208	261-10022-2D1	22*	2.89	2.42	2.03	1.74	1.54
713-7209	261-10030-2D1	30*	3.62	3.03	2.54	2.18	1.93
713-7210	261-10036-2D1	36*	4.20	3.51	2.95	2.53	2.24
713-7211	261-10043-2D1	43*	4.89	4.09	3.43	2.94	2.61
713-7412	261-12515-2	15†	2.16	1.81	1.52	1.30	1.15
713-7413	261-12518-2	18†	2.48	2.07	1.74	1.49	1.32
713-7414	261-12522-2	22†	2.89	2.42	2.03	1.74	1.54
713-7415	261-12528-2	28†	3.62	3.03	2.54	2.18	1.93
713-7416	261-12536-2	36†	4.20	3.51	2.95	2.53	2.24
713-7417	261-12543-2	43†	4.89	4.09	3.43	2.94	2.61
713-7418	261-15615-2	15‡	2.58	2.16	1.81	1.55	1.38
713-7419	261-15618-2	18‡	2.99	2.51	2.10	1.80	1.60
713-7420	261-15622-2	22‡	3.45	2.89	2.42	2.08	1.84
713-7421	261-15628-2	28‡	4.24	3.55	2.98	2.55	2.26
713-7422	261-15636-2	36‡	5.32	4.45	3.74	3.20	2.84
713-7423	261-15643-2	43‡	6.28	5.25	4.41	3.78	3.55
713-7428	261-70005	Pol. key	.02	.02	.02	.02	.02

SERIES 64 EDGE BOARD RECEPTACLES



Economy-type miniature receptacles for low-voltage applications. .075″ centers. Gold over silver-plated, heat-treated beryllium-copper contacts. Contact resistance: .010 ohms. Current rating: 1.0 amp. Voltage rating: 750 volts AC rms at sea level. Accepts board .032″ thick. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	No. Contacts	EACH 1-9	10-49	50-99	100-Up
713-2186	64-17	9	.69	.55	.50	.43
713-2187	64-18	15	1.51	1.22	1.10	.96

Amphenol and American Pamcor Connectors

AMPHENOL SERIES 17 CONNECTORS AND ACCESSORIES

"MIN RAC" RACK AND PANEL CONNECTORS

Miniature connectors with "Poke-Home" contacts. Zytel 101 dielectric. Contacts are gold-over-silver plated. Cadmium-plated steel shells. Rated 5 amps. 0° to 230° F. Tools to crimping, insertion, or removal of contacts below. *Solder receptacles. †Solder plugs. ‡Cable clamp assemblies. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-9	10-49	50-99	100-249	250-499	500-Up
713-0214	17-10090*	9	1.71	1.55	1.29	1.03	.95	.86
713-0218	17-10150*	15	2.45	2.23	1.84	1.47	1.35	1.23
713-0221	17-10250*	25	3.64	3.30	2.73	2.20	2.00	1.83
713-0224	17-10370*	37	5.18	4.68	3.86	3.11	2.81	2.58
713-0227	17-10500*	50	6.61	6.00	4.95	3.99	3.64	3.33
713-0230	17-20090†	9	1.25	1.13	.94	.75	.69	.63
713-0232	17-20150†	15	1.71	1.55	1.29	1.03	.95	.86
713-0234	17-20250†	25	2.41	2.18	1.79	1.44	1.30	1.19
713-0236	17-20370†	37	3.30	3.00	2.49	2.00	1.78	1.64
713-0238	17-20500†	50	4.20	3.82	3.15	2.53	2.31	2.11
713-0202	17-310-01‡	9	1.13	.95	.76	.68	.57	.52
713-0204	17-311-01‡	15	1.18	.99	.78	.71	.59	.54
713-0206	17-312-01‡	25	1.24	1.02	.82	.74	.62	.57
713-0208	17-313-01‡	37	1.28	1.07	.86	.77	.64	.59
713-0210	17-314-01‡	50	1.31	1.09	.87	.79	.65	.60

"POKE-HOME" CONNECTOR TOOLS

Top-quality connector tools for long life, steady service. Hand crimping tool, adjustable 4-indent miniature to MIL-T-22520, needs contact locator bushing. Tool handle requires insertion bit or correct removal bit for desired contact. See Table Below. Wt. 6 oz.

Stock No.	Mfr's Type	Description	For Contact	EACH
713-8105	357-100	Hand Crimp Tool	.....	95.00
713-8115	357-300-2	Contact Locator	.....	18.50
713-8005	356-200	Tool Handle Only	.....	3.25
713-8010	356-400-1	Insertion Bit	ALL	9.50
713-8013	356-400-5	Removal Bit	Female	5.25
713-8014	356-400-6	Removal Bit	Male	4.50

MIN-RAC FIXED CONTACT CONNECTORS

Feature captivated contacts for solder termination after conne is installed. Interchangeable with original Poke-Home® s connectors. Lightweight, rugged construction. Glass-filled n dielectric for great rigidity. Current Rating: 7.5 amps max. Vol Rating: 500 V rms at sea level. Temp. Range: −55° to +12 Shell: cadmium plated cold rolled steel. Contacts: gold over co plated brass. Wire size: up to #20. (Available in gold irradiate s on special order.)

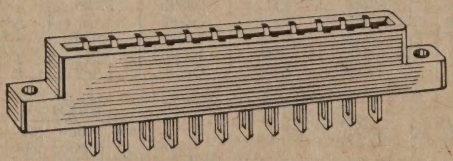
Stock No.	Mfr's Type 17-	Contacts	Description	EACH 1-9	10-49	50-99	100-249	250-499
713-0255	80090-16	9	Recep.	1.65	1.49	1.23	.99	.91
713-0257	80150-16	15	Recep.	2.41	2.18	1.81	1.45	1.33
713-0258	80250-16	25	Recep.	3.66	3.32	2.75	2.21	2.02
713-0260	80370-16	37	Recep.	5.15	4.64	3.83	3.09	2.78
713-0262	80500-16	50	Recep.	6.60	6.00	4.94	3.99	3.62
713-0270	90090-16	9	Plug	1.15	1.04	.86	.69	.63
713-0272	90150-16	15	Plug	1.62	1.47	1.22	.98	.89
713-0273	90250-16	25	Plug	2.34	2.12	1.76	1.41	1.29
713-0275	90370-16	37	Plug	3.20	2.90	2.40	1.93	1.76
713-0277	90500-16	50	Plug	4.15	3.76	3.11	2.50	2.29

MIN-RAC HIGH DENSITY CONNECTORS

Subminiature high density connectors have contact centers .075", yet each #24 size contact carries 3 amps at 500 V rms. up to 100% more circuits than original Poke-Home series. Te Range: −55° to +125°C. Glass-filled nylon dielectric. Cadm plated shell with chromate finish. Plug contacts: leaded co Socket contacts: phosphor bronze. Av. wt. 2 oz.

Stock No.	Mfr's Type 17-	Contacts	Description	EACH 1-9	10-49	50-99	100-249	250-499
713-0256	80140-1	14	Recep.	2.93	2.41	2.07	1.95	1.71
713-0259	80260-1	26	Recep.	4.34	3.11	2.97	2.61	2.47
713-0261	80440-1	44	Recep.	6.29	4.32	4.16	3.66	3.50
713-0263	80650-1	65	Recep.	6.99	5.79	5.09	4.91	4.48
713-0264	80980-1	98	Recep.	9.78	8.04	7.06	6.85	6.25
713-0271	90140-1	14	Plug	2.28	1.91	1.72	1.60	1.41
713-0274	90260-1	26	Plug	2.70	2.51	2.37	2.11	1.97
713-0276	90440-1	44	Plug	4.39	3.31	3.17	2.80	2.66
713-0278	90650-1	65	Plug	4.81	4.28	3.79	3.64	3.35
713-0279	90980-1	98	Plug	6.57	5.84	5.17	4.99	4.61

AMERICAN PAMCOR INC. MODIFIED FORK .156" CENTER PC CONNECTORS

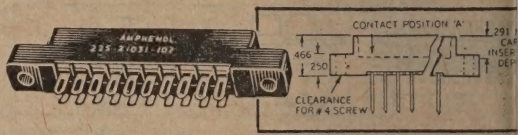


Modified fork connector contacts are U.L. rated at 250 volts between any two contacts at a maximum temperature range of +105° C. Glass filled nylon housing for high dielectric strength. Contact design reduces board wear and increases contact durability—50 insertions with no degraduation. Contact resistance does not exceed 6 milliohms. 5 amp capacity. Solder eyelet terminations. Breakdown voltage: 1800 VAC at sea level. Accepts .054" to .070" thick printed circuit boards with .156" centers. Screw mount. Gold-over-nickel plated contacts. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-99	100-249	250-999	1000-Up
729-1490	582313-1	3	.42	.36	.32	.28
729-1491	583415-1	6	.62	.54	.46	.41
729-1492	583416-1	9	.80	.69	.60	.54
729-1493	583417-1	10	.90	.78	.67	.60
729-1494	583418-1	12	1.00	.86	.75	.68
729-1495	583419-1	15	1.26	1.09	.95	.85
729-1496	583420-1	18	1.48	1.28	1.10	.99
729-1497	583421-1	22	1.74	1.50	1.30	1.17
729-1498	583422-1	24	1.88	1.62	1.40	1.26
729-1499	583423-1	33	2.50	2.16	1.87	1.69

Allied Electronics can supply the entire line of American Pamcor Inc. connectors and terminals. Contact your nearest Allied Electronics facility for prompt price and delivery information.

SERIES 225 .156" CENTERS P.C. RECEPTACLES WITH EYELET OR STRAIGHT PIN TERMINATIONS



Have gold-plated beryllium-copper contacts rated 5 amps at VAC rms. Bifurcated design guarantees two points of positive tact. Convexity of contact face concentrates bearing pressur mating surface reducing voltage losses to a minimum. Large ma surface provides low contact resistance. .156" centers for use .154 to .170" printed circuit boards. Glass-filled diallyl phtha one-piece connector body withstands physical and thermal sho Meet MIL-C-21097B. No loss of contact position even with polari key. Card slot provides guidance for misaligned boards and per easy entry even in blind applications, alignment is not possi Screw mount. .406" straight pin. *2 independent rows of conta †2 rows bridged for single readout. Solder terminations. Av., 2

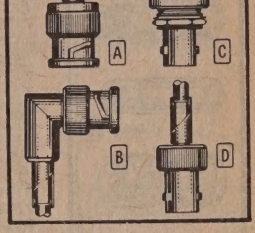
Stock No.	Type 225-	Contacts	Tail Style	EACH 1-49	50-99	100-249	250-999	10 U
713-6105	21021-101*	20	Eyelet	1.66	1.39	1.17	1.00	
713-6109	21521-101*	30	Eyelet	2.31	1.93	1.62	1.39	1.
713-6113	21821-101*	36	Eyelet	2.68	2.24	1.88	1.61	1.
713-6121	22221-101*	44	Eyelet	2.95	2.47	2.07	1.78	1.
713-6126	22821-101*	56	Eyelet	4.95	4.14	3.47	2.98	2.
713-6106	21021-103*	20	Pin	1.66	1.39	1.17	1.00	
713-6110	21521-103*	30	Pin	2.31	1.93	1.62	1.39	1.
713-6114	21821-103*	36	Pin	2.68	2.24	1.88	1.61	1.
713-6122	22221-103*	44	Pin	2.95	2.47	2.07	1.78	1.
713-6107	21031-101†	10	Eyelet	1.66	1.39	1.17	1.00	
713-6111	21531-101†	15	Eyelet	2.29	1.91	1.61	1.38	1.
713-6115	21831-101†	18	Eyelet	2.33	1.95	1.64	1.40	1.
713-6123	22231-101†	22	Eyelet	3.08	2.58	2.16	1.85	1.
713-6128	22831-101†	28	Eyelet	4.37	3.65	3.07	2.63	2.
713-6108	21031-103†	10	Pin	1.66	1.39	1.17	1.00	
713-6112	21531-103†	15	Pin	2.29	1.91	1.61	1.38	1.
713-6124	22231-103†	22	Pin	3.08	2.58	2.16	1.85	1.
713-6129	22831-103†	28	Pin	4.37	3.65	3.07	2.63	2.
713-6101	225-594		Pol. Key	.02	.02	.02	.02	

Amphenol BNC and "Subminax" Connectors

CRIMP OR SOLDER "QUICK-CRIMP" BNC'S

lits crimp or solder connection to cable. Even when center con- s crimped, connector maintains constant impedance. Costs are eciably reduced because crimping cuts assembly time 66% or . VSWR is identical to std. solder-type BNC's up to 10,000 . Connectors may be used with other than 50-ohm cable for mpedance match. Rated 500 V, max. Impedance, 50 ohms. VSWR, 1.25:1 max. (straight plug and jack). Cable retention equal to cable braid. Teflon dielectric. Bronze female and outer contact. Male contact and all other parts are brass. Center contacts gold plated; other parts silver plated. Sizes: plug, 1"7/64x3/8" dia.; right-angle plug, 1 3/16x1 1/8x3/8" dia.; cable jack, 1 11/32x3/8" dia.; bulkhead jack, 1 5/16x1 1/16" dia.—1/2" "D" mounting hole. Av. wt., 2 oz.

ock lo.	Mfr's Type	Fig.	Sim. to UG/-U	Description	Use With Amphenol RG/U Cable	EACH 1-24	25-99	100-499	500-999	1000-Up
9784	36775	A	88E	Plug	58, 58A, 58C, 141	1.09	.89	.75	.65	.57
9787	36875	A	88E	Plug	55, 55A, 142, 223	1.06	.87	.73	.63	.55
9785	36800	D	89C	Cable Jack	58,58A,58C,59/A/B,62,141	1.36	1.12	.94	.81	.71
9769	34625	A	260B	Plug	71	1.09	.89	.75	.65	.57
9818	68175	A	260B	Plug	59, 62, 71, 140, 210	1 07	.88	.74	.64	.56
9817	68150	D	261C	Cable Jack	59, 62, 71, 140, 210	1.52	1.25	1.05	.91	.....
9860	95700	C	909B	Blkhd. Jack	55, 55A, 142, 223	2.03	1.67	1.40	1.21	.....
9861	95725	C	909B	Blkhd. Jack	58, 58A, 58C, 59 141, 210	2.00	1.64	1.38	1.19	1.05
9862	95750	C	910B	Blkhd. Jack	59/A/B, 62/A/C, 140	2.08	1.70	1.43	1.23	1.09
9856	95600	B	913A	Angle Plug	58, 58A, 58C, 141	3.93	3.23	2.71	2.34	2.06
9857	95625	B	913A	Angle Plug	62/A/C, 140, 59, 210	3.99	3.28	2.75	.....	.....
0919	31-026	....	.....	Cap/Chain	Use with all receptacles	.54	.44	.37	.32	.28



CRIMPING TOOLS FOR "QUICK-CRIMP" BNC CONNECTORS

lity industrial crimping tools for use with "Quick-Crimp" BNC ectors. Connector reliability depends on proper use of good ping tools. These heavy-duty tools have extra-long handles and ow jaws of cold, hardened steel. Easy spring-loaded ratchet n assures uniform, secure crimp. Highly efficient design permits ping in less than ten seconds. Crimp is so effective that the s will break before they can be pulled from the contact crimped ion. Average shpg. wt., 1 lb.

Stock No.	Type No.	Use With Amphenol RG/U Cable	EACH
713-6305	227-350	55, 55B, 58, 58A, 58C, 141, 142, 223	78.00
713-6306	227-375	59, 59A, 59B, 62, 62A, 62C, 140, 210	78.00
713-6323	227-932-1	For crimping center contact of all above connectors	83.00

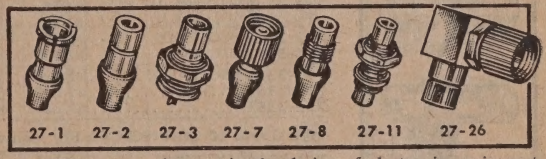
"SUBMINAX" CRIMP OR SOLDER RF CONNECTORS

es 5116 subminiature RF connectors feature captivated contacts igh resistance to cable strain due to mechanical stress, weather other adverse operating conditions, etc. Female contacts are le of beryllium copper with gold over silver plating; male contacts all other metal parts are brass with gold over silver plating. All nectors durable Teflon dielectrics. Series 5116 RF connectors r constant impedance, low VSWR and low insertion loss for dimum electrical efficiency. They are interchangeable with other ufacturers' designs. Rated at 500 volts, peak. All RF connectors d below have 50 ohm impedance except 057400, 95 ohms. rage shpg. wt., 1 oz. Type 227-911 crimping tool is designed for k, easy operation—crimps cable braid to connector and assures d secure connection. Shpg. wt., 1 lb.

tock No.	Type 5116-	For RG Cable	Fig.	EACH 1-24	25-99	100-499	500-999	1000-Up
9318	037475	178A, 178B, 196, 196A	F	2.82	2.31	1.94	1.67	1.47
9323	037600		G	4.40	3.61	3.03	.....	.....
9328	037700		E	3.37	2.76	2.32	.....	.....
9331	037800		H	4.56	3.24	3.14	.....	.....
9357	058350		J	3.54	2.91	2.44	3.11	1.85
9322	037575	174, 188, 188A	F	3.03	2.49	2.09	1.80	1.59
9342	037875	174, 188, 188A	H	4.56	3.74	3.14	.....	.....
9353	057400		J	3.22	2.64	2.22	.....	.....

9-6316 Type 227-911 Crimping Tool. (Fig. K) 16.00

"SUBMINAX" PUSH-ON AND SCREW-ON RF CONNECTORS



Allow significant advances in the design of electronic equipment. Feature full-size electrical characteristics compressed into a space-saving and weight-saving design. For Amphenol subminiature coaxial cable. Low-resistance gold-plated bodies and contacts. Screw-on and push-on types cannot be intermixed; impedances must match. 50-ohm types except *75 ohms. Require †227-900 or ‡227-901 tool below. Shpg. wt., 1 oz.

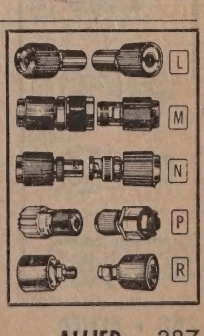
Stock No.	Mfr's Type	Description	EACH 1-24	25-99	100-499	500-999	1000-Up
713-0801	27-1†	Push-on	.83	.68	.57	.49	.43
713-0802	27-2†	Push-on	.84	.69	.58	.50	.44
713-0803	27-3	Push-on	1.21	.99	.83	.72	.63
713-0815	27-15*	Push-on	1.22	1.00	.84	.72	.64
713-0807	27-7†	Screw-on	.78	.64	.54	.47	.41
713-0808	27-8†	Screw-on	.90	.74	.62	.54	.....
713-0809	27-9	Screw-on	.68	.56	.47	.41	.36
713-0810	27-10†	Screw-on	1.15	.94	.79	.68	.60
713-0811	27-11	Screw-on	1.82	1.49	1.25	1.08	.....
713-0826	27-26†	Screw-on	1.90	1.56	1.31	1.13	1.00
713-0834	27-34	Screw-on	2.22	1.82	1.53	1.32	1.16
713-0819	27-19*‡	Screw-on	1.06	.87	.73	.63	.55
713-0821	27-21*	Screw-on	1.26	1.04	.87	.75	.66

713-6313. Type 227-900 Crimping Tool.† 19.50
713-6314. Type 227-901 Crimping Tool.‡ 19.50

APC-7 PRECISION MICROWAVE RF CONNECTOR AND ADAPTERS

cision 7mm 50 ohm sexless connector igned for rigid air line and ALJAK x with frequencies up to 18 GHz. Max- m VSWR, 1.039 @ 18 GHz. Leakage el, 120 dB down. DC contact resist- ce, .001 ohm. Outstanding features are dictable electrical length, high degree responsibility, low insertion loss and inable electrical and mechanical mat- plane with all parts captive. With test tificate and wooden shipping case. pg. wt., 1 lb. Adapters make the APC-7 erchangeable with other manufactur- connectors. *SWR @ 9 GHz. †SWR 12.4 GHz. Wt., 3 oz.

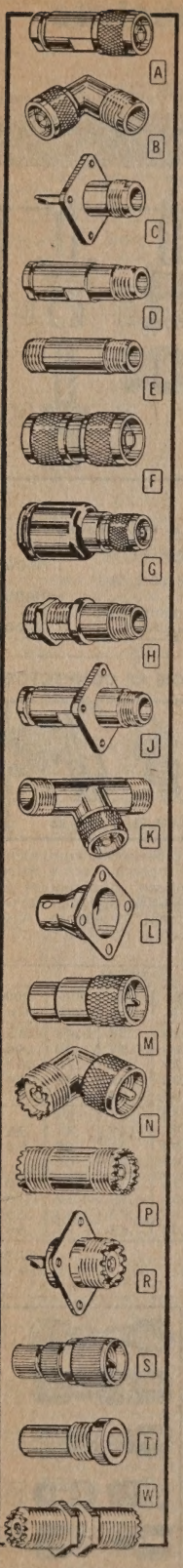
Stock No.	Type 131-	Adapts to	Max. SWR	Length x Dia.	Fig.	EACH
713-4604	1025	N Fem.	1.08*	1 43/64x1 3/16"	M	50.00
713-4608	1035	N Male	1.08*	1 13/16x1 3/16"	M	50.00
713-4606	1027	BNC Fem.	1.12	1 39/64x1 3/16"	N	50.00
713-4610	1037	BNC Male	1.12	1 23/32x1 3/16"	N	50.00
713-4607	1028	OSM Fem.	1.07†	1 11/32x1 3/16"	P	80.00
713-4611	1038	OSM Male	1.15	1 3/8x1 3/16"	P	80.00
713-4602	1022	GR 874	1.06	2 1/16x1"	R	60.00
713-4603	1023	GR 900	1.04	2 3/32x1 1/16"	R	110.00



L 713-4612. 131-1050 APC-7 Connector ..... Per Pair 35.00

nphenol SMA Series is Now Available —See Page 290

Amphenol Coaxial Connectors



SERIES 82 COAXIAL CONNECTORS

Highly dependable, weatherproof coaxial connectors. Meet government specifications. Av. shpg. wt., 2 oz

TYPE N CONNECTORS. Low voltage. 50 ohms except *70 ohms.

Stock No.	Military No.	Mfr's Type	Description	Fig.	For RG/U Cables	EACH 1-24	25-99	100-499	500-999	10 U
713C3311	UG-21B/U	82-61	Plug	A	8, 9, 10	1.38	1.13	.95	.82	
713-3325	UG-21C/U	82-96	Plug	A	8, 9, 10	1.55	1.25	1.07	.92	
713C3341	UG-21D/U	82-202	Plug	A	8, 9, 10	1.28	1.05	.88	.76	
713-3312	UG-22B/U	82-62	Panel Jack	J	8, 9, 10	2.00	1.64	1.38	1.19	1.0
713-3313	UG-23B/U	82-63	Jack	D	8, 9, 10	1.64	1.35	1.13	.98	
713-3345	UG-23D/U	82-209	Jack	D	8, 9, 10	1.82	1.49	1.25	1.08	
713-3314	UG-27A/U	82-64	Angle Adapter	B		3.46	2.83	2.38	2.05	1.8
713-3327	UG-27B/U	82-98	Angle Adapter	B		3.73	3.06	2.57	2.22	1.9
713-3348	UG-27C/U	82-213	Angle Adapter	B		2.87	2.36	1.98	1.71	1.5
713-3328	UG-28A/U	82-99	"T" Adapter	K		3.67	3.01	2.53	2.18	1.9
713-3315	UG-29A/U	82-65	Adapter	E		2.12	1.74	1.46	1.26	1.1
713-3330	UG-29B/U	82-101	Adapter	E		1.86	1.52	1.28	1.80	
713-3316	UG-30/U	82-66	Bulkhead Adapter	H		4.30	3.53	2.96	2.55	2.2
713-9845	UG-30D/U	91100	Bulkhead Adapter	H		3.30	2.70	2.27	1.96	1.7
713C3329	UG-57B/U	82-100	Adapter	F		2.37	1.94	1.63	1.41	1.2
713-3337		82-112*	Panel Receptacle	C		2.11	1.73	1.42	1.25	1.1
713C3326	UG-58A/U	82-97	Panel Receptacle	C		1.12	.92	.77	.66	
713C3301	UG-58/U	82-24*	Panel Receptacle	C		1.10	.91	.76	.66	
713-3318	UG-94A/U	82-84*	Plug	A	11, 12, 13	2.22	1.82	1.53	1.32	1.1
713-3321	UG-95A/U	82-89	Jack	D	11, 12, 13	2.28	1.87	1.57	1.35	
713-3302	UG-107A/U	82-36	"T" Adapter	K		5.01	4.11	3.45		
713-3331	UG-107B/U	82-102	"T" Adapter	K		5.27	4.32	3.63	3.13	2.7
713C9761	UG-536/U	34000	Plug	A	58, 141	2.32	1.91	1.60	1.38	1.2
713C9762	UG-536B/U	34025	Plug	A	55, 58	1.52	1.25	1.05	.91	.8
713-9768	UG-603A/U	34525	Plug	A	59, 62, 71	2.32	1.91	1.60	1.38	
713-3378	UG-680/U	82-811	Plug	Z		2.37	1.94	1.63	1.41	1.2
713-3332	UG-167A/U	82-104	Plug	G	17, 18	6.93	5.68	4.77	4.12	
713-3351	UG-1185/U	82-312	Plug	A	8, 9, 87A	1.60	1.31	1.10	.95	.8
713-3352	UG-1186/U	82-313	Jack	D	8, 9, 87A	2.08	1.70	1.43	1.23	1.0
713-3385		82-835	Angle Plug	B	87A	4.69	3.85	3.23	2.79	2.4

TYPE HN CONNECTORS. For high-voltage applications. 50 ohms.

713-3303	UG-59A/U	82-38	Straight Plug	A	8, 9, 10	3.95	3.24	2.72	2.35	2.07
713-3376	UG-59B/U	82-804	Straight Plug	A	8, 9, 10	3.57	2.93	2.46	2.12	1.87
713-3323	UG-496/U	82-92	Panel Receptacle	C		3.03	2.49	2.09	1.80	1.59
713-3377	UG-560/U	82-805	Panel Receptacle	C		3.54	2.91	2.44	2.11	1.85
713-3354	UG-1213/U	82-320	Straight Plug	A	8, 9, 87A	4.89	4.01	3.37		
713-3384		82-833	Angle Plug	B	8, 9, 10	7.55	6.19	5.20	4.49	3.95
713-3381		82-816	Straight Plug	A	54A	4.46	3.66	3.07	2.65	2.3

TYPE C AND LC CONNECTORS. For high-voltage applications. 50 ohms.

713-3364	UG-568/U	82-504	Panel Receptacle	Y		2.08	1.70	1.40		
713-3370	UG-573A/U	82-530	Plug	A	8, 9, 10	2.51	3.06	1.73	1.49	1.3

SERIES 83 UHF COAXIAL CONNECTORS AND ASTROPLATE

Meet government specs. *Polystyrene insulation. †Mica-filled insert. Non-constant impedance. Av. wt., 2

UHF SMALL SINGLE CONTACT. For any RF application. For Astroplate tarnish-proof finish add—1050 to M Type (only available on Stock Nos. with Suffix "C").

Stock No.	Military No.	Mfr's Type	Description	Fig.	For RG/U Cables	EACH 1-24	25-99	100-499	500-999	10 U
713C3405	UG-106/U, M-360	83-1H	Hood	L	8, 9, 10, 11	.49	.40	.34	.29	
713C3438	UG-111/U	83-750	Plug	M	59, 62, 71	1.06	.87	.73	.63	
713C3436	UG-175/U	83-185	Reducing Adapter	T	25, 55, 58	.19	.15	.13	.11	
713C3435	UG-176/U	83-168	Reducing Adapter	T	59, 62, 71	.19	.15	.13	.11	
713C3440	UG-177/U	83-765	Hood	L	29, 55, 58	.45	.37	.31	.27	
713-3442	UG-203/U, 49482	83-776	Plug	M	55, 59, 62, 71	1.70	1.39	1.17	1.01	
713C3404	UG-363/U, PL-274	83-1F*	Straight Adapter	W		2.79	2.29	1.92	1.66	1.4
713C3402	UG-646/U, M-359	83-1AP*	Angle Adapter	N		1.77	1.45	1.22	1.05	
713C3413	M-358, 49119	83-1T*	"T" Adapter	K		3.09	2.54	2.13	1.84	1.6
713-3426	M-359A, 49192	83-58	Angle Adapter	N		2.28	1.87	1.57	1.35	1.1
713C3407	PL-258, 49191	83-1J*	Straight Adapter	P		1.21	.99	.83	.72	
713C3410	PL-259, 49190	83-1SP†	Plug	M	8-13, 63, 65	.61	.50	.42	.36	
713-3439	PL-259A, 49195	83-756	Plug	M	8-12	1.60	1.31	1.10	.95	
713C3412	PL-259A, 49195	83-1SPN†	Plug	M	8-13, 63, 65	1.12	.92	.77	.66	
713C3408	SO-239, 49194	83-1R†	Panel Receptacle	R		.58	.48	.40	.35	
713C3444	SO-239A	83-798	Panel Receptacle	R		1.42	1.10	.98	.85	
713C3401		83-1AC	Cap & Chain			.80	.66	.55	.47	
713-3409	SO-239	83-1RTY†	Panel Receptacle	R		.90	.74	.62	.54	
713-3427		83-59	Angle Plug		8-13, 63, 65	4.72	3.87	3.25	2.80	2.4
713C3408	PL-259, 49190	83-822	Plug	M	8, 9	.83	.68	.57	.49	

UHF SMALL TWIN CONTACT. For use with 2-conductor coax cables.

713-3424	UG-102/U, PL-284	83-22SP	Plug			1.60	1.31	1.10	.95	
713-3423	UG-103/U, SO-264	83-22R	Panel Receptacle			1.29	1.06	.89	.77	
713-3420	UG-104/U, PL-293	83-22AP	Angle Adapter			2.64	2.17	1.82		
713-3428		83-65	Reducing Adapter	T	59, 62, 71	.29	.24	.20	.17	

SOLDERLESS TYPE UHF CONNECTORS.

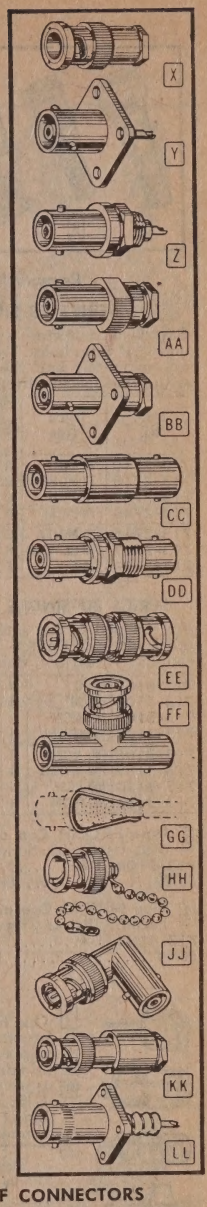
713-3447		83-850	Plug	S	11	3.41	2.80	2.35		
713-3448		83-851	Plug	S	8	2.45	2.01	1.69	1.46	

Amphenol Coaxial Connectors

SERIES 31 COAXIAL CONNECTORS—BNC TYPES AND ASTROPLATE

all, weatherproof connectors. Low-voltage single-contact types. Feature bayonet-lock coupling for quick nect and disconnect. 50-ohm impedance. Designed for use up to 10,000 MHz, 500 volts peak. Replaces "O" contacts in "MS" connectors. For Astroplate add—1050 to Type No. Available only on those Stock Nos. h suffix "C". *Pressurized. Av. shpg. wt., 4 oz.

Stock No.	Military No.	Mfr's Type	Description	Fig.	For RG/U Cables	EACH 1-24	25-99	100-499	500-999	1000-4999
13C0910	UG-88/U	31-002	Plug	X	55, 58	.74	.61	.51	.44	.39
13C0913	UG-88B/U	31-018	Plug	X	55, 58	.86	.70	.59	.51	.45
13C0926	UG-88C/U	31-202	Plug	X	55, 58	.80	.66	.55	.47	.42
13C0903	UG-89/U	31-005	Jack	AA	55, 58	1.21	.99	.83	.72	.63
13-0929	UG-89B/U	31-205	Jack	AA	55, 58	1.09	.89	.75	.65	.57
13-0912	CW-159/U	31-017	Cap and Chain	HH	.....	1.06	.87	.73	.63	.55
13-9554	UG-185	4500	Panel Receptacle	Y	.....	1.25	1.02	.86	.74	.65
13-0911	UG-254A/U	31-016*	Bulkhead Receptacle	Z	.....	5.14	4.22	3.54	3.06	2.69
13C0909	UG-260/U	31-012	Plug	X	59, 62, 71	.80	.66	.55	.47	.42
13C0916	UG-260A/U	31-021	Plug	X	59, 62, 71	.87	.71	.60	.52	.46
13C0936	UG-260B/U	31-212	Plug	X	59, 62, 71	.90	.74	.62	.54	.47
13-0910	UG-261/U	31-015	Jack	AA	59, 62, 71	1.36	1.12	.94	.81	.71
13-0937	UG-261B/U	31-215	Jack	AA	59, 62, 71	1.29	1.06	.89	.77	.68
13-0908	UG-262/U	31-011	Panel Jack	BB	59, 62, 71	1.50	1.23	1.03	.89	.78
13-0935	UG-262B/U	31-211	Panel Jack	BB	59, 62, 71	1.50	1.23	1.03	.....	.....
13C0906	UG-274/U	31-008	"T" Adapter	FF	.....	2.41	1.98	1.66	1.43	1.26
13C0932	UG-274A/U	31-208	"T" Adapter	FF	.....	2.64	2.17	1.82	1.57	1.38
13C0902	UG-290/U	31-003	Panel Receptacle	Y	.....	.83	.68	.57	.49	.43
13C0927	UG-290A/U	31-203	Panel Receptacle	Y	.....	.90	.74	.62	.54	.47
13-0925	UG-291B/U	31-201	Panel Jack	BB	55, 58	1.36	1.12	.94	.81	.....
13-0900	UG-291/U	31-001	Panel Jack	BB	55, 58	1.34	1.10	.92	.79	.70
13C0907	UG-306/U	31-009	Angle Adapter	JJ	.....	2.16	1.77	1.49	1.29	1.13
13-9806	UG-414/U	47000	Panel Recept. Adapter	.....	.....	1.90	1.56	1.31	1.13	1.00
13-0939	UG-447/U	31-817	Panel Receptacle	Y	.....	1.12	.92	.77	.66	.59
13C0940	UG-491A/U	31-218	Adapter	EE	.....	2.47	2.02	1.70	1.47	1.29
13C0942	UG-492A/U	31-220	Bulkhead Adapter	DD	.....	2.90	2.38	2.00	1.73	1.52
13C9571	UG-625/U	5375	Bulkhead Receptacle	Z	.....	.77	.63	.53	.46	.40
13C0948	UG-625B/U	31-236	Bulkhead Receptacle	Z	.....	.83	.68	.57	.49	.43
13C0922	UG-657/U	31-102	Bulkhead Receptacle	Z	.....	1.32	1.08	.91	.79	.69
13C0930	UG-909/U	31-206	Bulkhead Jack	.....	55, 58	1.64	1.35	1.13	.98	.86
13-0931	UG-910/U	31-207	Bulkhead Jack	.....	59, 62, 71	1.70	1.39	1.17	1.01	.89
13-0949	UG-911A/U	31-237	Bulkhead Receptacle	Z	.....	2.21	1.81	1.52	1.31	1.16
13-0950	UG-912/U	31-238	Bulkhead Receptacle	Z	.....	2.03	1.67	1.40	1.21	1.06
13-0928	UG-913/U	31-204	Angle Plug	.....	55, 58	3.24	2.66	2.23	1.92	1.69
13C0941	UG-914/U	31-219	Adapter	CC	.....	1.34	1.10	.92	.79	.70
13-9834	UG-1033/U	84975	Plug	X	122	1.70	1.39	1.17	1.01	.89
13C0985	UG-1094A/U	31-2221	Bulkhead Receptacle	Z	.....	.96	.79	.66	.57	.50
13C0943	UG-1094/U	31-221	Bulkhead Receptacle	Z	.....	.74	.61	.51	.44	.39
13-0944	UG-1098/U	31-222	Angle Receptacle	.....	.....	2.80	2.30	1.93	1.67	1.47
13C0919	CW-123A/U	31-026	Cap and Chain	HH	.....	.54	.44	.37	.32	.28
13-0905	CW-155/U	31-007	Cap Only	HH	.....	.33	.27	.23	.20	.17
13-0960	.....	31-304	Plug	X	.....	1.64	1.35	1.13	.98	.86
13C0977	.....	31-759	Grounding Lug	GG	.....	.17	.14	.12	.10	.09
13-0924	.....	31-105	Panel Receptacle	Y	.....	1.34	1.10	.92	.79	.70
13-0957	.....	31-301	Plug	X	55, 58C, 142	1.57	1.29	1.08	.93	.82
13-0981	.....	31-850	Angle Plug	.....	59, 62, 71	3.72	3.05	2.56	2.21	1.95



HV MINIATURE HIGH-VOLTAGE CONNECTORS. Single-contact types. Feature bayonet-lock coupling for quick nnect and disconnect. Av. shpg. wt., 3 oz.

Stock No.	Military No.	Mfr's Type	Description	Fig.	For RG/U Cables	EACH 1-24	25-99	100-499	500-999	1000-Up
13-9751	UG-931/U	27000	Panel Receptacle	LL	58, 59	2.02	1.66	1.39	1.20	1.06
13-9755	UG-932/U	28000	Straight Plug	KK	58, 59	2.08	1.70	1.43	1.23	1.09

MB MINIATURE RF COAXIAL CONNECTORS

w-cost coaxial connectors. All have bayonet lock. Maximum tings: 500 MHz, 500 volts, 400°F. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Description	EACH 1-24	25-99	100-499	500-999	1000-Up
13-9793	45000	Plug for RG-58/U	1.47	1.20	1.01	.87	.....
13-9799	46025	Receptacle (Kel-F)	1.16	.95	.80	.69	.61

"BETWEEN-SERIES" ADAPTERS AND ASTROPLATE

rovide positive connection between various RF connector series. on-constant impedance, but minimize electrical resistance. Av. pg. wt., 3 oz.

Stock No.	Military No. UG-	Mfr's Type	EACH 1-24	25-99	100-499	500-999	1000-Up
13-0979	201/U	31-830	2.77	2.27	1.91	1.65	1.45
13C0938	201A/U	31-216	1.92	1.57	1.32	1.14	1.00
13C0921	273/U	31-028	1.55	1.27	1.07	.92	.83
13C0978	349A/U	31-217	2.83	2.32	1.95	1.68	1.48
13-0828	.....	27-28	2.27	1.86	1.56	1.35	1.19
13-9553	146/U	4400	3.64	2.99	2.51	2.17	1.91
13C9531	255/U	2900	2.57	2.11	1.77	1.53	1.35

TWINAX WEATHERPROOF RF CONNECTORS

95-ohm twin-conductor weatherproof polarized connectors, for use up to 200 MHz. For use with cable type RG-22/U. Military No.: *UG-421/U; †UG-422/U. Av. shpg. wt., 2 oz.

6275 6225

Stock No.	Mfr's Type	Description	EACH 1-24	25-99	100-499	500-999	1000-Up
713-9578	6275*	RG-22/U plug	3.48	2.86	2.40	2.07	1.82
713-9576	6225†	Sq. flange socket.	3.64	2.99	2.51	2.17	1.91

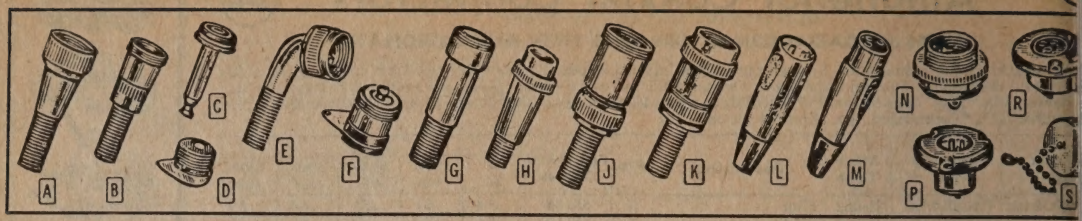
COAXIAL RF PLUG-INS

Commonly used on drawer-type chassis for direct plug-in connections. Rated for 2000 volts. Plug and receptacle mount in 5/16" dia. hole. Military No.: *UG-1050/U; †UG-1051/U. Wt., 1 oz.

2175 2225

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-99	100-499	500-999	1000-Up
713-9516	2225*	Male	.90	.74	.62	.54	.47
713-9515	2175†	Female	1.05	.86	.72	.62	.55

Amphenol Audio Connectors



Receptacles are for chassis mounting; plugs and jacks are used on cables. Plugs fit either jacks or receptacles.

SERIES 75 SINGLE-BUTTON-CONTACT TYPES

Standard connectors with 5/8", 27 threads. Types marked with * require 3/8" mtg. holes. Types marked with † are miniature connectors approximately half the size and weight of standard counterparts with same specifications. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-49	50-99	100-249	250-499	500-Up
713-2710	75 MC1F	A	Straight plug	.70	.60	.53	.46	.42
713-2718	75 MC1M	B	Cable jack	.48	.42	.36	.32	.29
713-2729	75 MC1P	C	Phone plug adap.	.68	.58	.51	.45	.40
713-2740	*75 PC1M	D	Receptacle open	.48	.42	.36	.32	.29
713-2715	75 MC1FA	E	90° cable jack	1.48	1.27	1.11	.97	.88
713-2707	*75 CL PC1M	F	Recept., shorting	.68	.58	.51	.44	.40
713-2770	†75 3	F	Locknut receptacle	.53	.45	.40	.35	.31

SERIES 80 SINGLE AND DOUBLE-PIN-CONTACT TYPES

For shielded cables, single and two-conductor coaxial cables, photo cell leads, etc. Center contacts are pin and socket type. *Single-contact. †Polarized, double-contact. Av. shpg. wt., 4 oz.

713-3100	*80 C	N	Female receptacle	.60	.52	.45	.40	.36
713-3104	*80-M	H	Male cable plug	.76	.65	.57	.50	.45
713-3106	†80-MC2F	G	Female cable jack	.85	.73	.64	.56	.50
713-3107	†80-MC2F1	H	Female cable plug	.85	.73	.64	.56	.50
713-3105	†80-MC2M	H	Male cable plug	.80	.68	.60	.52	.47
713-3109	†80-MC2M1	G	Male cable jack	.80	.68	.60	.52	.47
713-3110	†80-PC2F	N	Female receptacle	.68	.58	.51	.44	.40
713-3111	†80 PC2M	N	Male receptacle	.66	.56	.49	.43	.39

[S] **Type 75-CCC1 Cap and Chain.** Seals open chassis units against dirt. Used with Series 75 and 80 receptacles. Shpg. wt., 2 oz.
713-2704. 1-49 ..... Each .47
50-99 ..... Each .40 100-Up ..... Each .35

[S] **Type 91-CCC3 Cap and Chain.** Seals open chassis units against harmful dirt and dust. For use with Series 91 connectors. 2 oz.
713-4005. 1-49 ..... Each .50
50-99 ..... Each .43 100-Up ..... Each .38

SERIES 91—3, 4 AND 6-CONTACT TYPES

Microphone connectors for use with portable equipment. Pola to eliminate incorrect insertions. Clamps eliminate stress on sold connections *3-contact type. †4-contact type. ‡6-contact t Shpg. wt., 4 oz.

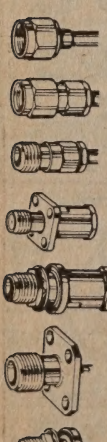
Stock No.	Mfr's Type	Fig.	Description	EACH 1-49	50-99	100-249	250-499
713-4011	*91-MC3F	J	Female cable jack	1.13	.97	.85	.74
713-4012	*91-MC3F1	K	Female cable plug	1.18	1.01	.88	.77
713-4013	*91-MC3M	K	Male cable plug	1.11	.95	.83	.73
713-4014	*91-MC3M1	J	Male cable jack	1.06	.91	.79	.70
713-4033	*91-PC3F	N	Female receptacle	.80	.69	.60	.52
713-4035	*91-PC3M	N	Male receptacle	.72	.67	.54	.47
713-4017	†91-MC4F	J	Female cable jack	1.17	1.00	.88	.77
713-4018	†91-MC4F1	K	Female cable plug	1.23	1.05	.92	.80
713-4019	†91-MC4M	K	Male cable plug	1.16	.99	.87	.76
713-4020	†91-MC4M1	J	Male cable jack	1.11	.96	.83	.73
713-4034	†91-PC4F	N	Female receptacle	.76	.66	.57	.50
713-4037	†91-PC4M	N	Male receptacle	.73	.62	.54	.48
713-4025	‡91-MC6F	J	Female cable jack	1.20	1.04	.90	.79
713-4027	‡91-MC6M	K	Male cable plug	1.17	1.01	.88	.77
713-4043	‡91-PC6F	N	Female receptacle	.82	.70	.61	.54

SERIES 91 "QUIK" 3 AND 4-CONTACT TYPES

Locked connection made by inserting plug in jack; released by l pressure on lock button. Gold-plated (over silver) bronze conta Dielectric is diallyl phthalate, shells are finished in satin nic *3-contact type. †4-contact type. Av. shpg. wt., 4 oz.

713-4085	*91-853	L	Male cable plug	1.89	1.62	1.41	1.24
713-4086	*91-854	M	Female cable plug	2.51	2.16	1.89	1.65
713-4087	*91-855	P	Male receptacle	1.47	1.26	1.10	.96
713-4088	*91-856	R	Female receptacle	3.48	2.99	2.61	2.29
713-4089	†91-857	L	Male cable plug	2.02	1.74	1.52	1.33
713-4090	†91-858	M	Female cable plug	2.85	2.45	2.14	1.87
713-4091	†91-859	P	Male receptacle	1.59	1.37	1.20	1.05
713-4092	†91-860	R	Female receptacle	3.75	3.22	2.81	2.46

SMA CONNECTORS



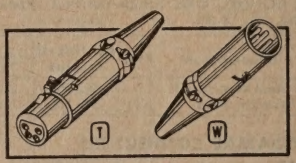
One hundred mating cycles with no APP. Shells are made of high strength, heat treated beryllium copper—three times stronger than stainless steel! Maximum SWR for mated pair of SMA solder-type for 0.141" semi-rigid cable is 1.09 to 12.4 GHz and 1.13 through 18 GHz. This is below the limits of MIL-C-39012. All Amphenol SMA connectors assembled with Tool Kit (below).

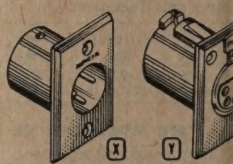
Stock No.	Mfr's Type	Fig.	Desc.	EACH 1-24	25-99	100-Up
713-8713	901-113	T	Plug	1.68	1.38	1.16
713-8705	901-105	W	Plug	2.08	1.70	1.43
713-8711	901-111	.....	Plug	2.25	1.85	1.55
713-8707	901-107	.....	Plug	3.08	2.52	2.12
713-8706	901-106	X	Jack	1.76	1.44	1.21
713-8708	901-108	.....	Jack	2.76	2.26	1.90
713-8703	901-103	.....	Plug	3.86	3.17	2.66
713-8704	901-104	.....	Jack	3.35	2.75	2.31
713-8721	901-121	Y	Jack	4.27	3.50	2.94
713-8722	901-122	Z	Jack	3.80	3.12	2.62
713-8701	901-101	.....	Plug	3.14	2.57	2.16
713-8702	901-102	.....	Crimp	2.69	2.20	1.85
713-8709	901-109	.....	Plug	3.14	2.57	2.16
713-8710	901-110	.....	Jack	2.85	2.33	1.96
713-8712	901-112	AA	Receptacle	2.89	2.37	1.99
713-8716	901-116	BB	Receptacle	2.48	2.04	1.71
713-8717	901-117	.....	Receptacle	2.53	2.07	1.74
713-8718	901-118	.....	Plug Adap.	3.75	3.07	2.58
713-8719	901-119	.....	Jack Adap.	2.42	1.99	1.67
713-8720	901-120	CC	Jack Adap.	3.21	2.63	2.21
713-4620	131-1074	DD	Adap.	35.00	35.00	35.00
713-4621	131-1075	.....	Adap.	35.00	35.00	35.00
713-4622	131-1076	.....	Adap.	35.00	35.00	35.00
713-4623	131-1077	.....	Adap.	35.00	35.00	35.00

713-8795. 901-2500 Tool Kit. 1 lb. 12.50

EXCELLITE MICROPHONE CONNECTORS

Straight Cord Plugs — Wall Mounting Receptacl





Rugged ABS molded plastic bodies give lightweight, durable c struction at a low price. Satin-nickel plating gives effective shi ing for high-impedance circuits. Positive gripping cable clamps up to 5/16" O.D.). Push-button lock and release. Voltage rating: t 1400 V rms, service; 133 V rms. *3-contact type. †4-contact ty ‡5-contact type. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-49	50-99	100-249	250-499	5
713-4061	*91-454	T	Female plug	1.42	1.20	1.07	.92	
713-4065	†91-458	T	Female plug	1.80	1.50	1.34	1.16	1.
713-4069	‡91-462	T	Female plug	3.10	2.62	2.32	2.02	1.
713-4060	*91-453	W	Male plug	1.20	1.02	.90	.78	
713-4064	†91-457	W	Male plug	1.33	1.14	.99	.86	
713-4068	‡91-461	W	Male plug	2.12	1.83	1.62	1.40	1.
713-4062	*91-455	X	Male receptacle	1.09	.92	.80	.70	
713-4066	†91-459	X	Male receptacle	1.30	1.10	.96	.84	
713-4070	‡91-463	X	Male receptacle	1.65	1.42	1.23	1.07	1.
713-4063	*91-456	Y	Female receptacle	1.98	1.69	1.47	1.29	1.
713-4067	†91-460	Y	Female receptacle	1.90	1.62	1.41	1.28	1.
713-4071	‡91-464	Y	Female receptacle	2.80	2.40	2.10	1.82	1.

Depend on Allied Electronics for Reliable Nationwide Servi

Crimp RF and Audio Connectors

I.T.T. CANNON AUDIO CONNECTORS

nd 4-contact connectors with clamp and resilient socket insulator. egral cable-clamp and push-action latchlock. First digit in Mfr's pe shows no. of contacts. Three 15-amp or four 10-amp contacts. all-type receptacles; †panel-type receptacles. Av. wt., 4 oz.

90-DEGREE PLUGS

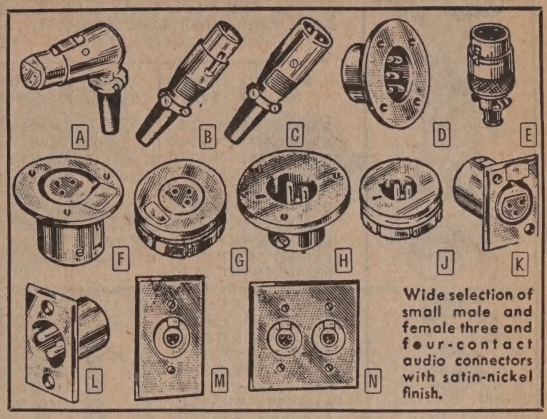
tock No.	Mfr's Type	Fig.	Description	1-9 EA.	10-49 EA.	50-Up EA.
9-8261	XLR-3-15	A	Female (socket insert)	4.84	4.44	4.04
9-8283	XLR-4-15	A	Female (socket insert)	4.89	4.48	4.08

STRAIGHT CORD PLUGS

9-8252	XLR-3-11C	B	Female (socket insert)	1.57	1.44	1.31
9-8253	XLR-3-11SC	B	As above, steel shell	4.99	4.58	4.16
9-8273	XLR-4-11C	B	Female (socket insert)	1.99	1.82	1.66
9-8274	XLR-4-11SC	B	As above, steel shell	5.08	4.66	4.24
9-8254	XLR-3-12C	C	Male (pin insert)	1.36	1.25	1.14
9-8255	XLR-3-12SC	C	As above, steel shell	3.98	3.65	3.32
9-8275	XLR-4-12C	C	Male (pin insert)	1.45	1.33	1.21
9-8277	XLR-4-12SC	C	As above, steel shell	4.10	3.76	3.42

WALL AND PANEL RECEPTACLES

9-8256	XLR-3-13*	F	Female (socket insert)	2.25	2.06	1.88
9-8278	XLR-4-13*	F	Female (socket insert)	2.33	2.14	1.95
9-8258	XLR-3-13N†	G	Female (socket insert)	3.05	2.80	2.55
9-8280	XLR-4-13N†	G	Female (socket insert)	3.15	2.89	2.63
9-8259	XLR-3-14*	H	Male (pin insert)	1.03	.94	.86
9-8281	XLR-4-14*	H	Male (pin insert)	1.06	.97	.88
9-8260	XLR-3-14N†	J	Male (pin insert)	2.48	2.28	2.07
9-8282	XLR-4-14N†	J	Male (pin insert)	2.68	2.46	2.24
9-8262	XLR-3-31*	K	Female (socket insert)	2.35	2.15	1.96
9-8284	XLR-4-31*	K	Female (socket insert)	2.41	2.21	2.01
9-8263	XLR-3-32*	L	Male (pin insert)	1.33	1.22	1.11
9-8285	XLR-4-32*	L	Male (pin insert)	1.75	1.61	1.46
9-8264	XLR-3-35*	M	Female (socket insert)	5.77	5.29	4.81
9-8265	XLR-3-35-2G*	N	As above, Dual ganged	10.61	9.72	8.84



Wide selection of small male and female three and four-contact audio connectors with satin-nickel finish.

TYPE P 3-CONTACT RECEPTACLES AND PLUGS

For up to No. 10 wires. 30-amp contacts. Av. wt., 4 oz.

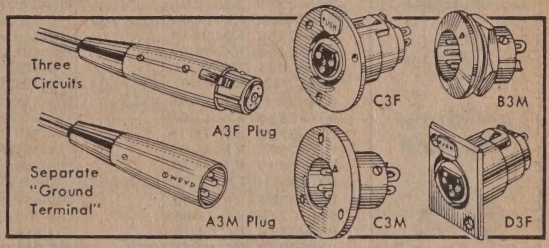
Stock No.	Mfr's Type	Fig.	Description	EACH 1-24	EACH 25-99	EACH 100-Up
819-8213	P3-13	D	Wall socket, female	6.31	5.36	4.73
819-8214	P3-14	D	Wall mount, male (pin)	5.20	4.42	3.90
819-8211	P3-CG-11S	E	Cable plug, female (skt)	8.62	7.33	6.47
819-8212	P3-CG-12S	E	Cable plug, male (pin)	7.92	6.73	5.94

SWITCHCRAFT "QUICK-GROUND" MALE AND FEMALE AUDIO CONNECTORS

3, 4 AND 5-CONTACT PLUGS AND RECEPTACLES

nnectors offer up to 5-contact versatility by means of up to four cuit contacts plus electrically integrated "ground terminal" shell. Insert-mounting screws assure firm mechanical connection. ver-plated, chromate-dipped brass and phosphor bronze pin and cket contacts provide low-loss electrical connection. Neoprene ble strain relief bushing keyed to shell; ribbed for easy access male plugs. Both male and female have die-cast zinc alloy con-uction and satin-nickel finish. Females have nickel-plated nut d washers. All receptacles are three-contact types. *Single hole g. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
32-0002	A3F	3 con. Fem. Plug	1.47	1.35	1.23	.98
32-0003	A3M	3 con. Male Plug	1.26	1.16	1.05	.84
32-0009	B3M	*Male Receptacle	1.80	1.65	1.50	1.20
32-0012	C3M	Male Receptacle	.96	.88	.80	.64
32-0011	C3F	Fem. Receptacle	1.92	1.76	1.60	1.28
32-0030	D3F	Fem. Receptacle	1.98	1.82	1.65	1.32

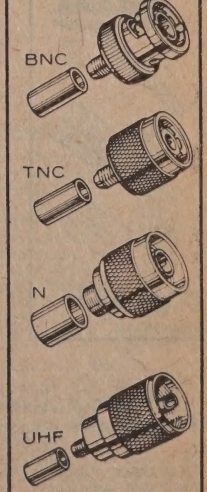


Stock No.	Mfr's Type	Description	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
932-0004	A4F	4-con. Fem. Plug	1.83	1.68	1.53	1.22
932-0005	A4M	4-con. Male Plug	1.35	1.24	1.13	.90
932-0006	A5F	5-con. Fem. Plug	3.15	2.88	2.63	2.10
932-0007	A5M	5-con. Male Plug	2.55	2.34	2.13	1.70

KINGS "K-GRIP JR." RF CONNECTORS

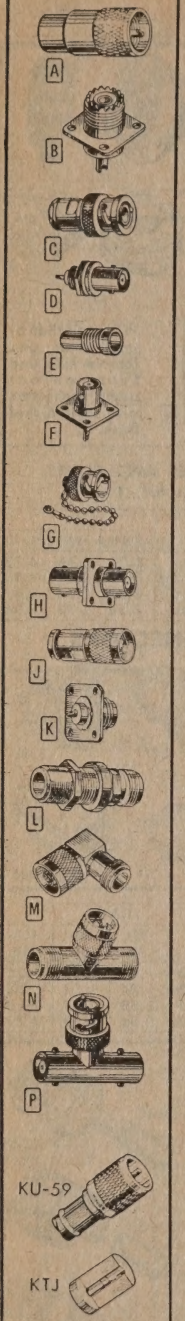
nall, lightweight versions of standard RF connec-rs, reduced to the essentials. Designed for fast, iform assembly with hex forming tool and trim gs, for mechanically strong and electrically consist-t connections. Special serrations grip cable braid curely. Type TR-4 tarnish-resistant finish. **BNC Series:** Bayonet coupling for small-dia. RG/U cables of 50-ohm impedance; 1500 V rms. **TNC Series:** Positive lock thread coupling with low noise level; 50-ohm; 1500 V rms test. **N Series:** Positive lock thread coupling; 50-ohm; 2500 V rms. **UHF Series:** Positive lock thread coupling. Jacks are not illustrated. 1 oz.

Stock No.	Mfr's Type	Series	For RG/U Cable Type	Description	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
36-0250	KC39-26	BNC	58, 141	Jack	1.21	1.01	.84	.76	.69	.66
36-0252	KC39-28	BNC	59, 62, 210	Jack	1.21	1.01	.84	.76	.69	.66
36-0350	KC59-78	BNC	58, 141	Plug	1.01	.84	.70	.64	.58	.55
36-0351	KC59-79	BNC	59, 62, 120	Plug	1.06	.88	.73	.66	.60	.57
36-0352	KC59-80	BNC	55, 142, 223	Plug	1.03	.86	.72	.65	.59	.56
36-0360	KC59-98	BNC	58, 141	Plug	.98	.82	.68	.62	.56	.53
36-0065	KA39-17	TNC	58, 141	Jack	1.31	1.09	.91	.83	.75	.71
36-0068	KA39-20	TNC	71	Jack	1.31	1.09	.91	.83	.75	.71
36-0115	KA59-44	TNC	58, 141	Plug	1.74	1.45	1.21	1.10	1.00	.95
36-0116	KA59-45	TNC	55, 142, 223	Plug	1.74	1.45	1.21	1.10	1.00	.95
36-0117	KA59-46	TNC	59, 62, 210	Plug	1.74	1.45	1.21	1.10	1.00	.95
36-0850	KN39-30	N	8, 11, 213	Jack	1.85	1.54	1.28	1.16	1.05	1.00
36-0950	KN59-67	N	8, 11, 213	Plug	1.67	1.39	1.16	1.05	.95	.90
36-0951	KN59-68	N	9, 214	Plug	1.67	1.39	1.16	1.05	.95	.90
36-1220	KU59-02	UHF	8, 11, 213	Plug	.77	.64	.53	.48	.44	.42
36-1224	KU59-07	UHF	58, 141	Plug	.77	.64	.53	.48	.44	.42
36-1225	KU59-08	UHF	59, 62, 210	Plug	.77	.64	.53	.48	.44	.42
36-1233	KU59-16	UHF	WE724, Belden 8281	Plug	.84	.70	.58	.53	.48	.46
36-1238	KU59-24	UHF	9, 214	Plug	.77	.64	.53	.48	.44	.42



See Next Page for More King Connectors

KINGS RF Connectors, K-Grips, "K-Grip Jr."



MIL SPEC TARNISH-RESISTANT TR-4, TR-5* RF CONNECTORS

MIL spec coax connectors. TR-4 (tarnish resistant) coated. *TR-5 is a bright finish. Series HN, BNC, C, N weatherproof. Max. voltage: HN, 5000 V; BNC, 500 V; N, 1500 V. BNC and C bayonet coupling t Numbers in "Use with K-Grip" column, refer to " column in table at bottom of page. Av. wt. 3 oz.

*Specify TR-5 if bright finish is desired.

Stock No.	TR-4 Type	TR-5 Type*	MIL No.	Fig.	For RG/U Cable	Desc.	Series	Use with K-Grip	EACH 1-24	25-49	50-99
836-0910	KN-57-02	.....	UG-21B/U	J	8, 9, 11, 213, 214	Plug	N	.....	1.39	1.16	.97
836-0890	KN-56-01	.....	UG-21D/U	J	8, 9, 11, 213, 214	Plug	N	1, 5	1.28	1.07	.89
836C0875	KN-53-02	KN-59-106	UG-21E/U	J	8, 9, 11, 213, 214	Plug	N	1, 5	1.38	1.15	.96
836C1012	KN-98-01	KN-99-47	UG-27C/U	M	.....	Adapt.	N	.....	2.62	2.18	1.82
836-0996	KN-96-03	.....	UG-27D/U	M	.....	Adapt.	N	.....	2.66	2.22	1.85
836-0985	KN-94-04	.....	UG-28A/U	N	.....	Adapt.	N	.....	3.37	2.81	2.34
836-0979	KN-93-01	.....	UG-30E/U	L	.....	Adapt.	N	.....	3.37	2.81	2.34
836C0965	KN-74-01	KN-79-40	UG-58A/U	K	.....	Recept.	N	.....	1.15	.96	.80
836C0704	KH-53-01	KH-59-44	UG-59E/U	....	8, 9, 11, 213, 214	Plug	HN	1, 5	4.33	3.61	3.01
836-0275	KC-51-01	.....	UG-88/U	C	55, 58	Plug	BNC	.....	.74	.62	.52
836C0343	KC-58-01	KC-59-141	UG-88C/U	C	55, 58, 142, 223	Plug	BNC	2, 4	.74	.62	.52
836-0324	KC-56-01	.....	UG-88D/U	C	55, 58, 142, 223	Plug	BNC	2, 4, 6	.92	.77	.64
836C0283	KC-53-01	KC-59-145	UG-88E/U	C	55, 58, 142, 223	Plug	BNC	2, 4, 6	.92	.77	.64
836-0295	KC-55-01	.....	UG-88F/U	C	55, 58, 223	Plug	BNC	2, 4, 6	1.01	.84	.70
836C0240	KC-58-02	KC-39-43	UG-89C/U	....	55, 58, 142, 223	Jack	BNC	2, 4, 6	.88	.73	.61
836-0425	KC-81-01	.....	CW-123A/U	G	.....	Cap/Ch	BNC	.....	.44	.37	.31
836-1310	KU-91-02	.....	UG-175/U	E	58	Adapt.	UHF	.....	.20	.17	.14
836-1311	KU-91-03	.....	UG-176/U	E	59, 62, 71	Adapt.	UHF	.....	.20	.17	.14
836C0986	KN-94-05	KN-99-35	UG-201A/U	....	.....	Adapt.	BNC	.....	1.61	1.34	1.12
836-1290	KU-71-02	.....	SO-239	B	8, 13, 63, 65	Recept.	UHF	.....	.62	.52	.43
836-0440	KC-91-01	.....	UG-255/U	....	.....	Adapt.	BNC	.....	2.32	1.93	1.61
836C1200	KU-51-01	KU-59-22	PL-259	A	8, 13, 63, 65	Plug	UHF	.....	.59	.49	.41
836-0276	KC-51-02	.....	UG-260/U	C	59, 62, 71, 210	Plug	BNC	.....	.79	.66	.55
836-0332	KC-57-02	.....	UG-260B/U	C	59, 62, 71, 210	Plug	BNC	3	.79	.66	.55
836-0344	KC-58-02	.....	UG-260C/U	C	59, 62, 71, 210	Plug	BNC	3	1.01	.84	.70
836-0325	KC-56-02	.....	UG-260D/U	C	59, 62, 71, 210	Plug	BNC	3	.92	.77	.64
836C0284	KC-53-02	KC-59-122	UG-260E/U	C	59, 62, 71	Plug	BNC	3	1.03	.86	.72
836C0441	KC-91-02	KC-99-34	UG-273/U	....	.....	Adapt.	BNC	.....	1.37	1.14	.95
836-0461	KC-94-10	.....	UG-274A/U	P	.....	Adapt.	BNC	.....	2.53	2.11	1.76
836C0484	KC-97-02	KC-99-31	UG-274B/U	P	.....	Adapt.	BNC	.....	2.57	2.14	1.78
836-0375	KC-71-01	.....	UG-290/U	F	.....	Recept.	BNC	.....	1.37	1.14	.95
836C0390	KC-74-04	KC-79-52	UG-290A/U	F	.....	Recept.	BNC	.....	.85	.71	.59
836-0989	KN-94-09	.....	UG-349A/U	....	.....	Adapt.	BNC,N	.....	2.22	1.85	1.54
836-0460	KC-94-09	.....	UG-492A/U	H	.....	Adapt.	BNC	.....	2.54	2.12	1.77
836-0491	KC-98-01	.....	UG-492C/U	H	.....	Adapt.	BNC	.....	2.57	2.14	1.78
836C0474	KC-96-01	KC-99-38	UG-492D/U	H	.....	Adapt.	BNC	.....	2.58	2.15	1.79
836C0913	KN-57-05	KN-59-121	UG-536B/U	J	55, 58, 142, 223	Plug	N	2, 4, 6	1.42	1.18	.98
836-0830	KN-17-04	.....	UG-556B/U	....	55, 58, 142, 223	Jack	N	2, 4	2.64	2.20	1.83
836-0730	KH-71-02	.....	UG-560/U	....	.....	Recept.	HN	.....	3.23	2.69	2.24
836-0575	KD-56-03	.....	UG-573B/U	....	8, 9, 11, 213, 214	Plug	C	1, 5	2.33	1.94	1.62
836-0879	KN-54-15	.....	UG-594A/U	....	8, 11, 213	Plug	N	.....	4.76	3.97	3.31
836C0410	KC-77-01	KC-79-47	UG-625B/U	D	.....	Recept.	BNC	.....	.74	.62	.52
836-0381	KC-71-09	.....	UG-657/U	D	.....	Recept	BNC	.....	1.25	1.04	.87
836-0210	KC-17-06	.....	UG-909B/U	....	55, 58, 142, 223	Jack	BNC	2, 4	1.37	1.14	.95
836-0316	KC-74-10	.....	UG-912A/U	D	.....	Recept.	BNC	.....	1.73	1.44	1.20
836-0448	KC-91-11	.....	UG-914/U	H	.....	Adapt.	BNC	.....	1.20	1.00	.83
836C0418	KC-79-02	KC-99-30	UG-931/U	....	.....	Recept.	MHV	.....	1.85	1.54	1.28
836-1425	KV-54-05	.....	UG-932A/U	....	59, 62, 71, 210	Plug	MHV	3	1.78	1.48	1.23
836C0392	KC-74-06	KC-79-35	UG-1094/U	D	.....	Recept.	BNC	.....	.72	.60	.50
836C0397	KC-74-12	KC-79-46	UG-1094A/U	D	.....	Recept.	BNC	.....	.80	.67	.56

"K-GRIP JR." FULLY CRIMPED PL-259-TYPE RF CONNECTORS CUT ASSEMBLY TIME

Use jacket and dielectric trim jigs for cable; crimp center contact, then crimp connector to cable.

Stock No.	Mfr's Type	Series	For RG/U Cable Type	Description	EACH 1-24	25-49	50-99	100-249	250-499	500-
836-1254	KU59-46	UHF	58, 58A, 58C/U	Plug	.79	.66	.55	.50	.45	.4
836-1252	KU59-44	UHF	59, 59A, 59B, 62, 62A/U	Plug	.79	.66	.55	.50	.45	.4
836-1251	KU59-43	UHF	11, 11A/U	Plug	.79	.66	.55	.50	.45	.4
836-1250	KU59-42	UHF	8, 8A, 213/U	Plug	.79	.66	.55	.50	.45	.4

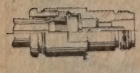
"K-GRIP" JR. TRIM JIGS CRIMPING TOOL AND DIES

Quickly and accurately crimps many sizes of cable. Finger-grip styling for portability. Interchangeable die feature permits fast and simple conversions. Tool does not release until sleeve is fully crimped. For RG-55, 58, 141, 142 and 223/U cable, use die KTH-1001 (sleeve cavity: .213"; contact cavity: .069"). RG-59, 62, 71 and 210/U cable, use die KTH-1 (sleeve cavity: .255"; contact cavity: .100"). For RG 11 and 213/U cable; use die KTH-1003 (sleeve cav .384"; contact cavity: .100"). One tool takes all dies

Conn. Type KU-	Replaces Old Type	Stock No.	Jacket Trim Jig Type No.	EA.	Stock No.	Dielectric Trim Jig Type No.	EA.	Stock No.	Crimp Die KTH-	E
59-46	PL-259/UG-175	836-1190	KTJ-12	6.00	836-1171	KTD-34	3.75	836-1180	1001	35
59-44	PL-259/UG-176	836-1190	KTJ-12	6.00	836-1170	KTD-33	3.75	836-1181	1002	35
59-42/43	PL-259	836-1189	KTJ-11	6.00	836-1172	KTD-35	3.75	836-1182	1003	35

836-1179, Type KTH-1000 Universal Crimp Tool ..... 60.

K-GRIPS FOR RF CONNECTORS



Hold cable, eliminate braid combing, hold dielectric in position, simplify inspection.

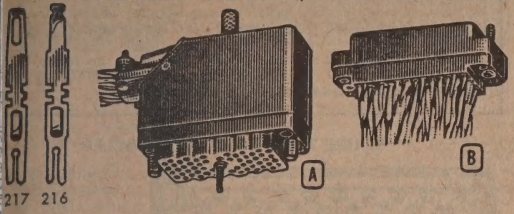
*Reference numbers used in RF connector table above. Av. wt., 2 oz.

Stock No.	Mfr's Type KS-	For RG/U Cable	Key *	EACH 1-24	25-49	50-99	100-Up	Stock No.	Mfr's Type KS-	For RG/U Cable	Key *	EACH 1-24	25-49	50-99
836-1110	89-04	8, 11, 213	1	.67	.56	.47	.43	836-1119	89-17	55, 142, 223	4	.48	.40	.33
836-1111	89-05	58	2	.49	.41	.34	.31	836-1122	89-24	9, 214	5	.73	.61	.51
836-1112	89-06	59, 62, 210	3	.49	.41	.34	.31	836-1126	89-31	58	6	.59	.49	.41

Write or Call for Larger-Quantity Pricin

lco Rack and Panel Connectors, Accessories

8016 MINIATURE RACK, PANEL CONNECTORS



e clamp on cover available for top or side entrance. Can be rized in 36 positions. Diallyl phthalate insulation. Contact g 8.5 amps. FN, fixed nut; AS, actuating screw. *Indicates no. ntacts. Available with or without installed contacts. Specify 216, or 218 in place of XXX in Mfr's Type for installed contacts. Order rate Varicon contacts or Varilok crimp-type contacts and insertion below, right. Av. shpg. wt. 8 oz.

A RECEPTACLES (Less Contacts and Cover)

tock No.	Mfr's Type 00-8016-	Lock	*	EACH 1-9	10-49	50-99	100-Up
A0319	-020-000-707	FN	20	1.94	1.84	1.67	1.35
A0323	-020-000-708	AS	20	3.13	2.96	2.70	2.18
A0356	-038-000-707	FN	38	2.33	2.21	2.01	1.63
A0360	-038-000-708	AS	38	3.52	3.33	3.04	2.45
A0391	-056-000-707	FN	56	2.83	2.67	2.44	1.97
A0395	-056-000-708	AS	56	4.02	3.80	3.47	2.79
A0436	-090-000-707	FN	90	3.51	3.31	3.01	2.43
A0440	-090-000-708	AS	90	4.70	4.43	4.04	3.26
A0476	-120-000-707	FN	120	3.94	3.72	3.39	2.74
A0480	-120-000-708	AS	120	5.13	4.84	4.41	3.56

RECEPTACLES with Installed Contact, Less Cover

AC0318	-020-XXX-707	FN	20	3.52	3.33	3.04	2.45
AC0322	-020-XXX-708	AS	20	4.71	4.45	4.06	3.28
AC0335	-038-XXX-707	FN	38	5.37	5.07	4.62	3.73
AC0390	-056-XXX-707	FN	56	7.27	6.86	6.26	5.05
AC0394	-056-XXX-708	AS	56	8.46	7.99	7.28	5.87
AC0435	-090-XXX-707	FN	90	10.64	10.04	9.15	7.38
AC0475	-120-XXX-707	FN	120	13.44	12.69	11.57	9.34
AC0479	-120-XXX-708	AS	120	14.63	13.82	12.60	10.16

B PLUGS (Less Contacts and Cover Assembly)

A0311	-020-000-701	AS	20	2.93	2.77	2.52	2.04
A0315	-020-000-702	FN	20	1.74	1.65	1.50	1.21
A0341	-038-000-701	AS	38	3.32	3.15	2.86	2.31
A0348	-038-000-702	FN	38	2.14	2.03	1.84	1.49
A0381	-056-000-701	AS	56	3.82	3.61	3.29	2.65
A0386	-056-000-702	FN	56	2.63	2.49	2.27	1.83
A0431	-090-000-701	AS	90	4.50	4.25	3.87	3.12
A0433	-090-000-702	FN	90	3.31	3.12	2.85	2.30
A0466	-120-000-701	AS	120	4.93	4.65	4.25	3.42
A0470	-120-000-702	FN	120	3.74	3.53	3.22	2.60

PLUGS with Installed Contact, Less Cover Assembly

AC0310	-020-XXX-701	AS	20	4.51	4.27	3.88	3.14
AC0314	-020-XXX-702	FN	20	3.32	3.15	2.86	2.31
AC0340	-038-XXX-701	AS	38	6.34	5.99	5.46	4.40
AC0347	-038-XXX-702	FN	38	5.15	4.86	4.43	3.58
AC0380	-056-XXX-701	AS	56	8.26	7.80	7.11	5.73
AC0430	-090-XXX-701	AS	90	11.62	10.98	10.01	8.07
AC0465	-120-XXX-701	AS	120	14.43	13.63	12.43	10.02
AC0469	-120-XXX-702	FN	120	13.24	12.51	11.41	9.20

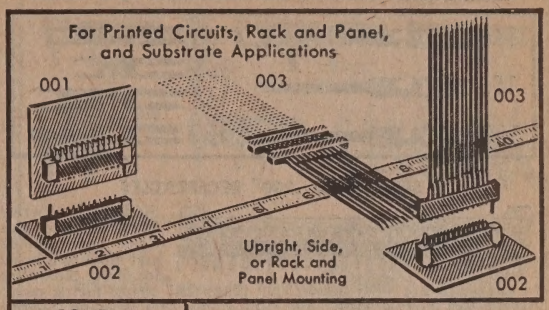
COVER ASSEMBLIES (**Cable Clamp Mounting)

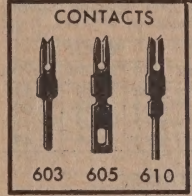
Stock No.	Mfr's Type	**	Size	EACH 1-9	10-49	50-99	100-Up
A0570	30-8016-9890	Side	20	1.98	1.87	1.71	1.38
A0487	30-8016-9811	Top	20	1.98	1.87	1.71	1.38
A0486	30-8016-9810	Side	38	1.97	1.79	1.44	1.30
A0497	30-8016-9820	Top	38	2.08	1.97	1.79	1.44
A0509	30-8016-9830	Side	56	2.18	2.06	1.88	1.52
A0519	30-8016-9840	Top	56	2.18	2.06	1.88	1.52
A0488	30-8016-9812	Side	90	2.38	2.24	2.05	1.65
A0489	30-8016-9813	Top	90	2.38	2.24	2.05	1.65
A0490	30-8016-9814	Side	120	2.77	2.62	2.39	1.93
A0491	30-8016-9815	Top	120	2.77	2.62	2.39	1.93

LARGE WIRE CLAMP COVERS

A0520	30-8016-9850	Side	38	2.08	1.97	1.79	1.44
A0539	30-8016-9860	Top	38	2.08	1.97	1.79	1.44
A0549	30-8016-9870	Side	56	2.18	2.06	1.88	1.52
A0559	30-8016-9880	Top	56	2.18	2.06	1.88	1.52

SERIES 8129 SUBMINIATURE VARICON CONNECTORS



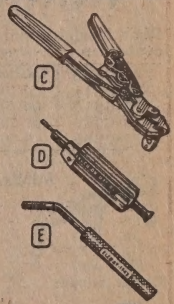


For printed circuit, flexible cable, rack and panel, substrate applications. One-piece diallyl phthalate insulator. Pin and socket arrangement for guidance and polarization. Single row of contacts on .100" spacing. 3 types (illus., left): Type 603 (upright mounting) and Type 610 (side mounting) have printed circuit termination for cards to 3/32"; Type 605 (rack and panel) has wire-wrap taper tab for .078" base tab. Tabs can be bent as installation requires. Wt., 2 oz.

Stock No.	Mfr's Type 00-8129-	Contact Type	Contacts	Brackets	EACH 1-99	100-249	150-Up
778-1304	006-610-001	610	6		1.16	.93	.82
778-1324	009-610-001	610	9	Side	1.31	1.02	.90
778-1345	012-610-001	610	12	Mount	1.34	1.10	.95
778-1364	015-610-001	610	15		1.42	1.13	1.00
778-1300	006-603-002	603	6		1.16	93	.82
778-1320	009-603-002	603	9	Up-	1.31	1.02	.90
778-1340	012-603-002	603	12	right	1.34	1.10	.95
778-1360	015-603-002	603	15		1.42	1.13	1.00
778-1302	006-603-003	603	6		.96	.76	.69
778-1322	009-603-003	603	9	None	1.09	.86	.76
778-1342	012-603-003	603	12		1.16	.93	.82
778-1362	015-603-003	603	15		1.23	.98	.86
778-1303	006-605-003	605	6		.96	.76	.69
778-1323	009-605-003	605	9	None	1.09	.96	.76
778-1344	012-605-003	605	12		1.16	.93	.82
778-1363	015-605-003	605	15		1.23	.98	.86

778-2066. Model 60-8129. 4311 Polarizing Pin. Takes up one contact position.....(Pkg. of 10) Each .20

VARILOK CRIMPING EQUIPMENT



C Type 06-7515-01 Hand Crimper. Designed for Varilok contact #60-8017-0313 in lab, model shop and prototype applications. **778-2505.** Shpg. wt., 3 lbs.....55.00

D Type 06-1877-04 Extraction Tool. Designed to extract Varilok contacts from their insulator quickly and easily without damage to either contacts or insulator. **778-2490.** Shpg. wt., 10 oz.....Each 9.00

E Type 06-1742-04 Insertion Tool. Provides positive method for inserting contacts into insulator by applying pressure on contacts directly at end of insulation crimp. **778-2450.** Shpg. wt., 10 oz.....Each 3.60

VARILOK CRIMPED-WIRING CONTACTS

Ingenious self-locking, crimp-type contacts. Make solderless connections between wire and contact by simply crimping wire directly to the contact. A portion of the crimped contact grips the wire insulation for strain relief. Designed to accommodate all sizes of wire from 18 gauge to 30 gauge. Can be crimped to the wire independently of other assembling procedures, then easily be inserted into any insulator hole location. When inserted, Varilok contacts lock into position using spring balance for permanence, and will not twist, turn, or bend out of alignment. Easily removed with extraction tool. 8.5 amp rating. Available loose in packages of 100 or on reels of 1800 contacts per reel.

778-2073. Type 60-8017-0313. Wt., 2 oz.....Per Pkg. 6.00
778-2074. Type 60-8017-0323. Wt., 4 lbs.....Per Reel 117.00

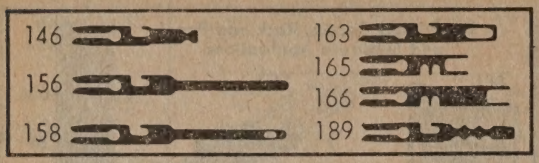
VARICON CONTACTS AND INSERTION TOOL

For Series 8016 and 8017 rack and panel connectors. Available in packages of 100. Av. shpg. wt. per package, 2 oz.

777A0586 A. Model 216. Has .078" taper tab term..Per Pkg. 4.50
777A0587 A. Model 217. Solder/.098" taper tab term Per Pkg. 4.50
777A0588 A. Model 218. Wire wrap termination....Per Pkg. 4.50
777A0482 A. Type 06-7638-01 Contact Insertion Tool.....Each 11.40

Elco Varicon® Receptacles and Plugs

VARICON CONTACT TYPES



SERIES 5007 .200″ RECEPTACLES

Similar to Series 5006, but end sections have guides and mounting holes for direct mounting to chassis. Mate with Series 5000 plugs and strips, facing page. Accept 1/16″ module card, have card guide. .200″ spacing. Specify Type Number of contact termination desired in place of ***. Wt., 2 oz.

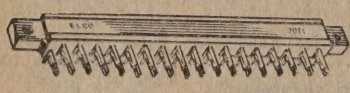
Stock No.	Mfr's Type	No. of Contacts	EACH 1-99	100-249	250-Up
777AC0040	00-5007-012-***-001	12	2.04	1.59	1.37
777AC0050	00-5007-019-***-001	19	3.02	2.34	2.00
777AC0060	00-5007-020-***-001	20	3.17	2.47	2.11
777AC0075	00-5007-024-***-001	24	3.72	2.89	2.49

SERIES 5009 .200″ RECEPTACLES

Single row of contacts on .200″ spacing. Two .128″ mounting holes. Polarize without loss of contacts. Mate with Series 5000 contact strips. Open-end card slot for any width 1/16″ module card, except 1 3/32″. Position with polarizing tabs below. Specify Type Number of contact termination desired in place of ***. Av. shpg. wt., 2 oz.

777AC0100	00-5009-012-***-001	12	2.08	1.62	1.39
777AC0110	00-5009-016-***-001	16	2.60	2.01	1.75
777AC0120	†00-5009-022-***-002	22	3.39	2.63	2.26
778-2070	60-5006. 3414 Pol. Tab for 1/16″ Card		Pkg. of 50 for 1.00		
778-2071	60-5006. 3424 Pol. Tab for 3/32″ Card		Pkg. of 10 for .20		

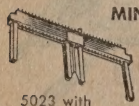
SERIES 7021 .100″ PLUGS



Double-tier plugs with .100″ spacing. For circuit boards 1/16″ thick. Mate with 7000 Series receptacles which do not have card guides. Rigid insulator maintains exact spacing between contacts, reduces card warp. Av. shpg. wt., 2 oz.

778-0508	00-7021-017-000-001	17	1.94	1.52	1.35
778-0511	00-7021-023-000-001	23	2.38	1.84	1.58
778-0515	00-7021-029-000-001	29	2.81	2.18	1.88
778-0523	00-7021-035-000-001	35	3.22	2.51	2.15
778-0531	00-7021-041-000-001	41	3.58	2.78	2.38

MINIATURE VARICON CONNECTORS



5023 with Center Guides

For 1/16″ module cards. Can be polarized without losing contact. Long molded card guides. Series 5023 shown with center guide (sold less guide). When guide is used, 2—14-contact receptacles are formed. *Less contacts, below. Mates with 5000 series strip, Page 295.

SERIES 5023 RECEPTACLES

One row of contacts on .200″ ctrs. Two .128″ mtg. holes. 4 oz.

Stock No.	Mfr's Type 00-5023-	Contact Type	No. of Contacts	EACH 1-99	100-Up
778-0350	014-217-001	Wire Hole	14	4.48	3.14
778-0353	033-217-001	Wire Hole	33	6.30	4.40
778-0349	014-000-001	Varilok*	14	2.06	1.45
778-0352	033-000-001	Varilok*	33	2.38	1.67

60-5023.3117 Center Guide. For 33-contact size only. Wt., 1 oz.
778-2086 ..... .28

TABS AND CONTACTS

Stock No.	Mfr's Type	Description	EACH
778-7020	60-5006.3414	Polarizing Tab (Pkg. of 50)	1.00
778-2073	60-8017.0313	Varilok Contact (Pkg. of 100)	6.00

Allied Electronics can furnish the entire Elco connector line and stocks items not listed on these pages. Because we stock connector components we are able to assemble many connectors otherwise unavailable. We can thereby provide faster, more comprehensive service

HOW TO ORDER RECEPTACLES. Specify Stock Number, then Ty Number. In place of ***, indicate Type Number of contact desir Example: 777AC0040 (Stk. No.)—00-5007-012-146-001 (Typ(N

SPECIFICATIONS. All Series. Diallyl phthalate insulation. Go flashed, nickel-plated phosphor-bronze contacts rated 10 am Maximum contact resistance, 0.006 milliohm.

SERIES 7001 .100″ RECEPTACLES

Double row of tacts on .200″ ing. .125″ bet rows. Mate Series 7022 or 7000 Series Co Strips (next p

For 1/16″ module card except †no card guide. Specify Type Numb contact termination desired in place of ***. Av. shpg. wt., 2 oz.

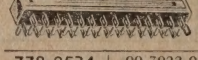
Stock No.	Mfr's Type	Contacts	EACH 1-99	100-249	25
777AC0135	00-7001-017-***-001	17	3.74	2.51	2
777AC0140	†00-7001-017-***-002	17	3.74	2.51	2
777AC0145	00-7001-023-***-001	23	4.32	2.88	2
777AC0150	†00-7001-023-***-002	23	4.32	2.88	2
777AC0155	00-7001-029-***-001	29	4.72	3.15	2
777AC0160	†00-7001-029-***-002	29	4.72	3.15	2
777AC0165	00-7001-035-***-001	35	5.35	3.57	2
777AC0175	00-7001-041-***-001	41	5.94	3.96	3
777AC0180	†00-7001-041-***-002	41	5.94	3.96	3
777AC0185	00-7001-047-***-001	47	6.61	4.46	3

SERIES 7008 .100″ RECEPTACLES

Double row contacts, .125″ tween rows, .200″ centers. F are offset .100″. Mate with S 7022 plugs or with Series Contact Strips (next page). 1/16″ PC cards except †no card guides. Specify Type No. of co termination desired in place of ***. Av. shpg. wt., 2 oz.

777AC0200	00-7008-017-***-001	17	3.74	2.51	2
777AC0205	†00-7008-017-***-002	17	3.74	2.51	2
777AC0210	00-7008-023-***-001	23	4.32	2.88	2
777AC0215	†00-7008-023-***-002	23	4.32	2.88	2
777AC0220	00-7008-029-***-001	29	4.72	3.15	2
777AC0225	†00-7008-029-***-002	29	4.72	3.15	2
777AC0230	00-7008 035-***-001	35	5.35	3.57	2
777AC0235	†00-7008-035-***-002	35	5.35	3.57	2
777AC0240	00-7008-041-***-001	41	5.94	3.96	3
777AC0245	†00-7008-041-***-002	41	5.94	3.96	3
778-2070	60-5006. 3414 Polarizing Tab		Each .02		

SERIES 7022 .100″ PLUGS



Double-tier miniature plugs. .100″ s ing. Fit boards 1/16″ thick. Mate with Receptacles above.

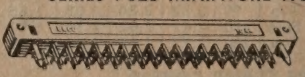
778-0534	00-7022-017-000-001	17	1.94	1.52	1
778-0538	00-7022-023-000-001	23	2.38	1.84	1
778-0542	00-7022-029-000-001	29	2.81	2.18	1
778-0546	00-7022-035-000-001	35	3.22	2.51	2
778-0550	00-7022-041-000-001	41	3.58	2.78	2
778-0554	00-7022-047-000-001	47	4.04	3.14	2

SERIES 7024 MINIATURE .100″ VARICON RECEPTACL

Double row. Mate with 7 Polarized at even posit Open ended 1/16″ card guide socket. Specify co for ***. Av. shpg. wt., 2

777AC0250	00-7024-017-***-001	17	3.55	2.49	2
777AC0255	00-7024-023-***-001	23	4.03	2.82	2
777AC0260	00-7024-029-***-001	29	4.54	3.17	2
777AC0265	00-7024-035-***-001	35	5.08	3.55	3
777AC0270	00-7024-041-***-001	41	5.60	3.93	3
778-2070	60-5006.3414 Polarizing Tab		Each .02		

SERIES 7023 MINIATURE .100″ VARICON PLUGS



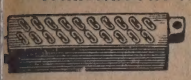
Mate with 7024 above. M flanges have .128″ diam holes. For 1/16″ PC c Guide pins. Av. wt., 2 o

778-0569	00-7023-023-000-001	23	2.85	2.21	1
778-0573	00-7023-029-000-001	29	3.28	2.55	2
778-0577	00-7023-035-000-001	35	3.69	2.87	2
778-0581	00-7023-041-000-001	41	4.12	3.21	2

Allied Electronics Offers Best Percentage of Order Handling in the Coun

Elco Varicon® Contact Strips, Pin Receptacles

VARITWIN-PIN .100″ TAPER-PIN RECEPTACLES



7014-Bottom

7009 & 7012 - Top

ese Elco receptacles (per MIL-C-21097B and MIL-E-19600) fea-re Varitwin-Pin bifurcated contact terminations and guides that integrally molded into the end sections. Mounting holes are 28″ diameter. Each receptacle consists of two rows of contacts, aced .200″ within each row. Rows are .125″ apart and offset .100″ m each other. Accept a 1/16″ printed circuit card. Can be polarized thout losing contact. Phosphor-bronze contacts are nickel-plated d gold-flashed for superior conductivity. Rated 10 amps. In-lation: Diallyl phthalate, glass-filled per MIL-M-14F Type SDGF ecifications. Accept type 53 taper-pin. Av. shpg. wt., 6 oz.

SERIES 7009

rmits mounting of adjacent receptacles on .600″ centers. *Sup-ed without board guides. †Polarizing tab. For 7022 plugs or 7000 ntact Strips.

Stock No.	Mfr's Type	No. of Contacts	EACH 1-99	100-249	250-Up
78-0274	00-7009-024-193-001	24	7.63	5.09	4.34
78-0278	00-7009-034-193-001	34	8.32	5.55	4.63
78-0279	00-7009-034-193-002*	34	8.32	5.55	4.63
78-0282	00-7009-040-193-001	40	9.15	6.11	5.09
78-0283	00-7009-040-193-002*	40	9.15	6.11	5.09
78-7020	†60-5006. 3414 Pol. Tab				Each .02

SERIES 7012 Supplied only with board guides.

78-0290	00-7012-023-193-001	23	7.35	5.14	4.41
78-0292	00-7012-035-193-001	35	8.40	5.88	5.04
78-0294	00-7012-047-193-001	47	9.50	6.65	5.70

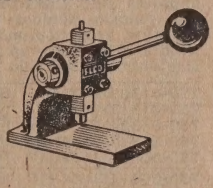
SERIES 7014

raight through, open-end card slot. Supplied without card guides.

Stock No.	Mfr's Type	No. of Contacts	EACH 1-99	100-249	250-Up
78-0298	00-7014-020-193-001	20	7.91	5.53	4.75

MODEL 06-1856-01 HAND STAKER

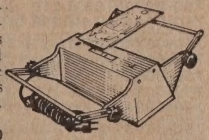
ecifically designed for proper staking Varicon contacts. Contact retention, lbs. after staking. For general laborato-y and experimental uses. Ram dimen-ns, 1/2x1/2x2 1/2″. Ram stroke, 13/16″. ight of opening, 1 1/8″. Throat depth m center of ram, 1″. Working surface, 2 7/8″. Rugged metal construction. Shpg. ., 3 lbs.



8-2487 ..... 50.00

MODEL 06-1751-02 HEATING PLATEN

ricon PC contacts are supplied on plas-strips to facilitate staking and solder-operations. Heating platen supplies per heat to melt plastic strips and ilitate removal after contacts have en staked and soldered to board, avoids ssibility of bending contacts. 10″ long. 0-120 V, AC or DC. Wt., 5 lbs.



8-2481 ..... 75.00

VARICON "MICROCON" CONTACTS

iniature "Varicon" contacts, see above right. r .100″ in line and .050″ offset contact spacing tterns. "Stand-off" types have a single stake ter-nation. 90° card edge mounted types have termi-tions for staking to printed circuit base or module rds. Type 60-8240.0312 has an extended tail. Type 8240.0313 same as 60-8240.0303 illustrated, ex-pt for 1/16″ PC. Contacts are phosphor bronze, kel-plated, gold-flashed. 100 per pkg. Wt., 1 1/2 oz.

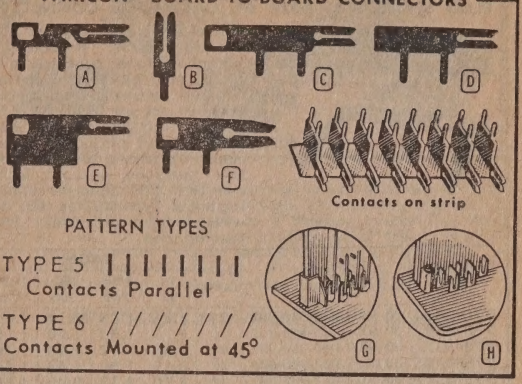
60-8240.0303

60-8240.0513

tock No.	Mfr's Type	For PC	Application	Per 100
78-2046	60-8240.0312	1/16″	"Stand-Off"	3.50
78-2045	60-8240.0303	1/32″	Card Edge	3.50
78-2047	60-8240.0313	1/16″	Card Edge	3.50
78-2048	60-8240.0513	1/16″	"Stand-Off"	3.50

Allied is a member of Elco's ADAP (Authorized Distributor Assembly Program), and can supply the complete Varicon series from stock, even in sizes not listed. Connectors for other board thicknesses may also be supplied. Contact the Allied Electronics facility nearest you for complete price and delivery information.

VARICON® BOARD-TO-BOARD CONNECTORS



PC module card is punched or drilled, and contacts are staked in and soldered to form male part of connector. Contact staking is accomplished by using contacts supplied in plastic strip for handling and support. Hole pattern on .200″ grid, .052″ hole dia.

Varicon Contact Strips. 30 contacts mounted on a plastic strip with .200″ spacing. Varicon fork-like contacts have four mating coined surfaces. Made of phosphor-bronze, contacts are nickel-plated and gold-flashed. Rated at 10 amps. *Pattern Type. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	*	Description	EACH
778-1850	02-030-111-5200	A	5	45° for 1/16″ Board	1.35
778-1856	02-030-113-6200	B	6	Stand-off for 1/16″	1.35
778-1864	02-030-114-6200	B	6	Stand-off for 3/32″	1.35
778-1872	02-030-115-6200	B	6	Stand-off for 1/8″	1.35
778-1879	02-030-135-5200	C	5	Lower Board 1/16″	1.35
778-1890	02-030-147-5200	D	5	Lower Board less wire hole	1.35
778-1884	02-030-137-5200	E	5	Upper Board 1/16″	1.50
778-1842	02-030-013-5200	F	5	Plug—Ser. 5000 1/16″	1.35

Guide Pins and Brackets. Series 5101 brackets are mounted either to the mother or module board with furnished eyelets. Series 5201 brackets are for mounting to mother board. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Description	For PC Board	EACH
778-2058	62-5101.4012	G	Guide Bracket	1/16″	.07
778-2059	62-5201.4012	G	Rt. Guide Bracket	1/16″	.05
778-2060	62-5201.4022	G	Left Guide Bracket	1/16″	.05
778-2061	62-5301.4012	H	Female Guide Pin	1/16″	.05
778-2062	62-5301.4112	H	Male Guide Pin	1/16″	.05

F PLUGS FOR ALL SERIES 5000 RECEPTACLES

For 5006, 5007, 5009 Series receptacles on facing page. Phosphor bronze, nickel-plated gold-flashed contacts rated 10 amps. For 1/16″ cards. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	No. of Contacts	EACH
778-1646	02-012-013-5200	12	.54
778-1673	02-014-013-5200	14	.63
778-1685	02-015-013-5200	15	.68
778-1693	02-016-013-5200	16	.72
778-1805	02-019-013-5200	19	.86
778-1812	02-020-013-5200	20	.90
778-1819	02-022-013-5200	22	.99
778-1826	02-023-013-5200	23	1.04
778-1834	02-024-013-5200	24	1.08
778-1842	02-030-013-5200	30	1.35

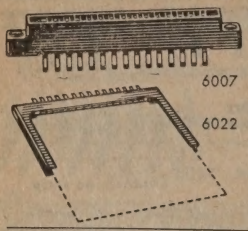
PLUGS FOR ALL SERIES 7000 RECEPTACLES

Hole pattern on .100″ grid. .052″ hole diameter. Require two contact strips, one for lower tier and one for upper tier. 2 oz.

Stock No.	Contacts	Fig.	Mfr's Type	Tier	EACH
778-1652	24	C	02-012-135-5200	Lower	.54
778-1653		E	02-012-137-5200	Upper	.60
778-1687	29	C	02-015-135-5200	Lower	.68
778-1675		E	02-014-137-5200	Upper	.70
778-1696	34	C	02-017-135-5200	Lower	.77
778-1697		E	02-017-137-5200	Upper	.85
778-1699	35	C	02-018-135-5200	Lower	.81
778-1697		E	02-017-137-5200	Upper	.85
778-1814	40	C	02-020-135-5200	Lower	.90
778-1815		E	02-020-137-5200	Upper	1.00
778-1836	47	C	02-024-135-5200	Lower	1.08
778-1828		E	02-023-137-5200	Upper	1.15
778-1840	51	C	02-026-135-5200	Lower	1.17
778-1839		E	02-025-137-5200	Upper	1.25

Cinch-Jones and Elco Connectors

ELCO SERIES 6007-6022 PC CARD-EDGE CONNECTOR

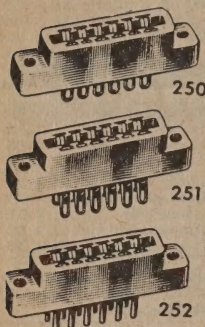


One-piece connectors for 1/16" module boards. Ribbon-type, phosphor bronze contacts, gold-plated over nickel-base plating. 7.5-amp rating. Dual-contact terminations are .046" by .125" straight tab wire hole. Glass-filled, diallyl phthalate insulation. Polarization: between contact positions, without losing contacts. .128" diameter mounting holes. Type 6022 as 6007 but with extended card guides. .156" spacing. 3 oz.

Stock No.	Mfr's Type	Contacts	EACH 1-99	100-249	250-999	1000-Up
778-0364	00-6007-022-940-002	22	1.86	1.33	1.14	1.03
778-0368	00-6007-036-980-002	36	2.10	1.50	1.28	1.16
778-0372	00-6007-044-980-002	44	2.35	1.68	1.44	1.30
778-0385	00-6022-022-940-002	22	2.15	1.86	1.63	1.34
778-0387	00-6022-044-980-001	44	2.70	2.35	2.06	1.68

778-2072. 60-6002. 3124 Polarizing Tab. Type B ..... Ea. .04

CINCH BIFURCATED-CONTACT EDGE CONNECTORS



Connectors are designed for minimum PC card wear, low insertion force and positive contact with PC board. For 1/16" PC boards with .156" contact spacing.

Glass-filled diallyl phthaiate insulation, SDGF per MIL-M-14F. Phosphor-bronze contacts with .00003" minimum Sel-Rex gold plate. Two flexing surfaces instead of one for positive contact—offset irregularities in PC boards. Unassembled plastic polarizing key included except with MIL types. 830 VAC (rms) rating. Current, 5 amps.

Series 250 and 253 have wiring tails. Series 252 have contact tails for dip soldering to fit .051" diameter holes. "M" in type number indicates beryllium copper contacts with 50 micro-inches of gold finish per MIL-C-2109 A. Series 253 have wire wrap posts. Av. shpg. wt. 2 oz.

250 SERIES SINGLE-READOUT

Stock No.	Mfr's Type 50-	Contact Pos.	No. of Cont.	EACH 1-24	25-49	50-99	100-249	250-Up
750-1100	6A-20	6	6	1.25	1.00	.84	.67	.63
750-1101	6A-20M	6	6	1.61	1.29	1.07	.86	.82
750-1105	10A-20	10	10	1.68	1.35	1.12	.90	.86
750-1106	10A-20M	10	10	2.25	1.80	1.50	1.20	1.14
750-1110	12A-20	12	12	1.90	1.52	1.26	1.01	.96
750-1119	15A-20	15	15	2.22	1.77	1.48	1.18	1.12
750-1120	15A-20M	15	15	3.05	2.44	2.04	1.63	1.55
750-1124	18A-20	18	18	2.54	2.03	1.69	1.36	1.29
750-1125	18A-20M	18	18	3.54	2.83	2.36	1.89	1.80
750-1137	22A-20	22	22	2.97	2.38	1.98	1.58	1.50
750-1138	22A-20M	22	22	4.18	3.35	2.78	2.22	2.12
750-1155	25A-20	25	25	3.54	2.83	2.36	1.89	1.80

251 SERIES DOUBLE-READOUT

750-1111	12A-30	6	12	1.25	1.00	.84	.67	.63
750-1129	20A-30	10	20	1.68	1.35	1.12	.90	.86
750-1130	20A-30M	10	20	2.25	1.80	1.50	1.20	1.14
750-1150	24A-30	12	24	1.90	1.52	1.26	1.01	.96
750-1157	30A-30	15	30	2.22	1.77	1.48	1.18	1.12
750-1158	30A-30M	15	30	3.05	2.44	2.04	1.63	1.55
750-1166	36A-30M	18	36	3.54	2.83	2.36	1.89	1.80
750-1173	44A-30	22	44	2.97	2.38	1.98	1.58	1.50
750-1174	44A-30M	22	44	4.18	3.35	2.78	2.22	2.12
750-1185	50A-30	25	50	3.54	2.83	2.36	1.89	1.80

252 SERIES DOUBLE-READOUT

750-1116	12B-10	6	12	1.25	1.00	.84	.67	.63
750-1134	20B-10	10	20	1.68	1.35	1.12	.90	.86
750-1151	24B-10	12	24	1.90	1.52	1.26	1.01	.96
750-1162	30B-10	15	30	2.22	1.77	1.48	1.18	1.12
750-1169	36B-10	18	36	2.54	2.03	1.69	1.36	1.29
750-1177	44B-10	22	44	2.97	2.38	1.98	1.58	1.50

253 SERIES DOUBLE-READOUT

750-1118	12B-20	6	12	3.05	2.45	2.04	2.04	2.04
750-1136	20B-20	10	20	3.83	3.06	2.55	2.55	2.55
750-1152	24B-20	12	24	4.21	3.37	2.81	2.81	2.81
750-1164	30B-20	15	30	4.78	3.83	3.19	3.19	3.19
750-1171	36B-20	18	36	5.36	4.28	3.57	3.57	3.57
750-1179	44B-20	22	44	6.12	4.90	4.08	4.08	4.08

CINCH-JONES "D" SUBMINIATURE CONNECTORS

Have pin and socket insert, gold-plated per alloy contacts, cadmium-plated steel s Mark I Golden "D": monoblock with d phthalate glass fiber insulation. Meets M-14F Type SDG. Insul. res., over 5000 ohms, per MIL-STD-202A, method 302. "Ori D" connectors have 2-piece nylon in

*Digits indicate number of contacts. "F" in Mfr's Type No., cates floating mtg. Suffix "P," male connector; "S," fe Shpg. wt., 2 oz.

ORIGINAL "D"

Stock No.	*Mfr's Type	Flange Size	EACH 1-9	10-49	50-99	100-249	25
750-0120	DE-9P	1 13/64 x 31/64"	1.18	1.07	.90	.71	
750-0121	DE-9S	1 13/64 x 31/64"	1.70	1.52	1.28	1.02	
750-0020	DA-15P	1 17/32 x 31/64"	1.68	1.50	1.27	1.01	
750-0021	DA-15S	1 17/32 x 31/64"	2.48	2.24	1.86	1.48	
750-0024	DAF-15P	1 17/32 x 31/64"	2.38	2.14	1.78	1.42	
750-0025	DAF-15S	1 17/32 x 31/64"	3.18	2.86	2.39	1.92	
750-0050	DB-25P	2 5/64 x 31/64"	2.43	2.18	1.82	1.45	
750-0051	DB-25S	2 5/64 x 31/64"	3.80	3.42	2.85	2.29	2
750-0054	DBF-25P	2 5/64 x 31/64"	3.20	2.88	2.41	1.93	
750-0055	DBF-25S	2 5/64 x 31/64"	4.57	4.12	3.43	2.75	2
750-0082	DC-37P	2 23/32 x 31/64"	3.30	2.97	2.47	1.99	
750-0083	DC-37S	2 23/32 x 31/64"	5.39	4.85	4.04	3.23	2
750-0100	DD-50P	2 5/8 x 39/64"	4.30	3.87	3.22	2.59	2
750-0101	DD-50S	2 5/8 x 2 9/64"	7.10	6.39	5.33	4.25	3

MARK I GOLDEN "D"

750-0126	DEM-9P	1 13/64 x 31/64"	2.35	2.11	1.76	1.41	
750-0127	DEM-9S	1 13/64 x 31/64"	3.24	2.91	2.44	1.96	
750-0033	DAM-15P	1 17/32 x 31/64"	3.39	3.05	2.53	2.03	
750-0034	DAM-15S	1 17/32 x 31/64"	4.81	4.33	3.61	2.88	2
750-0068	DBM-25P	2 5/64 x 31/64"	4.99	4.49	3.75	3.00	2
750-0069	DBM-25S	2 5/64 x 31/64"	7.41	6.66	5.56	4.44	4
750-0088	DCM-37P	2 23/32 x 31/64"	6.97	6.27	5.23	4.18	3
750-0089	DCM-37S	2 23/64 x 31/64"	10.55	9.50	7.91	6.32	5
750-0106	DDM-50P	2 5/8 x 39/64"	9.03	8.13	6.77	5.43	4
750-0107	DDM-50S	2 5/8 x 39/64"	13.84	12.46	10.38	8.30	7

MARK II GOLDEN "D"

Plugs have snap-in crimp type contacts in monoblock insulat improves temp. characteristics, moisture resistance. Snap-in c type contacts eliminate soldering and cut assembly time. Sh vibration, insulation, moisture and corrosion resistance stds. MIL-STD-202A. Takes up to #20 AWG stranded wire. 5 amp ra Has stainless steel float mtg. rivets and washers. Shpg. wt.,

750-0130	DESM-9P	1 7/32 x 31/64"	3.33	3.13	2.78	2.49	2
750-0131	DESM-9S	1 7/32 x 31/64"	3.93	3.61	3.29	2.96	2
750-0132	DESMF-9P	1 7/32 x 31/64"	4.01	3.75	3.30	2.90	2
750-0133	DESMF-9S	1 7/32 x 31/64"	4.61	4.22	3.79	3.37	3
750-0040	DASM-15P	1 35/64 x 31/64"	5.08	4.65	4.23	3.81	3
750-0041	DASM-15S	1 35/64 x 31/64"	6.16	5.65	5.14	4.62	4
750-0042	DASMF-15P	1 35/64 x 31/64"	5.76	5.26	4.75	4.22	3
750-0043	DASMF-15S	1 35/64 x 31/64"	6.84	6.27	5.65	5.04	4
750-0072	DBSM-25P	2 3/32 x 31/64"	7.71	6.73	6.13	5.19	4
750-0069	DBSM-25S	2 3/32 x 31/64"	9.30	8.52	7.76	6.31	5
750-0074	DBSMF-25P	2 3/32 x 31/64"	8.39	7.34	6.64	5.60	5
750-0075	DBSMF-25S	2 3/32 x 31/64"	9.98	9.14	8.27	6.73	5
750-0092	DCSM-37P	2 47/64 x 31/64"	8.96	8.21	7.50	6.73	5
750-0093	DCSM-37S	2 47/64 x 31/64"	12.79	11.73	10.66	9.13	8
750-0094	DCSMF-37P	2 47/64 x 31/64"	9.64	8.83	8.01	7.14	6
750-0095	DCSMF-37S	2 47/64 x 31/64"	13.47	12.35	11.18	9.54	8
750-0110	DDSM-50P	2 41/64 x 39/64"	13.86	12.68	11.36	8.92	8
750-0111	DDSM-50S	2 41/64 x 39/64"	17.25	15.81	14.38	11.90	10
750-0112	DDSMF-50S	2 41/64 x 39/64"	17.93	16.43	14.89	12.31	11

JUNCTION SHELLS

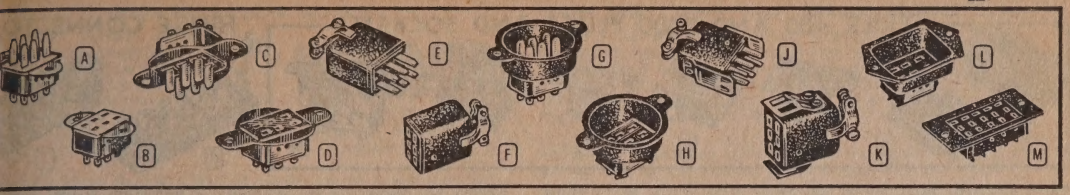
Low-carbon steel clamp with weather resis cadmium plating. Exceeds 50-hour salt s test; meet MIL-STD-202A. Av. shpg. wt., 3

Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-249	250
750-0046	DA-19678-1	1.04	.94	.78	.63	
750-0078	DB-19678-2	1.23	1.10	.93	.74	
750-0098	DC-19678-3	1.46	1.32	1.10	.88	
750-0114	DD-19678-4	1.61	1.44	1.19	.96	

SCREW LOCK ASSEMBLIES. For junction shells above. Same corro resistant construction. *Female; †male. Shpg. wt., 1 oz.

Stock No.	Type D20-	For Shell Size	EACH 1-9	10-49	50-99	100-249	250
750-0015	*418-2	DA, DB, DC, DD, DE	.40	.36	.31	.25	
750-0016	†419	DA, DB, DC, DE	.25	.23	.19	.15	
750-0017	†420	DD	.37	.34	.28	.23	

Cinch-Jones Series 300 Plugs and Sockets



pact multi-circuit connectors. Phosphor-bronze "knife-switch" socket contacts engage both sides of flat plug contacts. All s and sockets are polarized to eliminate possibility of incorrect tion. Plugs having from 24 to 33 contacts have special long izing pin in approximate center position to assure correct in- on and removal. Heavy-duty plug and socket contacts are nium-plated. Plug contacts are 5/32" wide by 3/64" thick. Black bakelite body is encased in black, crystal-finish metal cap. All caps have fiber insulators. DB Type sockets have a deep bracket for recessed mountings. SB Types have shallow bracket for flush mounting. Built to eliminate internal moisture traps. Snap-in socket contacts permit external prewiring and are "locked-in" to withstand wiring stress. Rated at 730 volts rms at 10 amps. *2-contact units have round shells; others are rectangular. 7 oz.

A AB PLUGS FOR CHASSIS MOUNTING

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
750-0404	P-302-AB	.31	.25	.22	.18	.17
750-0410	P-303-AB	.35	.28	.24	.20	.19
750-0416	P-304-AB	.39	.31	.27	.22	.21
750-0422	P-306-AB	.48	.39	.33	.26	.25
750-0429	P-308-AB	.56	.44	.37	.30	.29
750-0436	P-310-AB	.63	.49	.42	.34	.32
750-0442	P-312-AB	.70	.57	.46	.37	.35
750-0449	P-315-AB	.95	.75	.63	.49	.47
750-0456	P-318-AB	1.13	.91	.75	.61	.58
750-0463	P-321-AB	1.42	1.13	.95	.75	.72
750-0470	P-324-AB	1.72	1.38	1.14	.92	.88
750-0491	P-333-AB	2.60	2.08	1.73	1.38	1.32

B AB SOCKETS FOR CHASSIS MOUNTING

750-0609	S-302-AB	.33	.27	.23	.19	.18
750-0618	S-303-AB	.37	.30	.25	.21	.20
750-0624	S-304-AB	.41	.33	.28	.23	.22
750-0630	S-306-AB	.53	.41	.35	.28	.27
750-0637	S-308-AB	.63	.49	.42	.34	.32
750-0644	S-310-AB	.73	.59	.49	.39	.36
750-0650	S-312-AB	.88	.69	.59	.46	.43
750-0657	S-315-AB	1.10	.89	.73	.59	.56
750-0664	S-318-AB	1.27	1.01	.84	.68	.64
750-0671	S-321-AB	1.56	1.26	1.04	.82	.79
750-0678	S-324-AB	1.85	1.48	1.25	.99	.95
750-0685	S-327-AB	2.15	1.72	1.43	1.14	1.09
750-0692	S-330-AB	2.47	1.98	1.65	1.32	1.26
750-0699	S-333-AB	2.76	2.20	1.83	1.46	1.40

C FP PLUGS WITH FLUSH PLATE

750-0427	P-306-FP	.69	.56	.45	.36	.35
750-0434	P-308-FP	.75	.61	.50	.40	.38
750-0447	P-312-FP	.91	.72	.61	.47	.45

D FP SOCKETS WITH FLUSH PLATE

750-0613	S-302-FP	.55	.43	.36	.29	.27
750-0622	S-303-FP	.57	.45	.38	.30	.29
750-0628	S-304-FP	.62	.48	.41	.33	.31
750-0635	S-306-FP	.72	.58	.47	.38	.36
750-0642	S-308-FP	.82	.66	.56	.44	.42
750-0648	S-310-FP	.94	.74	.63	.49	.47
750-0655	S-312-FP	1.06	.84	.71	.58	.55

E CCT PLUGS WITH CABLE CLAMPS

750-0405	P-302-CCT	.64	.50	.42	.34	.32
750-0411	P-303-CCT	.70	.57	.46	.37	.35
750-0417	P-304-CCT	.74	.60	.49	.39	.37
750-0424	P-306-CCT	.84	.68	.57	.44	.42
750-0431	P-308-CCT	.92	.73	.62	.48	.46
750-0438	P-310-CCT	1.01	.80	.68	.55	.50
750-0444	P-312-CCT	1.09	.88	.73	.59	.56
750-0451	P-315-CCT	1.45	1.16	.98	.77	.74
750-0458	P-318-CCT	1.70	1.36	1.13	.91	.85
750-0465	P-321-CCT	2.03	1.63	1.36	1.08	1.03
750-0472	P-324-CCT	2.38	1.90	1.60	1.28	1.21
750-0479	P-327-CCT	2.73	2.17	1.81	1.45	1.38
750-0486	P-330-CCT	3.07	2.45	2.05	1.64	1.55
750-0493	P-333-CCT	3.40	2.72	2.27	1.81	1.72

F CCT SOCKETS WITH CABLE CLAMPS

750-0610	S-302-CCT	.66	.54	.44	.35	.34
750-0619	S-303-CCT	.72	.58	.47	.38	.36
750-0625	S-304-CCT	.76	.62	.50	.40	.39
750-0632	S-306-CCT	.89	.70	.59	.46	.44

F CCT SOCKETS WITH CABLE CLAMPS (Cont'd)

Contacts	Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
8	750-0639	S-308-CCT	.99	.78	.66	.54	.49
10	750-0646	S-310-CCT	1.11	.90	.74	.60	.57
12	750-0652	S-312-CCT	1.27	1.01	.83	.67	.64
15	750-0659	S-315-CCT	1.62	1.30	1.08	.85	.81
18	750-0666	S-318-CCT	1.83	1.46	1.23	.98	.93
21	750-0673	S-321-CCT	2.17	1.74	1.45	1.15	1.10
24	750-0680	S-324-CCT	2.51	2.02	1.68	1.34	1.28
27	750-0687	S-327-CCT	2.85	2.29	1.91	1.52	1.44
30	750-0694	S-330-CCT	3.22	2.58	2.15	1.72	1.64
33	750-0701	S-333-CCT	3.55	2.84	2.38	1.90	1.80

G RP PLUGS WITH RECESSED PLATES

2*	750-0409	P-302-RP	.60	.47	.40	.32	.31
4	750-0415	P-304-RP	.67	.54	.44	.36	.34
6	750-0428	P-306-RP	.77	.62	.48	.40	.39
8	750-0435	P-308-RP	.89	.70	.59	.46	.44

H RP SOCKETS WITH RECESSED PLATES

2*	750-0614	S-302-RP	.63	.49	.41	.33	.32
4	750-0629	S-304-RP	.69	.56	.46	.37	.35
6	750-0636	S-306-RP	.79	.64	.54	.42	.40
8	750-0643	S-308-RP	.95	.75	.64	.50	.47

J CCT-L PLUGS WITH CABLE CLAMPS AND LATCHES

2*	750-0406	P-302-CCT-L	.79	.64	.54	.42	.40
3	750-0412	P-303-CCT-L	.85	.69	.58	.45	.43
4	750-0418	P-304-CCT-L	.91	.72	.61	.47	.45
6	750-0425	P-306-CCT-L	1.01	.80	.67	.54	.50
8	750-0432	P-308-CCT-L	1.07	.85	.72	.58	.55
10	750-0439	P-310-CCT-L	1.16	.94	.78	.63	.60
12	750-0445	P-312-CCT-L	1.26	1.00	.83	.67	.64
15	750-0452	P-315-CCT-L	1.62	1.30	1.08	.85	.81
21	750-0466	P-321-CCT-L	2.18	1.75	1.46	1.16	1.11

K CCT-K SOCKETS WITH KEEPERS

2*	750-0611	S-302-CCT-K	.81	.66	.56	.43	.41
3	750-0620	S-303-CCT-K	.89	.70	.59	.46	.44
4	750-0626	S-304-CCT-K	.93	.74	.62	.48	.46
6	750-0633	S-306-CCT-K	1.04	.82	.69	.56	.53
8	750-0640	S-308-CCT-K	1.14	.92	.76	.62	.59
10	750-0647	S-310-CCT-K	1.28	1.02	.84	.68	.65
12	750-0653	S-312-CCT-K	1.42	1.13	.95	.75	.72

L DB RECESSED SOCKETS FOR CHASSIS MOUNTING

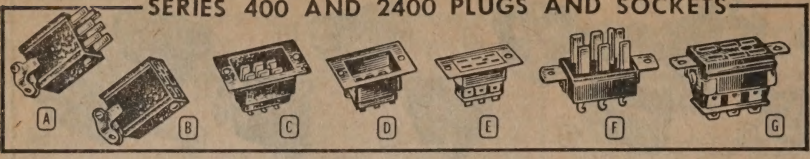
4	750-0627	S-304-DB	.83	.67	.57	.44	.42
6	750-0634	S-306-DB	.95	.75	.63	.49	.47
8	750-0641	S-308-DB	1.05	.83	.70	.57	.53
12	750-0654	S-312-DB	1.30	1.03	.88	.69	.66
15	750-0661	S-315-DB	1.53	1.24	1.03	.81	.77
18	750-0668	S-318-DB	1.78	1.42	1.18	.96	.91
21	750-0675	S-321-DB	2.12	1.70	1.41	1.12	1.07
30	750-0696	S-330-DB	3.14	2.51	2.10	1.68	1.60

M SB FLUSH SOCKETS FOR CHASSIS MOUNTING

15	750-0663	S-315-SB	1.53	1.24	1.03	.81	.77
18	750-0670	S-318-SB	1.78	1.42	1.18	.96	.91
21	750-0677	S-321-SB	2.12	1.70	1.41	1.12	1.07
24	750-0684	S-324-SB	2.46	1.97	1.65	1.32	1.25
27	750-0293	S-327-SB	2.79	2.22	1.85	1.48	1.41
30	750-0698	S-330-SB	3.14	2.51	2.10	1.68	1.60
33	750-0705	S-333-SB	3.47	2.78	2.32	1.84	1.76

Cinch Plugs, Sockets, Jacks and Connectors

SERIES 400 AND 2400 PLUGS AND SOCKETS



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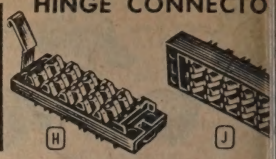


SERIES 400 AND 2400. Series 400 rated 1100 V rms @ 15 amps. Series 2400 rated 1700 V rms @ 15 amps. Polarizing pins. Prongs ¼" wide, 1/16" thick. Bakelite. Phosphor bronze contacts. Series 2400 mates with Series 400—interchangeable mechanically. Wt., 7 oz.

A CCT PLUGS WITH CABLE CLAMPS

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0506	P-404-CCT	4	1.46	1.17	.98	.78	.74
750-0512	P-406-CCT	6	1.68	1.34	1.12	.90	.85
750-0518	P-408-CCT	8	1.86	1.48	1.24	1.00	.95
750-0524	P-410-CCT	10	2.14	1.71	1.43	1.14	1.08
750-0530	P-412-CCT	12	2.34	1.87	1.55	1.25	1.18
750-0553	P-2402-CCT	2	1.35	1.08	.90	.71	.68
750-0558	P-2404-CCT	4	1.53	1.22	1.03	.82	.78
750-0563	P-2406-CCT	6	1.72	1.38	1.14	.92	.87
750-0568	P-2408-CCT	8	1.90	1.52	1.28	1.02	.97
750-0573	P-2410-CCT	10	2.10	1.68	1.40	1.11	1.06
750-0578	P-2412-CCT	12	2.19	1.76	1.47	1.17	1.11

B CCT SOCKETS WITH CABLE CLAMPS

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0708	S-402-CCT	2	1.45	1.16	.97	.77	.74
750-0714	S-404-CCT	4	1.73	1.39	1.16	.92	.87
750-0720	S-406-CCT	6	2.02	1.62	1.34	1.07	1.02
750-0726	S-408-CCT	8	2.29	1.84	1.53	1.22	1.17
750-0732	S-410-CCT	10	2.58	2.07	1.73	1.41	1.31
750-0738	S-412-CCT	12	2.88	2.29	1.91	1.53	1.46
750-0771	S-2406-CCT	6	1.82	1.45	1.21	.98	.92
750-0776	S-2408-CCT	8	2.02	1.62	1.34	1.07	1.02
750-0781	S-2410-CCT	10	2.21	1.76	1.47	1.18	1.11
750-0786	S-2412-CCT	12	2.40	1.92	1.60	1.28	1.22

C DB RECESSED PLUGS FOR CHASSIS MOUNTING

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0501	P-402-DB	2	1.03	.82	.68	.55	.51
750-0507	P-404-DB	4	1.25	1.00	.83	.66	.63
750-0511	P-406-DB	6	1.46	1.17	.98	.78	.74
750-0519	P-408-DB	8	1.68	1.34	1.12	.90	.85
750-0525	P-410-DB	10	1.90	1.51	1.27	1.02	.97
750-0531	P-412-DB	12	2.12	1.70	1.42	1.12	1.07

D DB RECESSED SOCKETS FOR CHASSIS MOUNTING

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0767	S-2404-DB	4	1.32	1.06	.89	.70	.67
750-0772	S-2406-DB	6	1.51	1.21	1.01	.80	.77
750-0777	S-2408-DB	8	1.70	1.35	1.13	.91	.85
750-0782	S-2410-DB	10	1.88	1.50	1.25	1.01	.96
750-0787	S-2412-DB	12	2.07	1.66	1.39	1.10	1.05

E SB FLUSH SOCKETS FOR CHASSIS MOUNTING

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0711	S-402-SB	2	1.11	.89	.75	.60	.57
750-0717	S-404-SB	4	1.42	1.13	.96	.76	.72
750-0723	S-406-SB	6	1.73	1.39	1.16	.92	.87
750-0729	S-408-SB	8	2.04	1.64	1.37	1.08	1.03
750-0798	S-410-SB	10	2.35	1.87	1.56	1.26	1.19
750-0741	S-412-SB	12	2.65	2.12	1.77	1.42	1.34
750-0774	S-2406-SB	6	1.43	1.14	.96	.76	.72
750-0779	S-2408-SB	8	1.62	1.29	1.08	.86	.82
750-0789	S-2412-SB	12	2.00	1.59	1.33	1.06	1.01

F AB PLUGS WITH ANGLE BRACKETS

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0504	P-404-AB	4	.95	.76	.63	.49	.47
750-0510	P-406-AB	6	1.11	.89	.75	.60	.57
750-0516	P-408-AB	8	1.29	1.03	.85	.68	.65
750-0522	P-410-AB	10	1.45	1.16	.98	.78	.74
750-0528	P-412-AB	12	1.63	1.30	1.08	.86	.82

G AB SOCKETS WITH ANGLE BRACKETS

750-0712	S-404-AB	4	1.16	.92	.77	.62	.59
750-0718	S-406-AB	6	1.42	1.13	.96	.76	.72
750-0724	S-408-AB	8	1.68	1.34	1.11	.89	.84
750-0736	S-412-AB	12	2.19	1.75	1.46	1.17	1.11

SERIES 37. Maximum no. contacts in minimum space. Desi for easy engagement and disengagement to eliminate contact d age. Castings of black bakelite. Heavy duty phosphor-bronze, mium-plated contacts, rated at 4.5 amperes. Wt., 9 oz.

H SOCKET WITHOUT LOCK

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250
750-1063	37F20	20	2.73	2.18	1.82	1.45	1.
750-1065	37F30	30	3.27	2.62	2.18	1.74	1.
750-1067	37F40	40	3.82	3.05	2.54	2.04	1.
750-1069	37F50	50	4.36	3.49	2.90	2.32	2.
750-1071	37F60	60	4.91	3.92	3.27	2.62	2.
750-1079	37F100	100	7.08	5.67	4.72	3.77	3.

J MATING PLUG WITH LOCK

Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250
750-1082	37M20L	20	3.04	2.42	2.02	1.62	1.
750-1084	37M30L	30	3.59	2.86	2.39	1.91	1.
750-1086	37M40L	40	4.13	3.29	2.75	2.20	2.
750-1088	37M50L	50	4.68	3.73	3.11	2.50	2.
750-1090	37M60L	60	5.21	4.16	3.48	2.78	2.
750-1092	37M70L	70	5.76	4.60	3.84	3.07	2.
750-1098	37M100L	100	7.39	5.91	4.93	3.95	3.

CONNECTORS CAPS FOR SERIES 37

Black wrinkle finish. Formed fiber liners. Cable hole 20-contact units, ¾"; 30, 40, 50-contact units, 1 3/16x1" and 100-contact units, 1 3/16x1½". Wt., 3 oz.

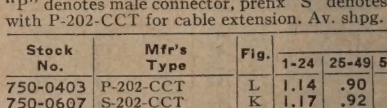
Stock No.	Mfr's Type	Contacts	EACH 1-24	25-49	50-99	100-249	250-
750-1054	37C20	20	4.22	3.38	2.82	2.26	2.
750-1055	37C30	30	4.27	3.41	2.85	2.28	2.
750-1056	37C40	40	4.31	3.45	2.88	2.30	2.
750-1057	37C50	50	4.36	3.49	2.90	2.32	2.
750-1058	37C60	60	4.40	3.52	2.94	2.34	2.
750-1062	37C100	100	4.59	3.66	3.06	2.44	2.

202 CONNECTORS

Dependable, two-contact po ized connectors with ¾" threaded fittings. P-202-B S-202-B have 1" mounting ters. In Mfr's Type No. pr "P" denotes male connector, prefix "S" denotes female. Use S-2 with P-202-CCT for cable extension. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fig.	EACH 1-24	25-49	50-99	100-249	250-
750-0403	P-202-CCT	L	1.14	.90	.77	.61	.5
750-0607	S-202-CCT	K	1.17	.92	.78	.62	.5
750-0402	P-202-B	M	1.46	1.20	1.01	.80	.7
750-0606	S-202-B	M	1.39	1.11	.92	.74	.7
750-0608	S-202-CCT-THR	K	1.53	1.24	1.03	.81	.7

PLUGS AND JACKS



Top-quality p and jacks for with hi-fi syste auto radios, sets, transceiv Type 13A ph pin plug fits jack. 81A on 1/16" bakelite mounting disc. Mounting centers: 8 1 1/16"; 81F, 1 5/16"; 2RP1, 1¼". Plug Type 2RP and 2RP1 are panel-mounting plugs. Each is 1 5/8x5/8x5/16". Type 2RP1 has piece contact. 81F is used extensively on auto radios. 13A fits m audio and radio applications. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-24	25-49	50-99
750-1035	13A	N	Phono Pin Plug	.10	.09	.08
750-1230	81A	P	Single Phono Pin Jack	.14	.11	.10
750-1233	81F	R	Ant. Conn. (Flange)	.24	.19	.17
750-0830	2RP	S	Recessed Plug	.19	.15	.13
750-0831	2RP1	....	Recessed Plug	.14	.11	.10

Allied Electronics Offers Best Percentage of Order-Filling in the Coun

Cinch-Jones Barrier Blocks and Strips

SERIES 500 BARRIER BLOCKS

h, wide barriers permit high-age ratings. Material between the inals at the base strengthens the re strip and maintains same con--to-contact and contact-to-ground page distance. Minimum warpage and shrinkage. Designations be printed on base. Closed bottoms require no insulation. ckouts in base can be removed for "Y" terminals.

es 540. Have double 5-40x3/16" binder, head screw terminals. page distance is 1/2". 1 1/8" wide by 39/64" high. Terminals are 3/8" er to center with .160" diameter holes. Av. wt., 14 oz.

Stock No.	Mfr's Type	Term-inals	EACH 1-24	25-49	50-99	100-249	250-Up
0-1356	2-540	2	.54	.42	.36	.29	.28
0-1405	3-540	3	.73	.59	.48	.39	.37
0-1450	4-540	4	.90	.71	.60	.47	.45
0-1495	5-540	5	.94	.74	.63	.49	.47
0-1540	6-540	6	1.06	.84	.71	.57	.55
0-1584	7-540	7	1.16	.96	.79	.64	.61
0-1629	8-540	8	1.33	1.06	.90	.71	.68
0-1672	9-540	9	1.45	1.16	.98	.77	.74
0-1712	10-540	10	1.60	1.28	1.06	.84	.80
0-1788	12-540	12	1.85	1.48	1.25	.99	.95
0-1867	14-540	14	2.12	1.70	1.42	1.13	1.08
0-1905	15-540	15	2.25	1.80	1.50	1.19	1.14
0-1936	16-540	16	2.39	1.91	1.60	1.28	1.21
0-1997	18-540	18	2.66	2.12	1.77	1.41	1.35
0-2046	20-540	20	2.91	2.34	1.96	1.56	1.48
0-2067	22-540	22	3.18	2.54	2.12	1.70	1.62
0-2075	24-540	24	3.45	2.76	2.31	1.83	1.75
0-2085	26-540	26	3.72	2.97	2.48	1.99	1.88
0-2094	30-540	30	4.24	3.40	2.83	2.26	2.15
0-2097	31-540	31	4.38	3.50	2.91	2.34	2.21

es 541. Have double 6-32x1/4" binder head screw terminals. epage distance is 5/8". 1 3/8" wide by 1 1/16" high. Terminals are center to center with .175-.180" diameter holes. Wt., 14 oz.

0-1357	2-541	2	.66	.54	.44	.35	.34
0-1406	3-541	3	.79	.64	.54	.42	.40
0-1451	4-541	4	.94	.74	.63	.49	.47
0-1496	5-541	5	1.06	.84	.71	.57	.55
0-1541	6-541	6	1.19	.96	.79	.64	.61
0-1585	7-541	7	1.36	1.08	.91	.72	.69
0-1630	8-541	8	1.48	1.18	.99	.78	.75
0-1713	10-541	10	1.75	1.40	1.16	.94	.90
0-1789	12-541	12	2.06	1.64	1.36	1.08	1.03
0-1868	14-541	14	2.31	1.83	1.53	1.23	1.16
0-1937	16-541	16	2.56	2.05	1.71	1.37	1.30
0-1998	18-541	18	2.84	2.27	1.90	1.51	1.44
0-2047	20-541	20	3.12	2.49	2.08	1.67	1.58
0-2068	22-541	22	3.41	2.72	2.27	1.81	1.73
0-2076	24-541	24	3.67	2.94	2.45	1.96	1.85
0-2086	26-541	26	3.93	3.15	2.63	2.10	2.00
0-2095	30-541	30	4.49	3.58	2.99	2.40	2.27

es 542. Have double 8-32x5/16" binder head screw terminals. epage distance is 3/4". 1 5/8" wide by 7/8" high. Wt., 14 oz.

Stock No.	Mfr's Type	Term-inals	EACH 1-24	25-49	50-99	100-249	250-Up
0-1358	2-542	2	.71	.57	.47	.38	.36
0-1452	4-542	4	1.06	.84	.71	.57	.55
0-1542	6-542	6	1.41	1.12	.95	.75	.71
0-1631	8-542	8	1.77	1.41	1.17	.95	.90
0-1714	10-542	10	2.12	1.70	1.41	1.12	1.07
0-1790	12-542	12	2.47	1.98	1.65	1.32	1.26
0-1869	14-542	14	2.82	2.26	1.88	1.50	1.43
0-1938	16-542	16	3.18	2.54	2.12	1.70	1.62
0-1999	18-542	18	3.53	2.82	2.36	1.88	1.79
0-2048	20-542	20	3.89	3.11	2.60	2.08	1.98
0-2069	22-542	22	4.24	3.40	2.83	2.26	2.15
0-2087	26-542	26	4.95	3.96	3.30	2.64	2.50

SERIES 150 BARRIER BLOCKS

xelite barriers with nickel-plated brass screws. 50-amp solder lugs—#6 stranded wire. 10-32x terminals on 1 1/16" ctrs. 3/4x1 13/16". Wt., 6 oz.

Stock No.	Mfr's Type	Term-inals	EACH 1-24	25-49	50-99	100-249	250-Up
0-1309	2-150	2	.79	.64	.54	.42	.40
0-1374	3-150	3	1.11	.90	.74	.60	.57
0-1419	4-150	4	1.44	1.15	.97	.76	.73
0-1464	5-150	5	1.77	1.41	1.17	.95	.90
0-1509	6-150	6	2.09	1.68	1.40	1.11	1.06
0-1554	7-150	7	2.42	1.93	1.62	1.29	1.23
0-1599	8-150	8	2.75	2.19	1.83	1.46	1.39
0-1684	10-150	10	3.40	2.72	2.27	1.81	1.72

SERIES 140-Y, 141-Y, 142-Y BARRIER BLOCKS

Barriers between each terminal provide increased insulation; follow edge of strips and terminate at base. Molded bakelite base. All have brass solder terminals with hot-tin dipped finish. Size: Series 140-Y, 7/8" wide x 5/8" high; 141-Y, 1 1/8" wide x 1/2" high; 142-Y, 1 5/16" wide x 5/8" high.

Series 140-Y. Leakage path between terminals, 3/8". Designed for use with Series 160 fanning strips on page 300. Av. wt., 5 oz.

Stock No.	Mfr's Type	Term-inals	EACH 1-24	25-49	50-99	100-249	250-Up
750-1302	2-140-Y	2	.29	.23	.20	.16	.15
750-1367	3-140-Y	3	.36	.29	.24	.19	.18
750-1412	4-140-Y	4	.48	.39	.33	.26	.25
750-1457	5-140-Y	5	.60	.47	.40	.32	.31
750-1502	6-140-Y	6	.73	.59	.48	.39	.37
750-1547	7-140-Y	7	.80	.65	.55	.42	.40
750-1592	8-140-Y	8	.92	.73	.62	.48	.46
750-1637	9-140-Y	9	1.03	.81	.69	.56	.52
750-1677	10-140-Y	10	1.13	.92	.76	.61	.58
750-1722	11-140-Y	11	1.23	.99	.82	.66	.64
750-1758	12-140-Y	12	1.35	1.07	.91	.72	.68
750-1802	13-140-Y	13	1.45	1.16	.98	.77	.74
750-1837	14-140-Y	14	1.57	1.26	1.05	.83	.79
750-1877	15-140-Y	15	1.68	1.34	1.11	.90	.84
750-1910	16-140-Y	16	1.77	1.42	1.18	.95	.91
750-1978	18-140-Y	18	2.00	1.60	1.33	1.06	1.01
750-2002	19-140-Y	19	2.09	1.68	1.40	1.11	1.06
750-2026	20-140-Y	20	2.19	1.76	1.46	1.16	1.12
750-2052	21-140-Y	21	2.32	1.85	1.55	1.23	1.17

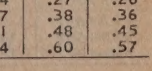
Series 141-Y. Leakage path, 7/16". For Series 161 fanning strips, listed on page 300. Av. shpg. wt., 5 oz.

750-1305	2-141-Y	2	.35	.28	.23	.18	.17
750-1370	3-141-Y	3	.48	.39	.33	.26	.25
750-1415	4-141-Y	4	.65	.52	.43	.34	.33
750-1460	5-141-Y	5	.78	.63	.52	.41	.39
750-1505	6-141-Y	6	.91	.72	.61	.47	.45
750-1550	7-141-Y	7	1.06	.84	.71	.57	.55
750-1595	8-141-Y	8	1.18	.95	.79	.64	.61
750-1640	9-141-Y	9	1.32	1.05	.88	.70	.67
750-1680	10-141-Y	10	1.46	1.16	.98	.78	.74
750-1761	12-141-Y	12	1.74	1.39	1.15	.93	.88
750-1840	14-141-Y	14	2.03	1.63	1.36	1.08	1.03
750-1880	15-141-Y	15	2.16	1.73	1.44	1.15	1.09
750-1913	16-141-Y	16	2.32	1.85	1.55	1.23	1.17
750-1981	18-141-Y	18	2.60	2.08	1.74	1.39	1.32
750-2029	20-141-Y	20	2.89	2.32	1.93	1.55	1.46

Series 142-Y. Leakage path, 9/16". For Series 162 fanning strips, listed on page 300. Av. shpg. wt., 5 oz.

750-1324	2-142-Y	2	.42	.34	.28	.22	.21
750-1418	4-142-Y	4	.78	.63	.52	.41	.39
750-1463	5-142-Y	5	.95	.75	.64	.50	.47
750-1508	6-142-Y	6	1.13	.91	.75	.61	.58
750-1553	7-142-Y	7	1.31	1.04	.87	.70	.66
750-1558	8-142-Y	8	1.47	1.17	.99	.78	.74
750-1683	10-142-Y	10	1.83	1.46	1.22	.98	.93
750-1728	11-142-Y	11	2.00	1.61	1.34	1.06	1.01
750-1764	12-142-Y	12	2.17	1.74	1.45	1.15	1.10
750-1843	14-142-Y	14	2.52	2.02	1.69	1.35	1.29
750-1916	16-142-Y	16	2.88	2.32	1.93	1.53	1.46
750-1953	17-142-Y	17	3.06	2.44	2.04	1.64	1.55

SERIES 171, 172, 173 MINIATURE BARRIER STRIP



Series 171 single 2-56x3/16" binding head screw terminals on 1/4" ctrs.; 5/16x13/32". Series 172 double 2-56x3/16" screw terminals on 1/4" ctrs.; 5/8x5/16". Series 173 single 4-40x5/16" screw terms. on 3/8" ctrs.; 3/8x1/2". Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Term-inals	EACH 1-24	25-49	50-99	100-249	250-Up
750-1443	4-171	4	.41	.33	.28	.22	.21
750-1533	6-171	6	.57	.44	.37	.30	.29
750-1622	8-171	8	.69	.56	.45	.36	.35
750-1444	4-172	4	.76	.62	.50	.40	.39
750-1534	6-172	6	1.03	.81	.69	.56	.52
750-1623	8-172	8	1.30	1.03	.85	.69	.66
750-1706	10-172	10	1.56	1.26	1.04	.82	.79
750-1784	12-172	12	1.82	1.45	1.22	.98	.93
750-1863	14-172	14	2.09	1.67	1.39	1.11	1.06
750-1354	2-173	2	.28	.22	.19	.15	.14
750-1448	4-173	4	.49	.40	.34	.27	.26
750-1538	6-173	6	.71	.57	.47	.38	.36
750-1627	8-173	8	.92	.72	.61	.48	.45
750-1710	10-173	10	1.11	.90	.74	.60	.57

Cinch-Jones Terminal, Fanning, Marker Strips

SERIES 140, 141, 142 BARRIER-TYPE TERMINALS

Barriers interposed between terminal positions for more insulation. Follow edge of strips, terminate at base. Insure positive contact with strips at right. Series 140, 5-40x3/16" binder-head screws; 141, 6-32x1/4"; 142, 8-32x5/16".

Series 140. Leakage path between terminals is 3/8". Base is 7/8" wide x5/8" high. Use with Series 160 fanning strips. Av. wt., 14 oz.

Stock No.	Mfr's Type	Terminals	EACH 1-24	25-49	50-99	100-249	250-Up
750-1300	1-140	1	.19	.15	.13	.11	.10
750-1316	2-140	2	.23	.19	.16	.13	.12
750-1365	3-140	3	.27	.22	.18	.15	.14
750-1410	4-140	4	.34	.27	.23	.19	.18
750-1455	5-140	5	.42	.33	.28	.23	.22
750-1500	6-140	6	.49	.39	.33	.27	.26
750-1545	7-140	7	.57	.45	.38	.30	.29
750-1590	8-140	8	.65	.52	.43	.34	.33
750-1635	9-140	9	.72	.58	.47	.38	.36
750-1675	10-140	10	.79	.64	.54	.42	.40
750-1720	11-140	11	.85	.69	.58	.45	.43
750-1756	12-140	12	.95	.75	.63	.49	.47
750-1800	13-140	13	1.01	.80	.68	.55	.50
750-1835	14-140	14	1.09	.87	.73	.59	.56
750-1875	15-140	15	1.16	.94	.77	.62	.60
750-1908	16-140	16	1.23	.99	.82	.66	.63
750-1945	17-140	17	1.31	1.04	.87	.70	.66
750-1976	18-140	18	1.38	1.10	.93	.73	.70
750-2000	19-140	19	1.45	1.15	.97	.77	.73
750-2024	20-140	20	1.51	1.22	1.02	.80	.77
750-2050	21-140	21	1.61	1.29	1.07	.84	.80

Series 141. Leakage path between terminals is 7/16". Base is 1 1/8" wide x 1/2" high. Use with Series 161 fanning strips. Av. wt., 14 oz.

750-1319	2-141	2	.26	.20	.17	.14	.13
750-1368	3-141	3	.34	.27	.23	.18	.17
750-1413	4-141	4	.45	.36	.31	.25	.24
750-1458	5-141	5	.57	.43	.37	.30	.28
750-1503	6-141	6	.63	.49	.42	.34	.32
750-1548	7-141	7	.74	.60	.49	.39	.37
750-1593	8-141	8	.82	.66	.56	.44	.42
750-1638	9-141	9	.92	.73	.62	.48	.46
750-1878	10-141	10	1.02	.81	.68	.55	.52
750-1911	11-141	11	1.10	.88	.74	.60	.57
750-1759	12-141	12	1.19	.96	.79	.64	.61
750-1803	13-141	13	1.30	1.03	.85	.69	.66
750-1838	14-141	14	1.39	1.10	.93	.74	.70
750-1878	15-141	15	1.47	1.17	.99	.78	.74
750-1911	16-141	16	1.57	1.26	1.05	.83	.79
750-1948	17-141	17	1.67	1.33	1.11	.90	.83
750-1979	18-141	18	1.76	1.41	1.17	.94	.90
750-2003	19-141	19	1.85	1.48	1.25	.99	.95
750-2027	20-141	20	1.96	1.56	1.31	1.04	.99

Series 142. Leakage path between terminals is 9/16". Base is 1 5/16" wide x 5/8" high. Use with Series 162 fanning strips. Av. wt., 14 oz.

750-1322	2-142	2	.30	.24	.20	.16	.15
750-1371	3-142	3	.41	.32	.27	.22	.21
750-1416	4-142	4	.55	.43	.36	.29	.28
750-1461	5-142	5	.66	.52	.43	.35	.33
750-1506	6-142	6	.77	.62	.52	.41	.39
750-1551	7-142	7	.90	.71	.60	.47	.45
750-1596	8-142	8	1.01	.80	.67	.54	.50
750-1641	9-142	9	1.11	.90	.74	.60	.57
750-1681	10-142	10	1.25	1.00	.82	.66	.63
750-1726	11-142	11	1.36	1.08	.91	.72	.69
750-1762	12-142	12	1.47	1.17	.99	.78	.71
750-1806	13-142	13	1.60	1.28	1.06	.84	.80
750-1841	14-142	14	1.71	1.37	1.14	.92	.87
750-1881	15-142	15	1.83	1.46	1.22	.98	.93
750-1914	16-142	16	1.96	1.56	1.31	1.04	.99
750-1951	17-142	17	2.07	1.66	1.38	1.10	1.05

FANNING STRIPS

Laminated 3/32" bakelite strips; hole in either end for fastening the cable with a clamp or lacing twine assures positive connections. Left hand mtg. .032" cadmium-plated brass terminals. 2 thru 20 terminals are available in all series. Prefix in Type no. indicates no. of terminals.

Series 160L. Fit Series 140 barrier terminals on 3/8" ctrs. 1/2" wide.

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
750-1519	6-160L	.52	.42	.35	.27	.26
750-1563	7-160L	.60	.48	.39	.31	.30
750-1608	8-160L	.66	.52	.44	.36	.33
750-1652	9-160L	.75	.60	.51	.39	.38
750-1692	10-160L	.83	.67	.56	.44	.43
750-1771	12-160L	1.03	.82	.69	.54	.52

FANNING STRIPS (Cont'd)

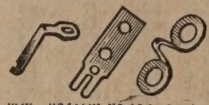
Series 161L. Fit Series 141 barrier terminals on 7/16" ctrs. 5/8" v

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	25(
750-1433	4-161L	.39	.31	.27	.22	.:
750-1478	5-161L	.48	.38	.33	.26	.:
750-1612	8-161L	.69	.55	.46	.37	.:
750-1696	10-161L	.85	.69	.57	.46	.:
750-1775	12-161L	1.06	.84	.71	.56	.:

Series 162L. Fit Series 142 barrier terminals on 9/16" ctrs. 5/8" v

750-1616	8-162L	.75	.60	.51	.39	.:
750-1700	10-162L	.90	.71	.60	.48	.:
750-1779	12-162L	1.11	.90	.75	.60	.:

ADAPTER SOLDER TERMINALS FOR BARRIER BLOCK

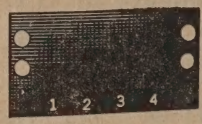


"Y" "¾W" "141J, 95B"

Permit topside or underside solder nections to barrier blocks. Types and W for topside; Type Y for under Types 141-J and 95B are jumpers use making permanent connections betv adjacent barrier block terminals. Tir brass. Wt., 1 oz.

Stock No.	Mfr's Type	For Series	EACH 1-99	100-249	250-
750-0809	¾W-140	140	.11	.08	.0
750-0810	¾W-141	141	.11	.08	.0
750-0811	¾W-142	142	.13	.09	.0
750-0800	W-140	140	.11	.08	.0
750-0806	Y-140	140	.11	.08	.0
750-0807	Y-141	141	.11	.08	.0
750-0808	Y-142	142	.13	.09	.0
750-1249	141-J	140 & 141	.09	.06	.0
750-1240	95B	142	.19	.11	.1

MARKER STRIPS



Used for labeling terminal positions barrier strips. Also act as insulators. black fiber. Mounting holes match t in corresponding barrier strips. Mi figure in Type No. indicates numbe contacts; last 3 figures indicate ba series. Strips are numbered sequenti from 1 with white numerals. 1 oz.

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250
750-0250	MS-2-140	.13	.10	.09	.08	.0
750-0260	MS-3-140	.13	.10	.09	.08	.0
750-0270	MS-4-140	.13	.10	.09	.08	.0
750-0280	MS-5-140	.13	.10	.09	.08	.0
750-0290	MS-6-140	.13	.10	.09	.08	.0
750-0300	MS-7-140	.15	.12	.10	.09	.0
750-0309	MS-8-140	.15	.12	.10	.09	.0
750-0318	MS-9-140	.15	.12	.10	.09	.0
750-0328	MS-10-140	.17	.13	.11	.10	.0
750-0334	MS-11-140	.17	.13	.11	.10	.0
750-0340	MS-12-140	.17	.13	.11	.10	.0
750-0351	MS-14-140	.19	.15	.13	.11	.1
750-0357	MS-15-140	.19	.15	.13	.11	.1
750-0363	MS-16-140	.21	.17	.14	.12	.1
750-0375	MS-18-140	.21	.17	.14	.12	.1
750-0379	MS-19-140	.23	.19	.16	.13	.1
750-0384	MS-20-140	.23	.19	.16	.13	.1
750-0388	MS-21-140	.23	.19	.16	.13	.1
750-0252	MS-2-141	.13	.10	.09	.08	.0
750-0262	MS-3-141	.13	.10	.09	.08	.0
750-0272	MS-4-141	.13	.10	.09	.08	.0
750-0282	MS-5-141	.15	.12	.10	.09	.0
750-0292	MS-6-141	.15	.12	.10	.09	.0
750-0302	MS-7-141	.15	.12	.10	.09	.0
750-0311	MS-8-141	.17	.13	.11	.10	.0
750-0328	MS-10-141	.17	.13	.11	.10	.0
750-0342	MS-12-141	.19	.15	.13	.11	.1
750-0353	MS-14-141	.21	.17	.14	.12	.1
750-0359	MS-15-141	.23	.19	.16	.13	.1
750-0365	MS-16-141	.23	.19	.16	.13	.1
750-0377	MS-18-141	.26	.20	.17	.14	.1
750-0386	MS-20-141	.27	.22	.18	.15	.1
750-0254	MS-2-142	13	10	.09	.08	.0
750-0264	MS-3-142	.13	.10	.09	.08	.0
750-0274	MS-4-142	.15	.12	.10	.09	.0
750-0284	MS-5-142	.15	.12	.10	.09	.0
750-0294	MS-6-142	.15	.12	.10	.09	.0
750-0313	MS-8-142	.17	.13	.11	.10	.0
750-0322	MS-9-142	.19	.15	.13	.11	.1
750-0344	MS-12-142	.23	.19	.16	.13	.1
750-0367	MS-16-142	.29	.23	.20	.16	.1
750-0373	MS-17-142	.32	.25	.21	.17	.1

Allied Electronics is the World's Foremost Supplier of Components to Indus

Military and Commercial Terminal Boards

Kulka

CLOSED-BACK TERMINAL BOARDS

ılded phenolic. Nickel-plated brass screws, ms. Voltage rating, ⅓ breakdown voltage. ıffix No. equals No. of terminals. Av., 12 oz.

) SERIES. Have 4 thru holes for mounting. re sizes: AWG #22 to 16. Current rating: amps. Voltage rating: 2500 volts rms.

Stock No.	Mfr's Type*	Lgth. In.	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
7-1510	670-2	1 13/32	.32	.24	.19	.16	.12	.11
7-1511	670-3	1 25/32	.36	.27	.22	.18	.14	.13
7-1512	670-4	2 5/32	.46	.35	.28	.23	.18	.16
7-1513	670-5	2 17/32	.57	.43	.34	.29	.23	.21
7-1514	670-6	2 29/32	.67	.50	.40	.34	.27	.24
7-1515	670-7	3 9/32	.77	.58	.46	.39	.31	.28
7-1516	670-8	3 21/32	.86	.65	.52	.43	.34	.31
7-1518	670-10	4 13/32	1.07	.80	.64	.54	.43	.39
7-1520	670-12	5 5/32	1.26	.95	.76	.63	.50	.45
7-1522	670-14	5 29/32	1.45	1.09	.87	.73	.58	.52
7-1523	670-15	6 9/32	1.55	1.16	.93	.78	.62	.56
7-1524	670-16	6 21/32	1.65	1.24	.99	.83	.66	.59
7-1526	670-18	7 13/32	1.85	1.38	1.11	.93	.94	.67
7-1528	670-20	8 5/32	2.04	1.53	1.22	1.02	.82	.74
7-1530	670-22	8 29/32	2.25	1.69	1.35	1.13	.90	.81
7-1532	670-24	9 21/32	2.56	1.92	1.54	1.28	1.02	.92
7-1534	670-26	10 13/32	2.82	2.12	1.69	1.41	1.13	1.02
7-1536	670-28	11 5/32	3.02	2.27	1.81	1.51	1.21	1.09
7-1538	670-30	11 29/32	3.23	2.42	1.94	1.61	1.29	1.16

1 SERIES. Has 4 thru holes for mounting. Wire sizes: AWG #16 to Current rating: 20 amps. Voltage rating: 3000 volts rms.

7-1700	671-2	1 5/8	.34	.26	.20	.17	.14	.13
7-1701	671-3	2 1/16	.46	.35	.28	.23	.18	.16
7-1702	671-4	2 1/2	.62	.47	.37	.31	.25	.22
7-1703	671-5	2 15/16	.74	.56	.44	.37	.30	.27
7-1704	671-6	3 3/8	.85	.64	.51	.43	.34	.31
7-1705	671-7	3 13/16	.98	.74	.59	.49	.39	.35
7-1706	671-8	4 1/4	1.12	.84	.67	.56	.45	.41
7-1707	671-9	4 11/16	1.23	.92	.74	.62	.49	.44
7-1708	671-10	5 1/8	1.36	1.02	.82	.68	.54	.49
7-1710	671-12	6	1.59	1.19	.95	.80	.64	.58
7-1712	671-14	6 7/8	1.86	1.40	1.12	.93	.74	.67
7-1714	671-16	7 3/4	2.10	1.58	1.26	1.05	.84	.76
7-1716	671-18	8 5/8	2.34	1.76	1.40	1.17	.94	.85
7-1718	671-20	9 1/2	2.60	1.95	1.56	1.30	1.04	.94
7-1720	671-22	10 3/8	2.90	2.18	1.74	1.45	1.16	1.04
7-1722	671-24	11 1/4	3.19	2.39	1.91	1.60	1.28	1.15
7-1724	671-26	12 1/8	3.57	2.68	2.14	1.79	1.43	1.29
7-1728	671-30	13 7/8	4.22	3.17	2.53	2.11	1.69	1.52

2 SERIES. Has 4 thru holes for mounting. Wire sizes: AWG #14 to . Current rating: 30 amps. Voltage rating: 3300 volts rms.

7-1910	672-2	2 3/32	.41	.31	.25	.21	.16	.14
7-1911	672-3	2 21/32	.56	.42	.34	.28	.22	.20
7-1912	672-4	3 7/32	.73	.55	.44	.37	.29	.26
7-1913	672-5	3 25/32	.87	.65	.52	.44	.35	.31
7-1914	672-6	4 11/32	1.04	.78	.62	.52	.42	.38
7-1915	672-7	4 29/32	1.20	.90	.72	.60	.48	.43
7-1916	672-8	5 15/32	1.34	1.01	.80	.67	.54	.49
7-1917	672-9	6 1/32	1.48	1.11	.89	.74	.59	.53
7-1918	672-10	6 19/32	1.66	1.25	1.00	.83	.66	.59
7-1920	672-12	7 23/32	1.97	1.48	1.18	.99	.79	.71
7-1922	672-14	8 27/32	2.28	1.71	1.37	1.14	.91	.82
7-1923	672-15	9 1/32	2.44	1.83	1.46	1.22	.98	.88
7-1924	672-16	9 31/32	2.62	1.97	1.57	1.31	1.05	.94
7-1926	672-18	11 3/32	2.92	2.18	1.75	1.46	1.17	1.05
7-1928	672-20	12 7/32	3.28	2.46	1.97	1.64	1.31	1.18

JUMPERS FOR TERMINAL BOARDS

601-J 600-RJS

or series 670, 671, 672 terminal oards, shown above. RJS are series umpers; suffix indicates number of rminals. Available for 2 to 23 termi- als. Nickel-plated brass. Av. wt., per 00, 8 oz.

Stock No.	Mfr's Type	For Series	PRICE PER 100
837-0409	600J	670	1.93
837-0610	601J	671	2.20
837-1110	602J	672	2.48

Stock No.	Mfr's Type	For Series	EACH 1-24	25-49	50-Up
837-0430	600RJS-2	670	.35	.28	.23
837-0432	600RJS-4	670	.49	.39	.33
837-0433	600RJS-5	670	.56	.44	.37
837-0434	600RJS-6	670	.69	.55	.46
837-0436	600RJS-8	670	.82	.65	.55

MIL-T-55164 CLOSED-BACK TERMINAL BOARDS

Terminal and reinforcement plates at mounting holes are molded into diallyl phthalate (type GDI-30F per MIL-M-19833) body. Screws (per QQ-W-321) and terminal plates (per QQ-B-613) brass, nickel-plated (per QQ-N-290). Holes molded, not drilled, for unbroken surfaces. Test voltages, per MIL-T-55164, are min., not breakdown voltage. *Last 2 digits in Mfr's Type No. is number of terminals. Av. wt., 12 oz.

37TB SERIES. Dielectric withstanding voltage: 3000 volts rms. 15-amp current rating. Accommodates wire sizes AWG #22 to 16.

Stock No.	*Mfr's Type	MIL. No.	EACH 1-9	10-24	25-49	50-99	100-Up
837-2810	20002	37TB-2	1.53	1.15	.92	.77	.61
837-2811	20003	37TB-3	1.97	1.48	1.18	.99	.79
837-2813	20005	37TB-5	2.55	1.91	1.53	1.28	1.02
837-2814	20006	37TB-6	2.80	2.10	1.68	1.40	1.12
837-2815	20007	37TB-7	3.18	2.39	1.91	1.59	1.27
837-2816	20008	37TB-8	3.52	2.64	2.11	1.76	1.41
837-2817	20009	37TB-9	3.74	2.81	2.24	1.87	1.50
837-2818	20010	37TB-10	4.04	3.03	2.42	2.02	1.62
837-2819	20011	37TB-11	4.31	3.23	2.59	2.16	1.72
837-2820	20012	37TB-12	4.80	3.60	2.88	2.40	1.92
837-2823	20015	37TB-15	5.67	4.25	3.40	2.84	2.27
837-2826	20018	37TB-18	6.55	4.91	3.93	3.28	2.62
837-2828	20020	37TB-20	7.14	5.36	4.28	3.57	2.86
837-2830	20022	37TB-22	7.76	5.82	4.66	3.88	3.10
837-2834	20026	37TB-26	9.30	6.98	5.58	4.65	3.72
837-2838	20030	37TB-30	10.52	7.89	6.31	5.26	4.21
837-2839	20031	37TB-31	10.78	8.09	6.47	5.39	4.13

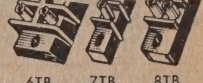
38TB SERIES. Dielectric withstanding voltage: 3400 volts rms. 20-amp current rating. Accommodates wire sizes AWG #16 to 14.

837-2911	21003	38TB-3	2.23	1.67	1.34	1.12	.89
837-2913	21005	38TB-5	2.81	2.11	1.69	1.41	1.12
837-2914	21006	38TB-6	3.24	2.43	1.94	1.62	1.30
837-2915	21007	38TB-7	3.81	2.86	2.29	1.91	1.52
837-2918	21010	38TB-10	5.27	3.95	3.16	2.64	2.11
837-2920	21012	38TB-12	6.23	4.67	3.74	3.12	2.49
837-2926	21018	38TB-18	8.32	6.24	4.99	4.16	3.33
837-2928	21020	38TB-20	9.06	6.80	5.44	4.53	3.62

39TB SERIES. Dielectric withstanding voltage: 4000 volts rms. 30-amp current rating. Accommodates wire sizes AWG #14 to 12.

837-3011	22003	39TB-3	4.03	3.02	2.42	2.02	1.61
837-3013	22005	39TB-5	4.90	3.68	2.94	2.45	1.96
837-3014	22006	39TB-6	5.25	3.94	3.15	2.63	2.10
837-3017	22009	39TB-9	6.83	5.12	4.10	3.42	2.73
837-3018	22010	39TB-10	7.34	5.51	4.40	3.67	2.94
837-3020	22012	39TB-12	8.13	6.10	4.88	4.07	3.25
837-3024	22016	39TB-16	10.91	8.18	6.55	5.46	4.36

NAVY MIL-T-55164 TERMINAL BOARDS



6TB 7TB 8TB

For use in fused circuits where normal operating power does not exceed 2000 watts per term. Max. voltage rating 600, except: 8TB, 300. Amp rating 30, except: 7TB, 40. *Double row. †Single row, through connection. ‡Double row linked. Last digit in Type No. indicates No. of terminals. Av. wt., 5 oz.

Stock No.	Type Des.	Federal Stk. No.	EACH 1-9	10-24	25-49	50-99	100-249	250-Up
837-0010	6TB6*	500-5373	4.62	3.47	2.77	2.31	1.85	1.66
837-0025	7TB8†	502-8476	6.71	5.03	4.03	3.36	2.68	2.42
837-0039	8TB2‡	500-5388	2.64	1.98	1.58	1.32	1.06	.95
837-0043	8TB6‡	542-8546	4.62	3.47	2.77	2.31	1.85	1.66
837-0045	8TB8‡	502-4522	5.39	4.04	3.23	2.70	2.16	1.94
837-0047	8TB10‡	518-9611	6.27	4.70	3.76	3.14	2.51	2.26

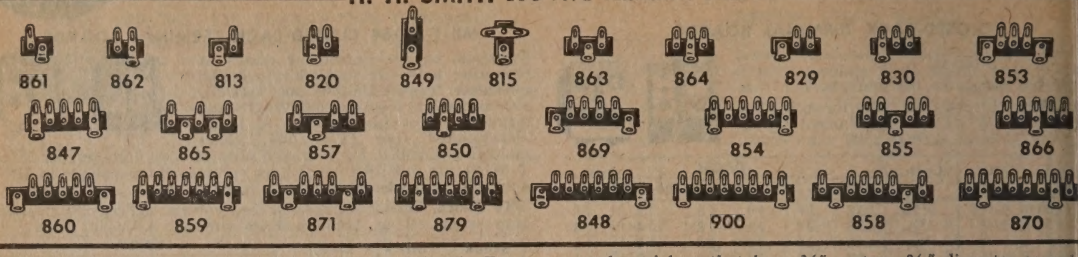
1699 FEED-THRU TERMINAL BOARDS

GP phenolic. Insulated. Speed nut mtg. Takes #16-14 wire. Solder terms. Rated 20 A, 1100 V. Last digit in Type No. indicates number of terminals. Av. wt. 12 oz.

Stock No.	Mfr's Type	Lgth. In.	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
837-1610	1699-2	3 1/32	.56	.45	.38	.30	.27	.26
837-1611	1699-3	1 13/32	.77	.62	.52	.41	.37	.36
837-1612	1699-4	1 27/32	.99	.79	.66	.53	.48	.46
837-1613	1699-5	2 9/32	1.25	1.00	.83	.66	.60	.58
837-1615	1699-7	3 5/32	1.74	1.39	1.16	.93	.84	.81
837-1616	1699-8	3 19/32	1.91	1.53	1.28	1.02	.92	.89
837-1617	1699-9	4 1/32	2.09	1.67	1.39	1.11	1.00	.97
837-1618	1699-10	4 15/32	2.27	1.82	1.52	1.21	1.09	1.06
837-1619	1699-15	6 21/32	3.57	2.86	2.38	1.90	1.71	1.67
837-1620	1699-18	7 31/32	4.11	3.29	2.74	2.19	1.97	1.92
837-1621	1699-20	8 27/32	4.46	3.57	2.98	2.38	2.14	2.08
837-1622	1699-22	9 23/32	4.84	3.87	3.23	2.58	2.32	2.26

Terminal Strips, Plugs, Jacks, Snaps and Clips

H. H. SMITH LUG-TYPE TERMINAL STRIPS



Dark brown bakelite strips, measuring 1/16" thick x 3/8" wide. For a wide variety of applications in electronics. Equipped with solder-coated steel lugs that have 3/8" centers. 9/64" diameter mount holes. Av. shpg. wt. 1 oz.

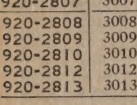
Stock No.	Mfr's Type	EACH 1-99	100-999	1000-2499	2500-Up	Stock No.	Mfr's Type	EACH 1-99	100-999	1000-2499	2500-Up	Stock No.	Mfr's Type	EACH 1-99	100-999	1000-2499	250 Up
920-0861	861	.04	.030	.027	.025	920-0830	830	.04	.033	.030	.027	920-0866	866	.06	.046	.042	.03
920-0862	862	.04	.031	.028	.025	920-0853	853	.06	.050	.045	.041	920-0860	860	.08	.065	.059	.05
920-0813	813	.04	.030	.027	.025	920-0847	847	.07	.056	.051	.046	920-0859	859	.09	.068	.062	.05
920-0820	820	.04	.031	.028	.025	920-0865	865	.06	.050	.045	.041	920-0871	871	.08	.065	.059	.05
920-0849	849	.04	.030	.027	.025	920-0857	857	.05	.041	.037	.034	920-0879	879	.09	.068	.062	.05
920-0815	815	.06	.05	.045	.041	920-0850	850	.05	.042	.038	.034	920-0848	848	.09	.070	.063	.05
920-0863	863	.04	.032	.029	.026	920-0868	869	.07	.060	.054	.049	920-0900	900	.09	.075	.068	.06
920-0864	864	.04	.033	.030	.027	920-0854	854	.08	.062	.056	.051	920-0858	858	.09	.070	.063	.05
920-0829	829	.04	.032	.029	.026	920-0855	855	.06	.045	.041	.037	920-0870	870	.09	.075	.068	.06

H. H. SMITH SERIES 3000 TERMINAL STRIPS

Terminals are made of steel, with cadmium plating for easy soldering. Spaced on 5/16" centers. Insulated strip is constructed of rugged molded bakelite. Sturdy, cadmium-plated steel mounting base. Mounting holes provided at each end of the base for No. 6 screws. Wt. 1 oz.

Stock No.	Mfr's Type	Terminals	Mtg. Ctrs.	EACH 1-99	100-999	1000-2499	2500-Up
920-2802	3002	2	1"	.09	.075	.068	.062
920-2803	3003	3	1 5/16"	.10	.085	.078	.070
920-2804	3004	4	1 5/8"	.11	.09	.082	.074
920-2805	3005	5	1 15/16"	.13	.105	.096	.086
920-2806	3006	6	2 1/4"	.14	.11	.10	.09
920-2807	3007	7	2 9/16"	.16	.125	.114	.102
920-2808	3008	8	2 7/8"	.18	.14	.126	.114
920-2809	3009	9	3 3/16"	.19	.15	.136	.122
920-2810	3010	10	3 1/2"	.20	.16	.144	.13
920-2812	3012	12	4 1/8"	.24	.19	.172	.154
920-2813	3013	13	4 7/8"	.28	.22	.198	.18

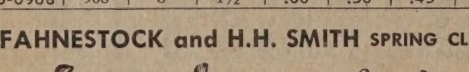
H. H. SMITH TERMINAL STRIPS



For a variety of connecting applications—antenna terminals, output terminals, etc. Made of black 3/32" bakelite. Screw-type terminals are cadmium-plated with tinned lugs. Av. shpg. wt. 4 oz.

Stock No.	Mfr's Type	Term.	Mtg. Ctrs.	EACH 1-24	25-99	100-499	500-Up
920-0902	902	2	1 1/2"	.24	.20	.18	.16
920-0903	903	3	2"	.26	.22	.20	.18
920-0904	904	4	2 1/2"	.32	.27	.24	.22
920-0905	905	5	3"	.40	.33	.30	.26
920-0906	906	6	3 1/2"	.48	.39	.35	.30
920-0908	908	8	4 1/2"	.60	.50	.45	.40

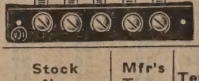
FAHNESTOCK and H.H. SMITH SPRING CLIPS



Offer positive, reliable contact. Easy to connect and disconnect. *Made of bronze; †H. H. Smith clips are brass, nickel-plated. All others solid brass. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Fig.	Length	Width	Max. Wire	Mtg. Hole	EACH 1-99	100-999	1000-Up
795-0301	2	A	1"	3/8"	#10	#8	.05	.04	.038
795-0587	534†	A	1"	3/8"	#10	#6	.05	.04	.036
795-0302	3	A	1 1/16"	3/8"	#10	#8	.05	.04	.038
795-0309	10	A	3/4"	5/16"	#14	#6	.02	.02	.018
795-0586	533†	A	3/4"	5/16"	#14	#6	.03	.028	.031
795-0597	539†	A	5/8"	7/32"	#16	#4	.03	.028	.031
795-0304	5	B	1 1/16"	3/8"	#10	#8	.05	.04	.038
795-0314	15*	B	1/2"	7/32"	#16	#4	.03	.02	.18
795-0588	535†	C	1 1/2"	5/16"	#14	#6	.13	.11	.099
795-0589	536†	C	2 1/16"	3/8"	#10	#8	.16	.13	.117

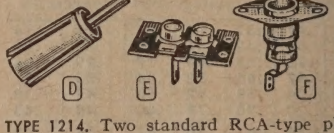
H. H. SMITH SCREW-TYPE TERMINAL STRIPS



For multiple outputs. 1/16" thick; *3 Solder-coated brass terms. on 7/16" cent 9/64" mounting holes. Bakelite. Av. sh wt. 1 oz.

Stock No.	Mfr's Type	Term.	Mtg. Ctrs.	EACH 1-49	50-249	250-499	50 U
920-0872	872	2	1 15/16"	.11	.09	.08	.0
920-0873	873	3	1 3/4"	.15	.12	.108	.0
920-0874	874	4	2 3/16"	.19	.75	.135	.1
920-0875	875	5	2 5/8"	.23	.18	.162	.1
920-0876	876	6	3 1/16"	.26	.21	.189	.1
920-0877	877	7	3 15/16"	.31	.25	.225	.2
920-0928	928	8	3 15/16"	.35	.28	.252	.2
920-0929	929	9	4 3/8"	.39	.31	.279	.2
920-0930	930*	10	4 13/16"	.44	.35	.315	.2

H. H. SMITH MOTOROLA-TYPE PLUG, JACK; RCA PHONO JACKS



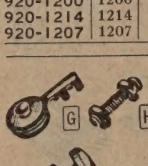
TYPE 1200. Motorola-t plug designed to conn coaxial antenna lead-i automobile radio; pin ameter 1/8". Shpg. wt., 1

TYPE 1207. Motorola male connector mount 15/32" hole. 1 oz.

TYPE 1214. Two standard RCA-type phono jacks on a 1 1/2 base. Use on phono players and recording units. Shpg. wt., 1 o

Stock No.	Mfr's Type	Fig.	Description	EACH 1-99	100-999	1000-4999	50 U
920-1200	1200	D	Motorola Type Plug	.13	.102	.092	.0
920-1214	1214	E	Double Phono Jack	.12	.096	.088	.0
920-1207	1207	F	Motorola Jack	.23	.18	.162	.1

NU-WAY SNAPS AND STUDS



Used to make or break temporary electr connections in an instant. Ideal for testing of circuits. Equally suitable permanent wire connections when you're a hurry. Snap connectors (G) fit threaded studs listed below. May be cascaded together for mult connections. Snaps have solder lug. Stud threaded screw shaft with nut for either pane chassis mounting. Shpg. wt. per 100, 12 oz. So Multiples of 100.

Stock No.	Fig.	Description	Size	PRICE PER 100-900	1000
859-0810	G	Snaps	7/16"Dx7/8" L	8.30	7.8
859-0812	H	Threaded Stud	1/2"Dx6 32/32"L	5.80	4.9

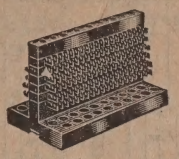
J Terminal Lugs. Screw-mount to chassis, terminal boards, et solder lugs; one wire-wrap, other grooved. Wt./pkg. of 10, 2

859-0816. 1-9.....Each .07 100-490.....Each
500-999.....Each .043 1000-Up.....Each

Terminal Blocks, Strips, Plugs, Jacks and Prods

ADC PRODUCTS TERMINAL BLOCKS

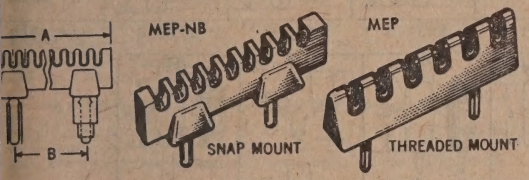
SOLDER-TYPE TERMINAL BLOCKS



igged units for design and construction e in telephone circuits, computers, record- g studios, broadcast stations, or wherever any circuits are in operation. Each unit s a one-piece molded black phenolic se; individual terminal separators are o of molded black phenolic. Polished phe- lic surface surrounding terminals assures sy removal of solder flash. Terminals are 0" thick plated brass, 20 terminals per w. Terminal rows are graduated in length for ease of wiring, and e identified by numbering imprinted along the top row. Base, 6x3". Av. shpg. wt., 1½ lbs.

Stock No.	Mfr's Type	No. Rows	No. of Terms.	Block Height	EACH 1-9	EACH 10-Up
729-0052	PJ-102	2	40	2¼"	4.65	3.88
729-0053	PJ-103	3	60	2 19/32"	5.85	4.88
729-0054	PJ-104	4	80	2 15/16"	7.05	5.88
729-0055	PJ-105	5	100	3 3/32"	8.25	6.88
729-0056	PJ-106	6	120	3 5/8"	9.45	7.88

ALCOSTRIP MEP, MEH CERAMIC TERMINAL STRIPS



mplify component replacement (easy removing and resoldering). rmanent bond between metal and ceramic. Tinned copperplate silvered ceramic for easy soldering. Withstand excessive heat. ap or thread mounting. Dielectric strength: more than 10 seconds 1500 VDC between terminals. Nominal insulation resistance: er 1000 megohms at 500 VDC megger. Steatite terminal strip, lypropolyne bushing. Mfd. in Japan under license by Tektronix. lo. of terminals. Av. shpg. wt., 4 oz.

SNAP MOUNT TYPES

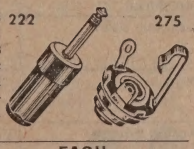
Stock No.	Type MEP-	Dimensions "A"	Dimensions "B"	EACH 1-9	10-24	25-99	100-499	500-Up
00-6540	NB-5*	.885"	.490"	.82	.66	.44	.396	.363
00-6542	NB-7*	1.165"	.490"	1.01	.81	.54	.486	.446
00-6544	NB-9*	1.445"	.750"	1.08	.87	.58	.522	.479
00-6548	NB-13*	2.140"	1.500"	1.38	1.11	.74	.666	.611
00-6555	NB-20*	3.020"	2.520"	2.06	1.65	1.10	.99	.908

THREAD MOUNT TYPES

Stock No.	Type MEP-	Dimensions "A"	Dimensions "B"	EACH 1-9	10-24	25-99	100-499	500-Up
00-8032	2*	.650"	.....	45	.36	.24	.216	.198
00-8034	4*	1.161"	.512"	.56	.45	.30	.27	.248
00-8036	6*	1.673"	1.024"	.75	.60	.40	.36	.33
00-8038	8*	2.185"	1.535"	.93	.75	.50	.45	.413
00-8040	10*	2.697"	2.047"	1.08	.87	.58	.522	.479
00-8042	12*	3.209"	2.560"	1.23	.99	.66	.594	.545

H. H. SMITH PLUGS AND JACKS

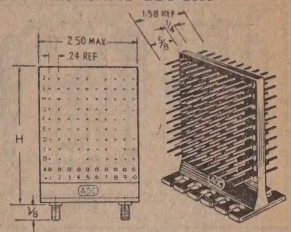
andard ¼" plug. Type 222 and 252 are vo conductor with screw terminals, others ree conductor, solder terminals. Type 222 d 227 have plastic barrel; others brass rrel. Open circuit jacks 275 and 277 have "—32 shank 3/32" long; require 1" behind nel. 275 for two circuit, 277 for three cir- it. Complete with mounting hardware. v. shpg. wt. 2 oz.



Stock No.	Mfr's Type	Description	EACH 1-49	50-99	100-249	250-Up
920-0264	222	Phone Plug (black)	.71	.63	.57	.51
920-0263	222	Phone Plug (red)	.71	.63	.57	.51
920-0273	227	Phone Plug (black)	1.08	.90	.81	.73
920-0272	227	Phone Plug (red)	1.08	.90	.81	.73
920-0274	228	Phone Plug (brass)	1.08	.90	.81	.73
920-0304	252	Phone Plug (brass)	1.12	1.01	.90	.82
920-0333	275	Std. Phone Jack	.37	.33	.30	.27
920-0335	227	Std. Phone Jack	.49	.44	.39	.35

"WRAPID" SOLDERLESS TERMINAL BLOCKS

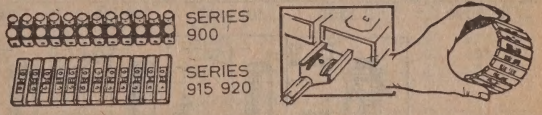
Use any wrapping tool to make 100 solderless, wrapped wire connections in a 3⅜x 2½" space—with Type PJ-610 (illus. at right). Even inexperienced operators can make one connection each 5 seconds. Block and fanning strip are molded of high-impact glass-filled Nylon. Have brass terminals. Letters and numbers identify terminals. Cadmium-chromate plated mtg. studs. 4 oz.



Stock No.	Mfr's Type	No. of Terminals	"H" Dim.	EACH 1-9	10-24	25-Up
729-0066	PJ-604	40	1.75"	3.63	2.91	2.42
729-0067	PJ-606	60	2.25"	4.46	3.57	2.97
729-0068	PJ-608	80	2.75"	5.28	4.23	3.52
729-0069	PJ-610	100	3.25"	6.11	4.89	4.07

NATIONAL TEL-TRONICS PRODUCTS

SOLDERLESS BLOCKS



Series 900. Black polyvinylchloride. Red pushbuttons lock wire. 27 amps max., 440 V. 70°C max. Beryllium copper contacts. Series 915 and 920 flexible blocks are for use with ¼" quick-disconnect terminals. Transparent polyvinylchloride can be cut. 20 amps max., 250 V. 80°C max. #12 wire, max. *No. of term. 4 oz.

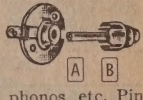
Stock No.	Mfr's Type	Description	Length	EACH 1-9	10-24	25-49	50 Up
869-1010	900-12*	Pushbutton	2 7/16x¾"	1.23	1.11	.99	.89
869-1014	900-24*	Pushbutton	4 7/16x¾"	2.31	2.08	1.87	1.68
869-1027	915-12*	Flexible	2 13/16x1⅛"	.52	.46	.42	.38
869-1031	915-24*	Flexible	5 5/8x1⅛"	1.03	.92	.83	.75
869-1055	920-12*	Flexible	2 13/16x1 17/32"	.52	.46	.42	.38
869-1060	920-24*	Flexible	5 5/8x1 17/32"	1.03	.92	.83	.75

SOLDERLESS BLOCKS

Series 905. A very versatile solderless block for many applications. Easily put into place; bends in any direction. If you need a smaller size, the series of terminals can easily be cut to fit your needs. Made of flexible polyester. 30 amps maximum. 380 volts at 60°C maximum. Each ½x5/8x3¾" with 1½" spacing between terminal centers. #10 wire maximum. Shpg. wt., 4 oz.

869-1020. 1-9.....Each 1.95 10-24.....Each 1.76
25-49.....Each 1.58 50-Up.....Each 1.30

PHONO PIN PLUG, JACK

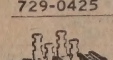


(A) Single-Prong Jack. For use with pin plug below. On 1/16" bakelite disc. 1 1/16" mounting centers. Wt. 1 oz. 10 per package.

(B) Shielded Phono Pin Plug. Excellent for radios, phonos, etc. Pin diameter, ⅛". Length, 9/16". Shpg. wt., 1 oz.

Stock No.	Description	Fig.	EACH 1-49	50-299	300-599	600-Up
729-0424	Pin Jack	A	.05	.04	.035	.032
729-0425	Pin Plug	B	.04	.03	.026	.024

CINCH JONES SERIES 170 TERMINAL STRIPS

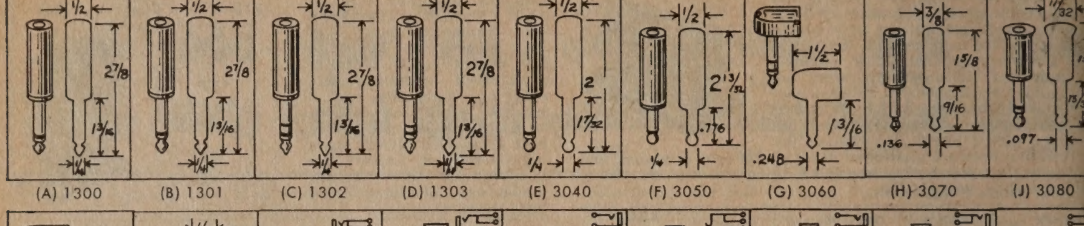


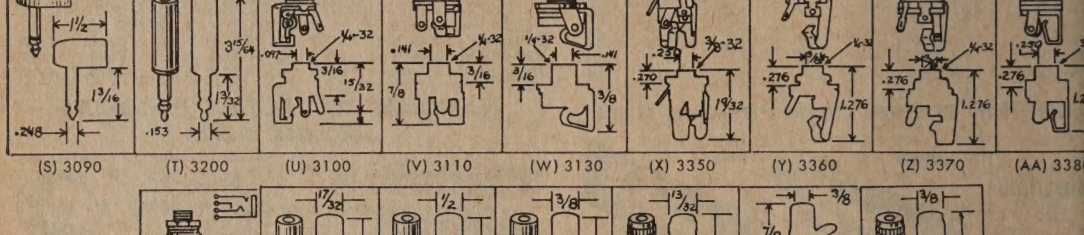
Extra-heavy-duty solder terminals. Sturdy black molded bakelite base is 5/16" wide, ¼" thick. Solder terminals are .032" tinned brass; on ⅜" centers. Double notched to insure good, easy mechanical connection. Mounting holes are ⅜" from center of end terminals. Shpg. wt., 5 oz.

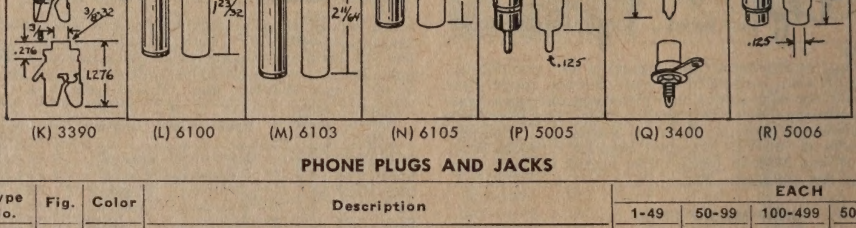
Stock No.	Mfr's Type	Terminals	EACH 1-24	25-49	50-99	100-249	250-Up
750-1348	2-170	2	.28	.23	.19	.16	.15
750-1397	3-170	3	.36	.28	.24	.19	.18
750-1442	4-170	4	.42	.34	.27	.22	.21
750-1487	5-170	5	.47	.38	.32	.25	.24
750-1532	6-170	6	.53	.42	.36	.28	.26
750-1576	7-170	7	.60	.47	.40	.32	.29
750-1621	8-170	8	.65	.51	.44	.36	.34
750-1705	10-170	10	.79	.62	.51	.42	.40

Allied Phone, Phono and Extension Plugs and Jack

Allied plugs and jacks use the finest U.S. materials and workmanship to provide excellent service. All metal parts are nickel-plated brass; solder-type terminals are tinned. Perfectly compatible w all American and foreign-country parts. Av. shpg. wt. 2 oz.







PHONE PLUGS AND JACKS

Stock No.	Type No.	Fig.	Color	Description	EACH 1-49	50-99	100-499	500-999	1000
706-3001	1300B	A	Black	**Two-conductor, screw terminals.**	.54	.46	.35	.33	.2
706-3002	1300R	A	Red	Accommodate two-conductor jacks	.54	.46	.35	.33	.2
706-3003	1300M	A	Metal	#3360, #3370 and similar types	.75	.64	.49	.46	.4
706-3010	1301B	B	Black	**Two-conductor, solder terminals.**	.50	.44	.33	.31	.2
706-3011	1301R	B	Red	Accommodate two-conductor jacks	.50	.44	.33	.31	.2
706-3012	1301M	B	Metal	#3360 and #3370 and spacer	.71	.64	.48	.44	.4
706-3020	1302B	C	Black	**Three-conductor, solder terminals.**	.74	.66	.50	.47	.4
706-3021	1302R	C	Red	Accommodate three-conductor jacks	.74	.66	.50	.47	.4
706-3022	1302M	C	Metal	#3380, #3390 and similar types	.90	.81	.62	.58	.5
706-3030	1303B	D	Black	**Three-conductor, screw terminals.**	.82	.74	.56	.537	.4
706-3031	1303R	D	Red	Accommodate three-conductor jacks	.83	.75	.57	.54	.4
706-3032	1303M	D	Metal	#3380, #3390 and similar types	.96	.86	.65	.62	.5
706-3040	3040B	E	Black	**Type PJ055** 2-cond. solder term.; Mil. Specs.	.82	.74	.56	.537	.4
706-3050	3050B	F	Black	**Type PJ054** 2-cond. solder term.; Mil. Specs.	.82	.74	.56	.537	.4
706-3360	3360	Y	Metal	**2-cond. open circ. jack.** Fits #1300, 1301, 3040, 3090	.30	.26	.197	.18	.1
706-3370	3370	Z	Metal	**2-cond. cl. circ. jack.** Fits #1300, 1301, 3040, 3090	.33	.29	.22	.21	.1
706-3380	3380	AA	Metal	**3-cond. open circ. jack.** Fits #1302, 1303, 3060	.38	.34	.26	.24	.2
706-3390	3390	K	Metal	**3-cond. cl. circ. jack.** Fits #1302, 1303, 3060	.55	.49	.37	.35	.3

EXTENSION JACKS, PHONO PLUGS AND JACKS

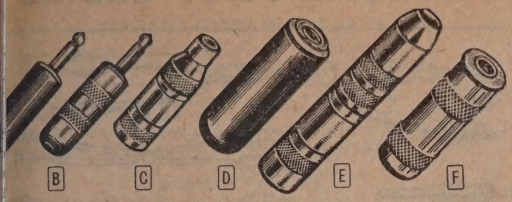
706-3401	6101	L	Metal	**2-cond. in-line jack.** Accommodates #1300, 1301, 3090	.71	.64	.48	.44	.4
706-3403	6103	M	Metal	**3-cond. in-line jack.** Accommodates #1302, 1303, 3060	1.35	1.20	.90	.84	.7
706-3405	6105	N	Metal	**2-cond. in-line miniature jack.** For #3070	.82	.74	.56	.537	.4
706-3396	5005	P	Metal	**Phono plug.** Shielded handle	.30	.26	.197	.18	.1
706-3400	3400	Q	Metal	**Phono jack.** Front mount for 3/8" hole	.21	.19	.145	.139	.1
706-3397	5006	R	Metal	**In-line phono jack.** For all phono pin plugs	.38	.34	.26	.24	.2
706-3051	3060B	G	Black	**Right angle phone plug.** Three-conductor, screw	.93	.84	.63	.59	.5
706-3053	3060R	G	Red	terminal. Accommodates	.93	.84	.63	.59	.5
706-3052	3060M	G	Metal	jacks #3380 and 3390	.98	.89	.67	.63	.5
706-3054	3070B	H	Black	**Two-conductor plug.** Solder terminal	.50	.44	.33	.31	.2
706-3056	3070R	H	Red	accommodates subminiature jacks	.50	.44	.33	.31	.2
706-3055	3070M	H	Metal	#3110 and 3130	.68	.61	.46	.43	.3
706-3057	3080B	J	Black	**Ultra-miniature plugs, two-conductor.** Solder	.46	.41	.31	.296	.2
706-3059	3080R	J	Red	terminal accommodates jack #3100	.46	.41	.31	.296	.2
706-3058	3080T	J	Tan		.46	.41	.31	.296	.2
706-3060	3090B	S	Black	**Two-conductor plug, right angle.** Screw terminal	.76	.69	.52	.49	.4
706-3062	3090R	S	Red	accommodates	.76	.69	.52	.49	.4
706-3061	3090M	S	Metal	jacks #3360 and 3370	.70	.62	.47	.44	.4
706-3200	3200B	T	Black	**Type PJ068 3-cond.** Solder and screw term.; Mil. Specs.	2.00	1.78	1.36	1.31	1.3

MINIATURE PHONE JACKS

706-3063	3100	U	Metal	**Ultra-miniature cl. circ. 2-cond. jack.** Fits #3080.	.34	.30	.23	.22	.1
706-3064	3110	V	Metal	**Subminiature cl. circ. 2-cond. phone jack.** Fits #3070	.33	.29	.21	.20	.1
706-3066	3130	W	Metal	**Subminiature open circ. 2-cond. jack.** Fits #3070.	.30	.26	.197	.18	.1
706-3350	3350	X	Metal	**Stereo phone jack.** Fits plugs #1302, 1303, 3060.	.71	.64	.48	.45	.4

Plugs and Extension Jacks

SWITCHCRAFT INC.



"TINI-PLUGS" SUBMINIATURE PHONE PLUGS

B For use with "Tini-Jax" listed on following page. 1⅝" overall length. 2-conductor. Handles are plastic or nickeled brass. rew terminals; all others solder terminals. Av. shpg. wt., 1 oz.

tock No.	Mfr's Type	Fig.	Handle	EACH 1-24	25-49	50-249	100-499	250-499	500-Up
2-1335	740§	A	Black	.57	.523	.475	.38	.361	.342
2-1339	745§	A	Red	.57	.523	.475	.38	.361	.342
2-1343	750	A	Black	.54	.495	.45	.36	.342	.324
2-1347	755	A	Red	.54	.495	.45	.36	.342	.324
2-1354	770§	B	Shielded	.78	.715	.65	.52	.494	.468
2-1362	780	B	Shielded	.75	.688	.625	.50	.475	.45

Type 125 "Tini-Extension Jax," 2-conductor; with solder-lug terminals. Mate with "Tini-Plugs." Av. shpg. wt., 2 oz.

2-0965. 1-24....Ea. .90 25-49....Ea. .83 50-99...Ea. .75
-249.....Ea. .60 250-499.....Ea. .57 500-Up.....Ea. .54

"EXTENSION JAX" CABLE EXTENSION JACKS

E F Open circuit. Fit std. ¼" plugs. 1 1/16" O.D. 2 5/32" long; 121 and 131, ½" O.D., 2½" long. Black handles, plastic; elded are nickeled brass. §Screw terminals, others solder. 3 oz.

2-CONDUCTOR TYPES

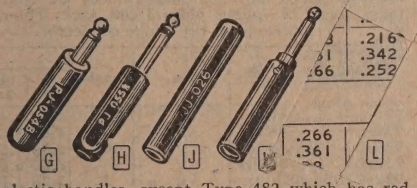
2-0880	80§	D	Black	.87	.798	.725	.58	.51	.52
2-0988	88	D	Black	.78	.715	.65	.52	.494	.468
2-0957	120§	F	Shielded	1.14	1.05	.95	.76	.72	.68
2-0961	121	E	Shielded	1.20	1.10	1.00	.80	.76	.72

3-CONDUCTOR TYPES

2-0970	131	E	Shielded	1.50	1.38	1.25	.95	.90	.80
2-1378	830§	D	Black	1.14	1.05	.95	.76	.72	.68
2-1440	1230§	F	Shielded	1.47	1.35	1.23	.98	.931	.882

MILITARY-TYPE "LITTEL-PLUGS" AND EXTENSION JACK

series of con-ctors made to et require-nts of mili-y specifica-ns. Terminals -tinned brass. have plural ternal inter-k; parts will t shift once in sition. Black plastic handles, except Type 482 which has red ndle. All plugs have screw terminals; meet MIL-P-642A specs, pe 820 ext. jack meets MIL-J-642A—fits Type 430 plug. 4 oz.



2-CONDUCTOR TYPES

Stock No.	Mfr's Type	Fig.	JAN Type	EACH 1-24	25-49	50-99	100-246	250-499	500-Up
2-1235	412	L	PJ-289	2.94	2.70	2.45	1.96	1.86	1.76
2-1244	430	G	PJ-054 B	.90	.83	.75	.60	.57	.54
2-1247	440	G	PJ-055 B	.90	.83	.75	.60	.57	.54
2-1374	820	J	JJ-026	1.26	1.16	1.05	.84	.798	.756

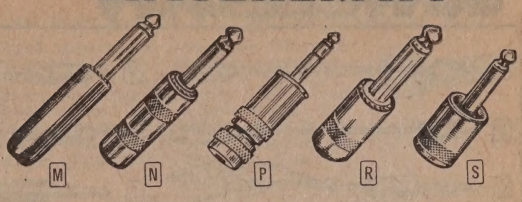
3-CONDUCTOR TYPES

2-1258	480	H	PJ-068	2.16	1.98	1.80	1.44	1.37	1.30
2-1260	482	K	PJ-051	2.40	2.20	2.00	1.60	1.52	1.44
2-1261	483	K	PJ-051B	2.40	2.20	2.00	1.60	1.52	1.44

TYPE 410 PLUG AND TYPE 810 JACK

iniature, 2-cond. extension jack and mating plug. ug is Signal Corps Type PJ-291; jack, JJ-048. piece, molded construction with EM-1 insulation r MIL-P-3412. Plug has solder-cup terminals; k, solder lugs. After wiring, shells must be cented. Overall size (engaged), 2⅝x1 7/32x7/32". 3 oz.

Stock No.	Mfr's Type	Desc.	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
2-1230	410	Plug	.63	.578	.525	.42	.399	.378
2-1370	810	Jack	.84	.77	.70	.56	.532	.504



"LITTEL-PLUG" PHONE PLUGS

Fit std. ¼" phone jacks, except S250 and S280 have .206"-dia. sleeve to mate S-11 "Littel-Jax;" R280 has short sleeve for Revere recorders. §Screw terminals, others solder terminals. Plugs with solder terminals have cable clamp. Metal (shielded) handles are nickel plated brass. Handles, 1 1/16" long; ½" diameter. Av., 4 oz.

2-CONDUCTOR TYPES

Stock No.	Mfr's Type	Fig.	Handle Color	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-1033	240§	M	Black	.57	.523	.475	.38	.361	.342
932-1036	245§	M	Red	.54	.495	.45	.36	.342	.324
932-1039	250	M	Black	.57	.523	.475	.38	.361	.342
932-0196	S250	M	Black	.54	.495	.45	.36	.342	.324
932-1041	255	M	Red	.81	.743	.675	.54	.513	.486
932-1053	270§	N	Metal	.78	.715	.65	.52	.494	.468
932-1056	280	N	Metal	.99	.908	.825	.66	.627	.594
932-1188	R280	N	Metal	.78	.715	.65	.52	.494	.468
932-1198	S280	N	Metal	.90	.825	.75	.60	.57	.54

3-CONDUCTOR TYPES

932-1044	260§	M	Black	.90	.825	.75	.60	.57	.54
932-1050	267	M	Black	.81	.743	.675	.54	.513	.486
932-1060	290§	N	Metal	1.05	.963	.875	.70	.665	.63
932-1064	297	N	Metal	.99	.908	.825	.66	.627	.594

STANDARD PHONE PLUGS

¼" plugs. Metal (shielded), red or black bakelite handles; 2 1/16" long, ¾" dia., except *1" long. 170 and 190A have 2 1/16x1 1/16" 2-piece handle with cable clamp for ¼" cable. Av. shpg. wt., 5 oz.

2-CONDUCTOR TYPES WITH SCREW TERMINALS

932-0760	40	M	Black	.60	.55	.50	.40	.38	.36
932-0802	45	M	Red	.96	.88	.80	.64	.608	.576
932-0880	70	N	Metal	.78	.715	.65	.52	.494	.468
932-0987	160*	S	Metal	1.23	1.13	1.03	.82	.779	.738
932-0990	170	P	Metal	1.17	1.07	.98	.78	.741	.702

3-CONDUCTOR TYPES WITH SOLDER TERMINALS

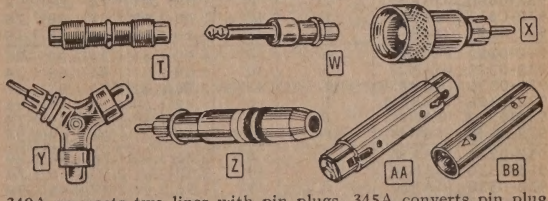
932-0860	60	M	Black	.81	.743	.675	.54	.513	.486
932-0925	90*	S	Metal	1.02	.935	.85	.68	.646	.612
032-0994	190	N	Metal	1.17	1.07	.975	.78	.741	.702
932-0995	190A	P	Metal	1.47	1.35	1.23	.98	.931	.882

"LUG-PLUG" PHONE PLUGS

Low-cost, two-conductor phone plugs. All fit standard ¼" jacks. Have solder terminals. Exterior parts bright nickel plated. Type 350 has black plastic handle 1⅝" long, ½" diameter. Type 380 has shielded, bare metal handle. 1" long. Av. shpg. wt., 4 oz.

932-1147	350	M	Plastic	.48	.44	.40	.32	.304	.288
932-1210	380	R	Metal	.60	.55	.50	.40	.38	.36

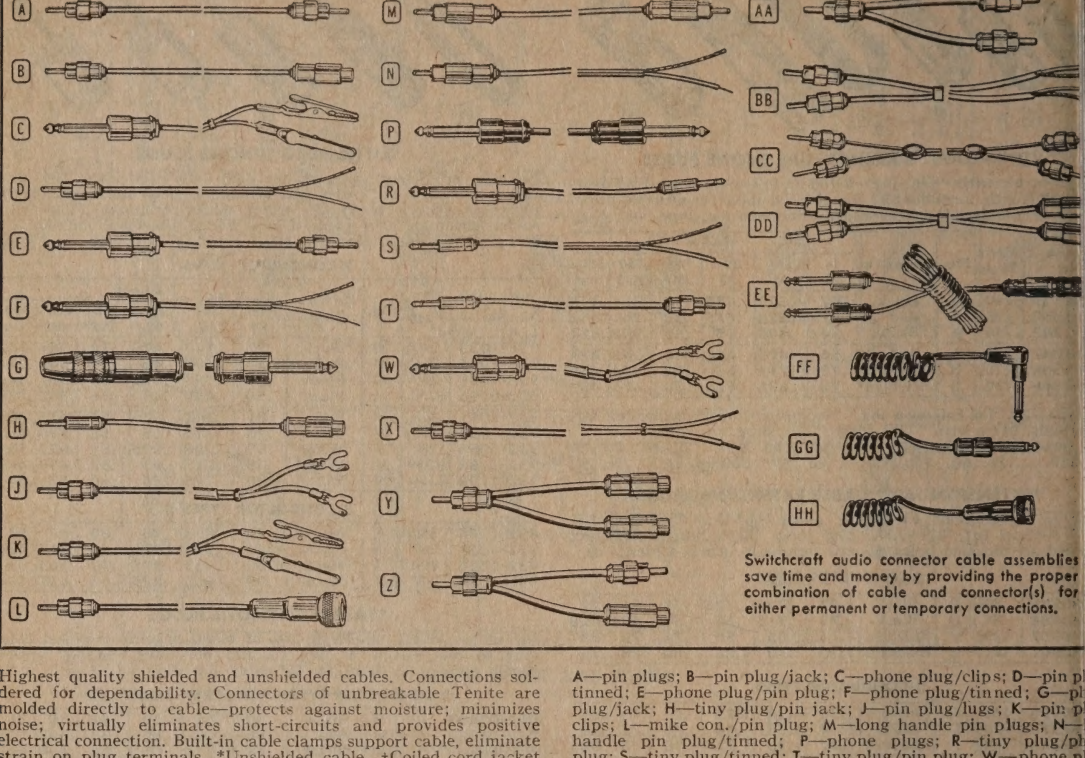
JACK ADAPTERS AND CONNECTORS



349A connects two lines with pin plugs. 345A converts pin plug to phone plug. 338B pin plug with mike connector. 389 3-contact mike receptacle input to same output. 390 3-pin mike plug to equipment with this output. Av. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	1-24	25-Up
932-1144	349A	T	Double-ended Phono Pin Jack	.78	.72
932-1138	345A	W	Phono Pin Jack; Phone Plug	.93	.85
932-1124	338B	X	Mic; Phono Pin Plug	.93	.85
932-1103	330F	Y	2 Phono Pin Jacks; Phono Pin Plug	1.29	1.18
932-1117	336A	Z	Phone Jack; Phono Pin Plug	1.26	1.16
932-1219	389	AA	Double-ended 3-contact recept.	3.00	2.79
932-1220	390	BB	Double-ended 3-pin plug	2.52	2.31

SEE PAGE 306 FOR SWITCHCRAFT AUDIO CONNECTOR CABLES



Switchcraft audio connector cable assemblies save time and money by providing the proper combination of cable and connector(s) for either permanent or temporary connections.

Highest quality shielded and unshielded cables. Connections soldered for dependability. Connectors of unbreakable Tenite are molded directly to cable—protects against moisture; minimizes noise; virtually eliminates short-circuits and provides positive electrical connection. Built-in cable clamps support cable, eliminate strain on plug terminals. *Unshielded cable. †Coiled cord jacket is high-quality neoprene. ‡Stripped and tinned, ready for easy soldering into circuit—no insulation removal required. §3-conductor cable and/or connectors. **Terminations are as illustrated. Av. shpg. wt., 8 oz.

A—pin plugs; B—pin plug/jack; C—phone plug/clips; D—pin pl tinned; E—phone plug/pin plug; F—phone plug/tinned; G—pl plug/jack; H—tiny plug/pin jack; J—pin plug/lugs; K—pin p clips; L—mike con./pin plug; M—long handle pin plugs; N— handle pin plug/tinned; P—phone plugs; R—tiny plug/ph plug; S—tiny plug/tinned; T—tiny plug/pin plug; W—phone p lugs; X—pin plug/tinned; Y—pin plug/jacks; Z—pin jack/pl AA—pin plugs; BB—pin plugs/tinned; CC—pin plugs; DD— plugs/jacks; EE—phone plugs/3 con. jack; FF—right angle ph pl[illegible]—phone plug; HH—mike connector.

Stock No.	Mfr's Type	Fig.	Lgth.	EACH 1-9	10-24	25-49	50-99	100-Up
932-0582	25AC25	A	1.5′	1.00	.75	.688	.625	.50
932-0583	25AF25	A	3′	1.12	.84	.77	.70	.56
932-0592	25AK25	A	6′	1.40	1.05	.96	.88	.70
932-0607	25AN25	A	10′	1.96	1.47	1.35	1.23	.98
932-0585	25AF82	B	3′	1.28	.96	.88	.80	.64
932-0596	25AK82	B	6′	1.72	1.29	1.18	1.08	.86
932-0610	25AN82	B	10′	1.96	1.47	1.35	1.23	.98
932-0353	05CN86*	C	10′	2.32	1.74	1.60	1.45	1.16
932-0361	05CT86*	C	20′	2.96	2.22	2.04	1.85	1.48
932-0586	25AF84‡	D	3′	.88	.66	.61	.55	.44
932-0600	25AK84‡	D	6′	1.08	.81	.74	.68	.54
932-0611	25AN84‡	D	10′	1.56	1.17	1.07	.98	.78
932-0685	25AR84‡	D	15′	2.20	1.65	1.51	1.38	1.10
932-0322	05AK25	E	6′	1.92	1.44	1.32	1.20	.96
932-0328	05AN25	E	10′	2.68	2.01	1.84	1.68	1.34
932-0336	05AR25	E	15′	2.96	2.22	2.04	1.85	1.48
932-0326	05AK84‡	F	6′	1.72	1.29	1.18	1.08	.86
932-0332	05AN84‡	F	10′	2.20	1.65	1.51	1.38	1.10
932-0340	05AR84‡	F	15′	2.68	2.01	1.84	1.68	1.34
932-0324	05AK80	G	6′	2.56	1.92	1.76	1.60	1.28
932-0330	05AN80	G	10′	3.48	2.61	2.39	2.18	1.74
932-0338	05AR80	G	15′	3.96	2.97	2.72	2.48	1.98
932-0407	10BK81§	G	6′	4.80	3.60	3.30	3.00	2.40
932-0412	10BN81§	G	10′	6.00	4.50	4.13	3.75	3.00
932-0417	10BU81§	G	25′	8.80	6.60	6.05	5.50	4.40
932-0769	40DF82	H	3′	1.68	1.26	1.16	1.05	.84
932-0779	40DK82	H	6′	2.44	1.83	1.68	1.53	1.22
932-0790	40DN82	H	10′	2.84	2.13	1.95	1.78	1.42
932-0626	25CN85*	J	10′	1.40	1.05	.96	.88	.70
932-0632	25CT85*	J	20′	2.12	1.59	1.46	1.33	1.06
932-0627	25CN86*	K	10′	2.20	1.65	1.51	1.38	1.10
932-0633	25CT86*	K	20′	2.56	1.92	1.76	1.60	1.28
932-0603	25AK87	L	6′	2.40	1.80	1.65	1.50	1.20
932-0683	26AR26	M	15′	2.56	1.92	1.76	1.60	1.28
932-0680	26AN84	N	10′	1.76	1.32	1.21	1.10	.88
932-0320	05AK05	P	6′	2.56	1.92	1.76	1.60	1.28
932-0327	05AN05	P	10′	3.48	2.61	2.39	2.18	1.74

Stock No.	Mfr's Type	Fig.	Lgth.	EACH 1-9	10-24	25-49	50-99	1
932[illegible]	[illegible]AU05	P	25′	4.60	3.45	3.16	2.88	2
932-[illegible]	[illegible]K10§	P	6′	4.80	3.60	3.30	3.00	2
932-0[illegible]	[illegible]10§	P	10′	6.00	4.50	4.13	3.75	3
932-04[illegible]	[illegible]BU10§	P	25′	8.80	6.60	6.05	5.50	4
932-0765	40DF05	R	3′	2.28	1.71	1.57	1.43	1
932-0774	40DK05	R	6′	2.68	2.01	1.84	1.68	1
932-0784	40DN05	R	10′	2.96	2.22	2.04	1.85	1
932-0770	40DF84‡	S	3′	1.72	1.29	1.18	1.08	
932-0780	40DK84‡	S	6′	1.92	1.44	1.32	1.20	
932-0791	40DN84‡	S	10′	2.44	1.83	1.68	1.53	1
932-0767	40DF25	T	3′	2.04	1.53	1.40	1.28	1
932-0776	40DK25	T	6′	2.44	1.83	1.68	1.53	1
932-0787	40DN25	T	10′	2.80	2.10	1.93	1.75	1
932-0360	05CT85*	W	20′	2.28	1.71	1.57	1.43	1
932-0625	25CN84*	X	10′	1.32	.99	.91	.83	
932-0724	33OF1	Y	4″	2.00	1.50	1.38	1.25	1
932-0775	33OF2	Z	4″	2.00	1.50	1.38	1.25	1
932-0726	33OF3	AA	4″	2.00	1.50	1.38	1.25	1
932-0642	25FF84‡	BB	3′	2.84	2.13	1.95	1.78	1
932-0649	25FK84‡	BB	6′	3.20	2.40	2.20	2.00	1
932-0654	25FN84‡	BB	10′	3.72	2.79	2.56	2.33	1
932-0637	25FF25	CC	3′	3.20	2.40	2.20	2.00	1
932-0646	25FK25	CC	6′	3.72	2.79	2.56	2.33	1
932-0651	25FN25	CC	10′	4.48	3.36	3.08	2.80	2
932-0641	25FF82	DD	3′	2.92	2.19	2.01	1.83	1
932-0648	25FK82	DD	6′	3.40	2.25	2.34	2.13	1
932-0653	25FN82	DD	10′	4.04	3.03	2.78	2.53	2
932-0368	05FH81§	EE	4′	4.36	3.27	3.00	2.73	2
932-0525	15LH84†	FF	4′	2.56	1.92	1.76	1.60	1
932-0373	05LH84†	GG	4′	2.56	1.92	1.76	1.60	1
932-0895	87LH84†	HH	4′	2.64	1.98	1.82	1.65	1
932-0377	05LP05†	GG/GG**	12′	5.36	4.02	3.69	3.35	2
932-0378	05LP15†	GG/FF**	12′	5.36	4.02	3.69	3.35	2
932-0380	05LT05†	GG/GG**	20′	7.40	5.55	5.09	4.63	3
932-0381	05LT15†	GG/FF**	20′	7.40	5.55	5.09	4.63	3
932-0382	05LT87†	GG/HH**	20′	7.40	5.55	5.09	4.63	3

Phone Jacks and Phone Plugs

SWITCHCRAFT® INC.

"SF-JAX" SHORT-FRAME JACK

gedly designed jacks requiring a minimum of el depth. Short frame supports springs parallel to . surface. Long springs without "forms" assure imum fatigue. Tubing runs through entire stack frame. Overall length: Series 20, 1²⁹⁄₃₂". Frame, nut and stack screws made of cadmium-plated l. Take std. ¼" plugs. Fit ⅜" dia. hole. Av. shpg. 3 oz.

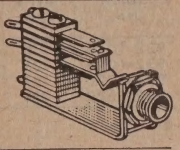
2-CONDUCTOR TYPE

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
-0568	22A	II	.63	.578	.525	.42	.399	.378

3-CONDUCTOR TYPE

-0580	24B	VII	.84	.77	.70	.56	.532	.504

"LF-JAX" LONG-FRAME JACKS



g frame supports springs perpendicular to inting surface. Action of mating plug with g springs insures maximum spring life. 3 d. 3A max. Tubing press-fit through stack tight assembly. Lgth., 3⅜". Fit ⅜" hole. std. ¼" plugs. Nut, washer. 3 oz.

-0720	32B	III	.75	.688	.625	.50	.475	.45
-0732	34B	VI	.90	.825	.75	.60	.57	.54

"LITTEL-JAX" PHONE JACKS

standard ¼" phone plugs, except *S-11, ich takes S250, S280, and 385 plugs, and 12B, which takes 480 military-type "Littel- g," and **14B, which takes standard "Lit- Plugs." Stereo "Littel-Jax" Type 14B is for tching out speakers when 3-wire stereo dphones are plugged in. Dual, normally sed contacts open both circuits when 3-cond. standard Littel- g is inserted. All are ¾" dia., 1⁹⁄₃₂" overall lgth., and have ⅜" . threaded shank, ⁹⁄₃₂" long, except §⅜" long. With nut and wash- Av. wt., 3 oz.

2-CONDUCTOR TYPES

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
2-0480	11	I	.33	.303	.275	.22	.209	.193
2-0013	C-11	I	.48	.44	.40	.32	.304	.288
2-0076	§L-11	I	.39	.358	.325	.26	.247	.234
2-0189	*S-11	I	.36	.33	.30	.24	.228	.216
2-0485	12A	II	.36	.33	.30	.24	.228	.216
2-0014	C-12A	II	.57	.523	.475	.38	.361	.342
2-0077	§L-12A	II	.42	.385	.35	.28	.266	.252

3-CONDUCTOR TYPES

2-0486	12B	III	.42	.385	.35	.28	.266	.252
2-0015	†C-12B	III	.57	.523	.475	.38	.361	.342
2-0505	13B	IV	.60	.55	.50	.40	.38	.36
2-0509	**14B	VII	.78	.715	.65	.52	.494	.468

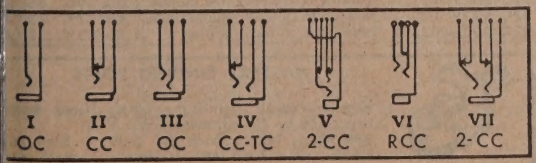
MICRO-JAX AND MICRO-PLUGS

traminiature 2-conductor plugs and jack. Plugs ly 1¼" long. Mate TR-2A jack, 1⁹⁄₃₂" long. Take les to 7⁄₆₄" dia. Screw-on shield handles and cable mps. Jack has nylon insulation, nickel alloy rings, solder lugs. Can be used as open or closed cuit. Fits .190" hole. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
2-1386	850	Plug (black handle)	.51	.468	.425	.34	.323	.306
2-1389	855	Plug (red handle)	.51	.468	.425	.34	.323	.306
2-1395	880	Plug (silver handle)	.51	.468	.425	.34	.323	.306
2-0234	TR-2A	Jack (silver)	.39	.358	.325	.26	.247	.234

JACK SCHEMATIC DIAGRAMS

the schematic diagrams shown below, OC indicates open circuit; C, closed circuit; TC, transfer circuit; RCC, ring closed circuit.



"MT-JAX" AND "T-JAX" SWITCHBOARD-TYPE JACKS

Rugged, press-welded steel frame. All types have nickel-silver-alloy springs to ensure maximum spring life and corrosion resistance. Military types beginning with "MT" meet MIL-J-641(A), and have welded-crossbar palladium contacts. Nonmilitary types beginning with "T" have fine silver contacts. Standard ¼" bushing. Size: 1³⁄₁₆" wide, 9⁄₁₆" high, and 3⁷⁄₁₆" overall length. Shpg. wt., 3 oz.

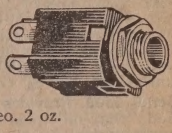
2-CONDUCTOR TYPES

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-0112	MT-332A	II	.90	.325	.75	.60	.57	.54
932-0219	T-332A	II	.78	.72	.65	.52	.494	.468

3-CONDUCTOR TYPES

932-0113	MT-332B	III	.90	.83	.75	.60	.57	.54
932-0220	T-332B	III	.78	.72	.65	.52	.494	.468
932-0115	MT-334B	V	1.08	.99	.90	.72	.684	.648
932-0224	T-334B	V	.96	.88	.80	.64	.608	.576

"HI-D JAX"



High-density phone jack for commercial applications. Only ⅝" square; weighs only 7⅛ grams—especially suitable for PCs. Nickel-silver-plated springs. Mount in ⅜" hole in panels up to ⁵⁄₃₂" thick. Take standard 2 and 3-conductor ¼" plugs. With hdwe. *For stereo. 2 oz.

2-CONDUCTOR TYPES

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-0940	111	I	.33	.303	.275	.22	.209	.198
932-0941	112A	II	.36	.33	.30	.24	.228	.216

3-CONDUCTOR TYPES

932-0942	112B	III	.39	.358	.325	.26	.247	.234
932-0944	113B	IV	.51	.468	.425	.34	.323	.306
932-0950	113F	VI	.51	.468	.425	.34	.323	.306
932-0952	*114B	VII	.57	.523	.475	.38	.361	.342

N-Series "Hi-D" Jax. Prefix "N" on manufacturer's Type No. designates nylon bushing. Insulates sleeve terminal from mounting panel, eliminating possible source of noise and crosstalk. Specifications same as above. *For stereo applications. 2 oz.

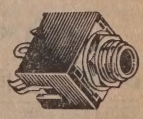
2-CONDUCTOR TYPES

932-0039	N-111	I	.42	.385	.35	.28	.266	.252
932-0040	N-112A	II	.45	.413	.375	.30	.285	.27

3-CONDUCTOR TYPES

932-0141	N-112B	III	.48	.44	.40	.32	.304	.288
932-0143	*N-114B	VII	.63	.578	.525	.42	.399	.378

"TINI-D-JAX" ENCLOSED PHONE JACK



Completely enclosed, subminiature 2-conductor phone jacks. Fully insulated molded plastic housing protects nickel-plated contact springs. Mate with "Tini-Plugs." ½" long, ⅜" wide, ⅝" depth behind panel. Bushing ¼"-32 thd. x .203" long. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Diagram	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-0975	142A	II	.39	.358	.325	.26	.247	.234

"TINI-JAX" MINIATURE PHONE JACKS

Extra small, 2-conductor jacks for use with "Tini-Plugs," elsewhere in this section. Miniature types with all features of "Littel-Jax" above, yet only one-third the size. 2¹⁄₃₂" long; fit ¼" dia. hole. 2 oz.

932-0796	41	I	.33	.303	.275	.22	.209	.198
932-0802	42A	II	.36	.33	.30	.24	.228	.216

JACK COVERS

Rugged spring-loaded covers. Provide dust- and moistureproof seals over jack openings. Use with conventional ⅜"-32 threaded bushing jacks. Special locknut seals into rubber washer inside cover. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Color	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-1280	512	Nickel	.81	.743	.675	.54	.513	.486
932-1283	515	Black	.81	.743	.675	.54	.513	.486
932-1287	520	Gray	.81	.743	.675	.54	.513	.486

Jacks, Plugs and Adapters

SWITCHCRAFT JACKS AND PLUGS

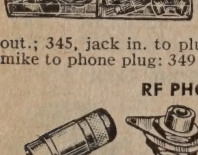
SWITCHCRAFT

PHONO JACKS AND PLUGS

Series 3501, 3502, 3503, 371. Easy-to-install phono jacks and phono plugs. 3501FR for rear panel mounting in ⅜" hole—fits panel to 1¾₆₄" thick. 3501FP for front panel mtg. in ¼" hole—fits panel to ⅛". 3501F and 3501M are std. 2-cond. audio connectors. 371 adapts phono jack for mtg. in panels to 1¼" thick; use with 3501-FP. 3503 extension jack is shielded, has removable 1³⁄₃₂" O.D. shell with cable clamp. 3502 has 1³⁄₃₂" O.D. shielded handle. 3501MC is unshielded, has ⅜" O.D. shell with crimping-type cable clamp.

Series 3508. Provides color coded phono plugs with cable clamp and "snap-on" plastic handles in red, black or white—simplify stereo wiring. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
932-1503	3501FR	A	Jack	.30	.28	.25	.20	.19	.18
932-1502	3501FP	B	Jack	.24	.22	.20	.16	.15	.14
932-1501	3501F	C	Jack	.10	.08	.075	.06	.57	.054
932-1509	3503	F	Ext. Jack	.42	.39	.35	.28	.27	.25
932-1506	3502	E	Plug	.33	.30	.28	.22	.21	.20
932-1505	3501 MC	H	Plug	.09	.083	.075	.06	.057	.054
932-1504	3501 M	G	Plug	.05	.06	.05	.04	.038	.026
932-1522	3508-1	J	Plug, Red	.15	.14	.13	.10	.095	.09
932-1523	3508-2	J	Plug, Black	.15	.14	.13	.10	.095	.09
932-1526	3508-5	J	Plug, White	.15	.14	.13	.10	.095	.09



HANDY 331A ADAPTER KIT

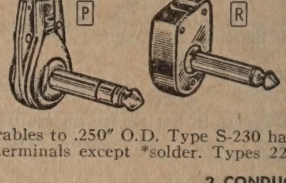
932-1108. 11 audio adapters, one cable. One each: 25AF25—36" shielded cable with plug each end; 25Y mike-con., Y adapter.; 330F1 Y adapt.; 332A, 2 cond. phone jack for female mike output; 334A, phono jack to phono plug; 336A, phone in. to phone out.; 336B, phone in. to jack out.; 345, jack in. to plug out.; two each: Type 44 adapter; male mike to phone plug; 349 coupler, phono jacks each end. 1 lb. 10.56

RF PHONO JACK AND PLUG

Nylon insulation. 2-conductor. Jack for front-of-panel mounting. With hardware. Plug has long screw-on handle for easy gripping and cable clamp for cord-strain relief. 2 oz.

932-1520	3507	K	Plug	.51	.47	.43	.34	.323	.306
932-1516	3505F	L	Jack	.39	.36	.33	.26	.247	.234

FLAT PHONE PLUGS



¼" flat phone plugs for where space is limited. I for back-of-chassis use. F removable plastic cap for connection of wire leads. rods are 1³⁄₁₆" long. All m lic parts of nickel plated br Types 220 and 225 ac standard phone tips. T cables to .250" O.D. Type S-230 has .206" dia. sleeve. Screw terminals except *solder. Types 228 and 238 are shielded.

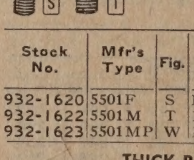
2 CONDUCTOR

Stock No.	Mfr's Type	Fig.	Handle Color	EACH 1-24	25-49	50-99	100-249	250-499
932-1015	220	R	Black	.84	.77	.70	.56	.532
932-1018	225	R	Red	.84	.77	.70	.56	.532
932-1020	227*	R	Black	.66	.605	.55	.44	.418
932-1022	228*	P	Metal	.75	.69	.63	.50	.475

3 CONDUCTOR

932-1025	230	R	Black	1.02	.94	.85	.68	.646
932-0194	S-230	R	Black	1.29	1.18	1.08	.86	.817
932-1027	235	R	Red	1.02	.94	.85	.68	.646
932-1029	237*	R	Black	.99	.91	.83	.66	.627
932-1031	238*	P	Metal	1.08	.99	.90	.72	.684

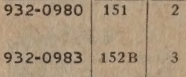
"MINI-CON" MICROPHONE-TYPE CONNECTORS



Popular miniature microphone-t connectors. About ½ size of stand mike connectors. For use with sin conductor shielded cables to ³⁄₁₆" O Nickel-plated brass bodies. Coupling on 5501F removable for quick chang female to male type. Cable-braid sp clamped to body by hollow set screw. 5 MP fits ³⁄₁₆" hole. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-24	25-49	50-99	100-249	250-499	5
932-1620	5501F	S	Female	.48	.44	.40	.32	.304	.2
932-1622	5501M	T	Male	.39	.36	.33	.26	.247	.2
932-1623	5501MP	W	Panel, male	.36	.33	.30	.24	.228	.2

THICK-PANEL MOUNTING JACKS



Have extra long bushings for use in pa up to 1¼" thick. Ideal for wall pane and hi-fi installations. Jacks are shiel for microphone use. Take standard phone plugs. Require 1⁵⁄₃₂" mounting hole. Both have solder te nals and cord-strain relief clamp. Length, 2⁵⁄₁₆". Shpg. wt., 2

Stock No.	Mfr's Type	Cond.	Use With "Littel Plugs"	EACH 1-24	25-49	50-99	100-249	250-5
932-0980	151	2	240, 245, 250, 255, 270, 280	.99	.91	.83	.66	.627
932-0983	152B	3	260, 267, 269, 297	1.08	.99	.90	.72	.684

H. H. SMITH DUAL AND SINGLE INSTRUMENT TEST ADAPTERS

DUAL INSTRUMENT ADAPTERS

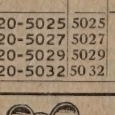
Excellent quality male, female dual binding post adapters. Insulated 5-way binding posts, with Red and Black heads on ¾" centers. Banana jack holes are provided for side stacking. Packages of 1, average shpg. wt. per pkg. 1 oz.

Stock No.	Mfr's Type	Fig.	Front Connection	EACH 1-24	25-49	50-99	100-Up
920-1782	1689	M	BNC/female	4.60	4.14	3.91	3.24
920-1876	1776	M	TNC male	6.00	5.40	5.10	4.22
920-1877	1777	M	TNC female	5.00	4.50	4.25	3.51
920-1880	1780	M	N male	5.00	4.50	4.25	3.51
920-1881	1781	M	N female	5.00	4.50	4.25	3.51
920-1795	1695	M	UHF male	4.60	4.14	3.91	3.24
920-1791	1691	M	UHF female	5.00	4.50	4.25	3.51
920-1782	1682	M	Dual bananas	2.25	2.03	1.91	1.58
920-1784	1684	M	2-cir. phone plug	4.60	4.14	3.91	3.24
920-1788	1688	N	BNC male	4.60	4.14	3.91	3.24
920-1798	1698	N	BNC male	10.00	9.00	8.50	7.05
920-1790	1690	N	UHF female to banana	4.60	4.14	3.91	3.24
920-1797	1697	N	BNC female to dual banana	9.00	8.10	7.65	6.35

SINGLE TEST ADAPTERS

High-quality single instrument test adapters, are standard adapters. Types 5025, 5032 have ban jack holes for side stacking in front connecti Types 5027, 5029 have centers with turret-term connections to isolated front and rear conduc for insertion in series input circuit.

Stock No.	Mfr. Type	Fig.	Front Connection	EACH 1-24	25-49	50-99	1
920-5025	5025	X	Binding post to banana	.90	.81	.77	
920-5027	5027	X	Binding post to isolated banana	1.00	.90	.85	
920-5029	5029	Y	Banana to isolated banana plug	.85	.77	.72	
920-5032	5032	Y	BNC jack to banana plug	1.50	1.35	1.28	

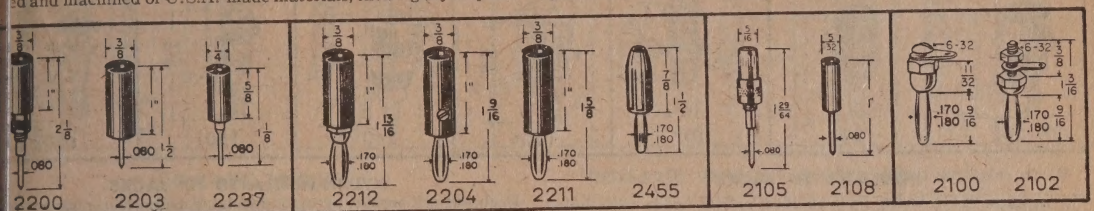


BATTERY BINDING POSTS

Easy-to-install binding posts. Have ho tapers ⅝ to ¾" diameter. Wt. 1 oz.
959-7914. 1-5....Each .84 6-29....Each .7
30-59.....Each .68 60-Up.....Each .6

Allied® Tip and Banana Plugs and Jacks

Allied Electronics' own tip and banana plugs and jacks, in insulated and non-insulated styles. All types are accurately molded and machined of U.S.A.-made materials, then rigidly inspected to assure precision quality. Check our wide selection for all your electronic requirements. Tip and banana jacks are supplied with hex mounting nut.



INSULATED AND NON-INSULATED TIP PLUGS

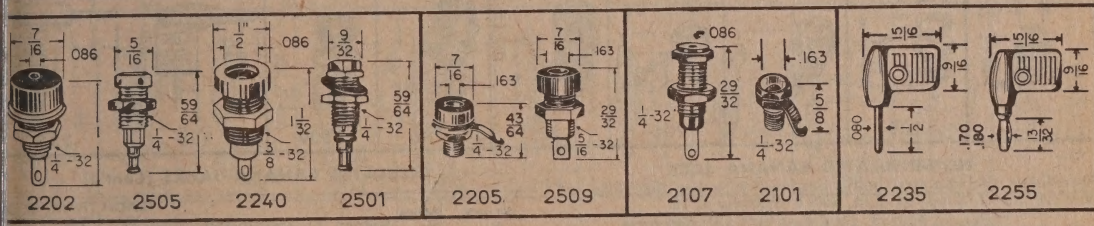
Nickel-plated brass construction for heavier current applications. Handles are molded thermosetting plastic except Type 2237 which is molded butyrate. Types 2105 and 2108 are non-insulated tip plugs. All are rated 12 amps AC. Shpg. wt. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-9	10-99	100-249	250-Up
6C2200	2200	Red or Black Specify	Solderless; wire tightens securely under knurled collar.	.22	.20	.17	.15
6C2237	2237	Red or Black	Hollow phone tip; solder-type.	.15	.14	.12	.10
6C2203	2203	Red or Black Specify	Short tip plug for applications where minimum metal can be exposed.	.18	.16	.13	.11
6-2105	2105	Nickel-plated	Solderless, all metal. Wire fastens under knurled collar.	.20	.18	.15	.13
6-2108	2108	Nickel-plated	Standard solid phone tip; solder type.	.05	.04	.03	.018

INSULATED AND NON-INSULATED BANANA PLUGS

Types 2212, 2204, 2211, 2455 insulated unbreakable handles. Types 2100 and 2102 are non-insulated.

Stock No.	Mfr's Type	Color	Description	EACH 1-9	10-99	100-249	250-Up
706C2212	2212	Specify Red or Black	Hex brass body; internal brass stud for solderless or solder connection.	.40	.36	.30	.27
706C2204	2204	Red or Black	Lead wire conn.; set screw thru handle.	.33	.30	.25	.22
706C2211	2211	Specify Red or Black	Wire solders to plug or stud; or stud locks wire for solderless connection.	.33	.30	.25	.22
706C2455	2455	Red or Black	Nylon. Solderless connection.	.33	.30	.25	.22
706-2100	2100	Nickel-plated	Panel-mtg. type; 6-32 tapped body.	.33	.30	.25	.22
706-2102	2102	Nickel-plated	Threaded-shank type; spring tip.	.33	.30	.25	.22



INSULATED TIP JACKS

Nylon-insulated except 2202, molded plastic insulation. Nickel-plated brass bodies, hex nut. Accept std. phone tip plugs. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-9	10-99	100-249	250-Up
06C2202	2202	Specify Red or Black	Phosphor-bronze spring. Plastic head. Extruded fiber washer for mtg. in 5/16" hole in panel to 3/8".	.20	.18	.15	.13
06C2505	2505	Specify Red or Black	Wrap-around type. Hex head. Mount in 1/4" hole in panels to 1/4".	.28	.25	.21	.18
06C2240	2240	Specify Red or Black	Phosphor-bronze spring. Mount in 3/8" hole in panels to 5/16". Rated 5000 V.	.26	.24	.20	.18
06C2501	2501	Red or Black	Wrap-around type; to MS-16108 spec.	.40	.36	.30	.27

INSULATED BANANA JACKS

Heavy duty, molded body. Supplied with fiber washer. 2 oz.

06C2205	2205	Specify Red or Black	Plastic head; nickel-plated brass body. For 5/16" hole, in panels to 3/8" thick.	.20	.18	.15	.13
06C2509	2509	Specify Red or Black	Molded nylon jack. Locks into panel by means of double "D" body. For 5/16" hole, panel to 5/16".	.15	.14	.12	.10

NON-INSULATED TIP AND BANANA JACKS

Nickel-plated brass bodies. Tip jack has phosphor-bronze spring. Mount in 1/4" hole in panels to 3/8" thick. With hex nut. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 1-9	10-99	100-249	250-Up
706-2107	2107	Nickel-plated	Tip jack for phone tip plugs.	.20	.18	.15	.13
706-2101	2101	Nickel-plated	Banana jack with tinned lug.	.20	.18	.15	.13

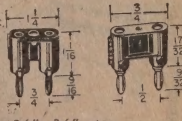
MOLDED RIGHT-ANGLE METER PLUGS

Right-angle plugs with plastic handles. Half shells assemble with one screw and nut. Lead wire solders to body. *Nickel-plated. 2 oz.

706C2255	2255	Red or Black	4-leaved phosphor-bronze springs.*	.52	.48	.40	.36
706C2235	2235	Red or Black	Maximum wire insulation, 3/64"	.40	.36	.30	.27

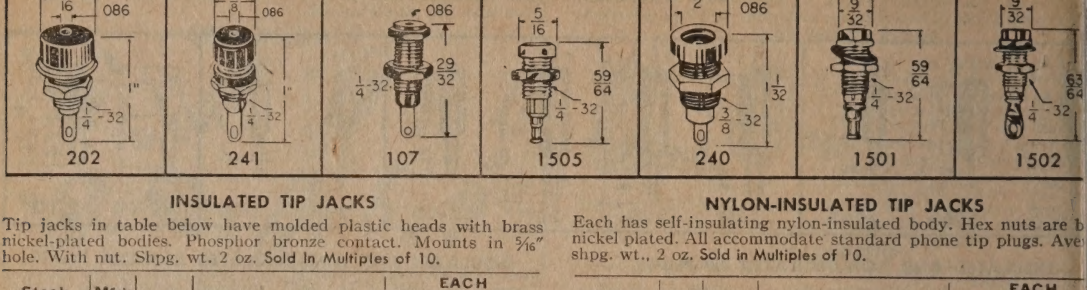
MOLDED DOUBLE BANANA PLUGS

Molded as single unit for banana jacks. Can be stacked for multiple connections. Molded polystyrene body per Fed. Spec. L-P416, Type 1. Nickel-plated brass plug. Takes wire to #12. 15-amp rating. Wt. 3 oz.



Type 2210. Standard plug. Overall, $1\frac{15}{16}$x$1\frac{3}{4}$"; 3/4" ctrs.
706-2210. 1-24.....Each .72 25-49.....Each .65
50-99....Each .58 100-499....Each .51 500-Up....Each .484
Type 1749. Miniature; 1/2" centers. Overall, $1\frac{7}{32}$x$2\frac{7}{32}$x1/2".
706-1749. 1-24.....Each .72 25-49.....Each .65
50-99....Each .58 100-499....Each .51 500-Up....Each .484

H. H. Smith Tip and Banana Jacks and Plugs



INSULATED TIP JACKS

Tip jacks in table below have molded plastic heads with brass nickel-plated bodies. Phosphor bronze contact. Mounts in 5/16" hole. With nut. Shpg. wt. 2 oz. Sold in Multiples of 10.

Stock No.	Mfr's Type	Color	Description	EACH 10-90	100-290	300-Up
920-0204	202	Red	With phosphor-bronze spring. Supplied with extruded fiber washer for insulated mounting in panel to 3/8" thick.	.18	.15	.135
920-0208	202	Yellow				
920-0206	202	Green				
920-0207	202	Blue				
920-0205	202	Black				
920-0292	241	Red	Supplied with molded nylon head, washer.	.32	.27	.24
920-0293	241	Black				

NON-INSULATED TIP JACK

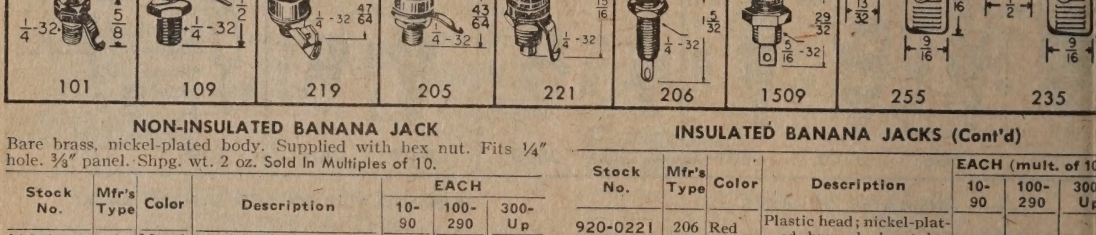
All metal. Brass nickel-plated body. Phosphor-bronze spring. With nut. Shpg. wt. 2 oz. Sold In Multiples of 10.

Stock No.	Mfr's Type	Color	Description	EACH 10-90	100-290	300-Up
920-0107	107	Nickel-plated	Mounts in 1/4" hole; fits panels to 3/8" thick.	.18	.15	.135

NYLON-INSULATED TIP JACKS

Each has self-insulating nylon-insulated body. Hex nuts are b nickel plated. All accommodate standard phone tip plugs. Ave shpg. wt., 2 oz. Sold in Multiples of 10.

Stock No.	Mfr's Type	Color	Description	EACH 10-90	100-290	30 U
920-1513	1505	Black	Wrap-around type. Hex head. Mount in 1/4" hole in panels to 1/4" thick.	.25	.21	.1
920-1516	1505	Yellow				
920-1514	1505	Green				
920-1515	1505	Blue				
920-1512	1505	Red				
920-0290	240	Red	Phosphor-bronze spring. Mtg. nut. Mt. in 3/8" hole. Fit to 5/16" panels. Rated 5000 V.	.24	.20	.1
920-0291	240	Black				
920-1503	1501	Red	Wrap around type made to MS-16108 specifications.	.36	.30	.27
920-1504	1501	Black				
920-1507	1501	Yellow				
920-1505	1501	Green				
920-1506	1501	Blue				
920-1502	1501	White				
920-1508	1502	Red	Spade type made to MS-16108 specifications.	.50	.42	.37
920-1509	1502	Black				



NON-INSULATED BANANA JACK

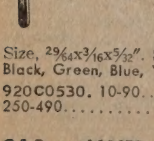
Bare brass, nickel-plated body. Supplied with hex nut. Fits 1/4" hole. 3/8" panel. Shpg. wt. 2 oz. Sold In Multiples of 10.

Stock No.	Mfr's Type	Color	Description	EACH 10-90	100-290	300-Up
920-0101	101	Metal	Tinned lug; takes banana plug.	.18	.15	.135
920-0109	109	Metal	With solder lug.			

INSULATED BANANA JACKS

Heavy-duty, molded body. Supplied with fiber washer. 2 oz.

920-0252	219	Red	Plastic head; nickel-plated brass body; solder lug and mtg. nut. For 5/16" hole, panel to 3/8"	.22	.18	.16
920-0255	219	Blue				
920-0253	219	Black				
920-0216	205	Red	Plastic head; nickel-plated brass body. For 5/16" hole, panels up to 3/8" thick.	.18	.15	.135
920-0220	205	Yellow				
920-0218	205	Green				
920-0219	205	Blue				
920-0217	205	Black				
920-0258	221	Red	Nylon head; fit 5/16" mtg. hole; for panels up to 1/4" thick.	.30	.25	.225
920-0259	221	Black				
920-0262	221	Yellow				
920-0260	221	Green				



TYPE 430 RIGHT-ANGLE TEST JACK

For reliable test point connections on printed circuit boards in a minimum of space. Accepts standard .080" dia. probe tips at either end. Snaps into .052" dia. holes on .400" centers, solders in place. For use with PC boards up to 3/16" thick. Tested to MIL-P-20693A for nylon; MIL-STD-202B for mechanical tests. Rated at 5 amperes and 1.5 kV, 60 Hz AC continuous. Size, 2 9/64 x 3/16 x 5/32". Sold in multiples of 10. Specify color: White, Red, Black, Green, Blue, Yellow, Gray. Shpg. wt. per 10, 3 oz.

920C0530. 10-90.....Ea. .14 100-240.....Ea. .11
250-490.....Ea. .10 500-Up.....Ea. .088

INSULATED BANANA JACKS (Cont'd)

Stock No.	Mfr's Type	Color	Description	EACH (mult. of 10) 10-90	100-290	300-Up
920-0221	206	Red	Plastic head; nickel-plated brass body; takes banana plug or tip plug; phos.-bronze spring. For 1/4" hole, up to 5/8" panel.	.24	.20	.18
920-0225	206	Yellow				
920-0223	206	Green				
920-0224	206	Blue				
920-0222	206	Black				
920-1521	1509	Red	Molded nylon jack. Locks into panel by means of double "D" body. For 5/16" hole, panel to 5/16".	.14	.12	.10
920-1522	1509	Black				
920-1525	1509	Yellow				
920-1523	1509	Green				
920-1524	1509	Blue				
920-1520	1509	White				

MOLDED RIGHT-ANGLE METER PLUGS

Right-angle plugs with plastic handles. Half shells assemble wi one screw and nut. Lead wire solders to body. *Nickel-plated. 2 o

Stock No.	Mfr's Type	Color	Description	EACH (mult. of 10) 10-90	100-290	300-Up
920-0208	255	Red	4-leaved phosphor-bronze springs.*	.48	.40	.36
920-0209	255	Black		.48	.40	.36
920-0282	235	Red	Maximum wire insulation, 9/64".	.36	.30	.27
920-0283	235	Black		.36	.30	.27

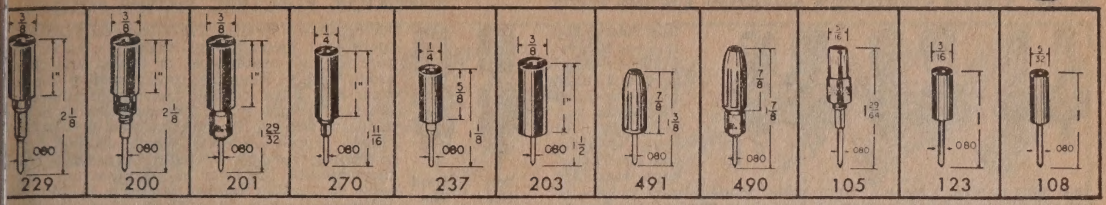
INSULATED SPADE LUG ADAPTE

Banana plug to spade lug adapte Molded plastic handle. Wires may b soldered to plug or terminated in banan plug. Shpg. wt. 2 oz. Sold in mult. of 1

920-0250	218	Red	Fork fits binding posts and terminal screws to No. 10.	.17	.14	.13
920-0251	218	Black		.117	.14	.13

Highest Percentage of Orders Filled in the U.S.A

H. H. Smith Tip, Banana Plugs and Test Jacks



INSULATED TIP PLUGS

nature nickel-plated brass construction for heavier current applitions. Handles are molded thermosetting plastic except Type 237, olded butyrate; Types 490 and 491, molded nylon; and Type 0, fibre. 12 amps AC. 2 oz. Sold in multiples of 10 only.

Stock No.	Mfr's Type	Color	Description	EA. (Mult. of 10) 10-90	100-290	300-Up
20-0275	229	Red	Std. tip; large dia. for soldering heavy-duty wire into nickel-plated brass body.	.20	.17	.15
20-0276	229	Black				
20-0200	200	Red	Solderless; wire tightens securely under knurled collar.	.20	.17	.15
20-0201	200	Black				
20-0202	201	Red	"Jr." solderless phone tip; wire fastens under knurled collar.	.20	.17	.15
20-0203	201	Black				
20-0327	270	Red	Submin.; std. tip, extra small dia.	.24	.20	.18
20-0328	270	Black				
20-0286	237	Red	Hollow phone tip, solder-type.	.14	.12	.108
20-0287	237	Black				
20-0209	203	Red	Short tip plug for applications where minimum metal can be exposed.	.16	.13	.118
20-0210	203	Black				

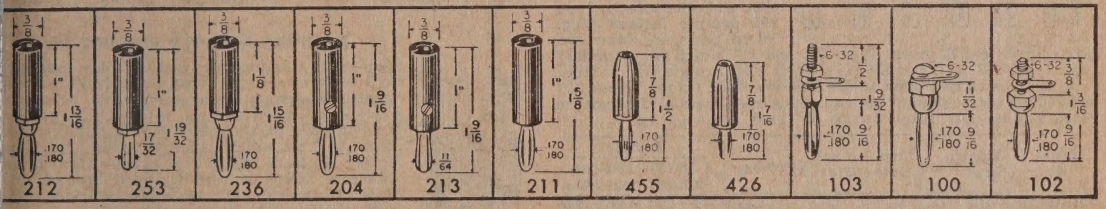
INSULATED TIP PLUGS (Cont'd) Sold in multiples of 10

Stock No.	Mfr's Type	Color	Description	EACH 10-90	100-290	300-Up
920-0578	491	Red	Short, tip plug (7/8" handle). Inserts flush, no metal exposed, Molded nylon handle.	.20	.165	.149
920-0577	491	Black				
920-0590	491	Yellow				
920-0580	491	Green				
920-0575	490	Red	Solderless tip plug with molded nylon handle. Threaded type.	.24	.20	.18
920-0576	490	Black				

NON-INSULATED TIP PLUGS

Nickel-plated brass phone tip plugs. Fit standard phone tip jacks. Type 123 has .149" inside diameter for larger wire. All are rated 12 amps AC, for 10°C temperature rise, continuous duty. 2 oz.

920-0105	105	Nickel-plated	Solderless, all metal. Wire fastens under knurled collar.	.18	.15	.135
920-0123	123	Nickel-plated	Heavy-duty solder-type.	.05	.04	.036
920-0108	108	Nickel-plated	Std. solid phone tip. Solder type.	.04	.03	.018



INSULATED BANANA PLUGS

nsulated banana plugs with unbreakable plastic handles. All are nachined of the best materials, and inspected. Have sufficient pring tension to assure good holding power and minimum contact esistance. Sold in multiples of 10 only. 2 oz.

Stock No.	Mfr's Type	Color	Description	EACH 10-90	100-290	300-Up
920-0237	212	Red	4-leaved phosphor-br. sprg. hex brass body. Sep. internal brass stud for solderless or solder connection.	.36	.30	.27
920-0241	212	Yellow				
920-0239	212	Green				
920-0240	212	Blue				
920-0238	212	Black				
920-0305	253	Red	Split type with internal brass stud for solderless or soldered connection.	.26	.22	.198
920-0306	253	Black				
920-0284	236	Red	4-leaved ni.-plated phosphor-br. spring. Threaded spacer for solderless connection.	.54	.45	.405
920-0285	236	Black				
920-0211	204	Red	4-leaved phosphor-br. nickel-plated sprg. Lead wire conn with set screw thru handle.	.30	.25	.225
920-0215	204	Yellow				
920-0213	204	Green				
920-0214	204	Blue				
920-0212	204	Black				
920-0242	213	Red	Cross-slotted body. Lead wire connection with set screw.	.22	.18	.16
920-0243	213	Black				
920-0232	211	Red	4-leaved phosphor-bronze nickel-plated spring. Wire solders to plug or stud; or stud locks wire for solderless connection.	.30	.25	.225
920-0233	211	Black				
920-0236	211	Yellow				
920-0234	211	Green				
920-0235	211	Blue				
920-0231	211	White				

INSULATED BANANA PLUGS (Cont'd)

Stock No.	Mfr's	Color	Description	EACH 10-90	100-290	300-Up
920-0554	455	Red	4-leaf, phos. bronze. Nylon. Solderless.	.30	.25	.225
920-0555	455	Black				
920-0526	426	Red	4-leaf, phos. bronze spring. Nylon. Midget.	.28	.23	.207
920-0527	426	Black				

NON-INSULATED BANANA PLUGS

Feature four-leaved, phosphor-bronze nickel plated springs. Each is supplied with terminal lug and hex nut. Shpg. wt., 2 oz.

920-0103	103	Nickel-plated	Threaded-shank type.	.30	.25	.255
920-0100	100	Nickel-plated	Panel-mtg. type; 6-32 tapped body. Intern'l threads for panel use.	.30	.25	.225
920-0102	102	Nickel-plated	Threaded-shank type; spring tip.	.30	.25	.225

STANDARD AND MINIATURE DOUBLE PLUGS

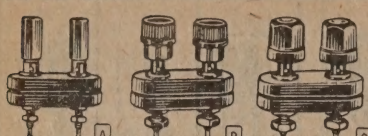
Double plugs molded as a single unit for banana jacks. Can be stacked for multiple connections. Body is of molded polystyrene per Fed. Spec. L-P416, Type 1. Nickel-plated brass plug. Wire up to #12 is held with internal set screw. 15-amp rating. Polarity indicated on top and side. Av. wt., 3 oz.

Type 210. Standard plug, 1 5/16 x 1 3/4". 3/4" ctrs.
920-0230. 1-24 ..... Each .72 25-49 ..... Each .65
50-99 ..... Each .58 100-Up ..... Each .51

Type 1749. Miniature plug. As above, but has 1/2" centers. 15-amp rating. Overall size, 1 1/32 x 27/32 x 1 1/2".
920-1855. 1-24 ..... Each .72 25-49 ..... Each .65
50-99 ..... Each .58 100-Up ..... Each .51

Binding Posts, Connectors and Plugs

H. H. SMITH STANDARD & MINIATURE BINDING POSTS



Dual Binding Post Assemblies. Quality-constructed dual binding-post assemblies ruggedly made for long trouble-free service. Accept standard dual banana-plug, wire, etc. Have solder studs. Mount in two ½" holes in 1/16" to ¼" panels. ¾x1 1/2" base. Type 209 has metal posts, rounded black base. Types 224 and 269 are 5-way; include 4 hex nuts and 2 flat washers. Type 224 has black, insulated, fluted heads. Type 269BB has black, hex-grip, insulated heads. Type 269RB is same as Type 269BB, but has one red and one black head.

Miniature Dual Binding Post Assemblies. Mount in two ¼" holes (on ½" centers) in up to ¼" panels. Accept dual connectors, miniature banana plugs, 0.080 phone tips, #6 spade lugs. Solder turret. Two hex nuts, flat washers. Gold-plated brass. Black heads. Type 3016RR is same as above, but has two red heads. Type 3016RB as above, but one red and one black head. Wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Mtg. Ctr.	Color	EACH 1-24	25-49	50-99	100-Up
920-0229	209	A	¾"	Metal/black	1.02	.85	.77	.73
920-0267	224BB	B	¾"	Black/black	.84	.70	.63	.60
920-0325	269BB	C	¾"	Black/black	.90	.75	.68	.64
920-0326	269RB	C	¾"	Red/black	.90	.75	.68	.64
920-2816	3016BB	C	½"	Black/black	.90	.75	.68	.64
920-2818	3016RR	C	½"	Red/red	.90	.75	.68	.64
920-2817	3016RB	C	½"	Red/black	.90	.75	.68	.64

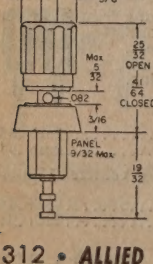
Assorted Multipurpose Nylon and Metal Binding Posts. For a wide variety of uses. All are rated 2000 volts at 30 amperes. Types 257, 220, and 260 have banana-plug jack in head—also accept phone-tip plug, spade lug, alligator clip, and wire strand. Type 208 accepts banana plug. Metal parts are brass, insulated front panel, except Types 220 and 337, which are grounding type. Types 257, 377, and 378 take direct solder connection to stud. Type 208 has wrap-around solder stud and 6-32 thread. Types 257 and 260 are both equipped with a locking edge. Type 3015 miniature fluted binding post; captive nylon ⅜" head. Av. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Mtg. Hole	Lgth. (Closed)	Color	EACH 1-99	100-299	300-499	500-Up
920-0228	208	D	11/64"	15/16"	Metal	.42	.35	.30	.28
920-0211	257	E	½"	1 43/64"	Red	.54	.45	.41	.36
920-0212	257	E	½"	1 43/64"	Black	.54	.45	.41	.36
920-0256	220	F	11/64"	1¼"	Red	.26	.22	.20	.18
920-0257	220	F	11/64"	1¼"	Black	.26	.22	.20	.18
920-0215	260	G	5/16"	1 11/16"	Red	.54	.45	.41	.36
920-0216	260	G	5/16"	1 11/16"	Black	.54	.45	.41	.36
920-0477	377	H	11/64"	1⅜"	Red	.42	.35	.32	.28
920-0478	377	H	11/64"	1⅜"	Black	.42	.35	.32	.28
920-0479	378	H	23/64"	1⅜"	Red	.42	.35	.32	.28
920-0480	378	H	23/64"	1⅜"	Black	.42	.35	.32	.28
920-2814	3015	E	¼"	1 5/16"	Red	.60	.50	.45	.40
920-2815	3015	E	¼"	1 5/16"	Black	.60	.50	.45	.40

J Type 110 Post. Metal binding posts for heavy-duty use and low-resistance connections. Binding posts are rated at 15 amps, 60 Hz AC, for 10°C temperature rise under continuous duty. Nickel-plated brass 21/32" long, 3/16" mtg. hole. Supplied complete with screw and lock washer. Shpg. wt., 2 oz.

920-0110. 1-99.....Each .30
100-299.....Each .25 300-Up.....Each .23

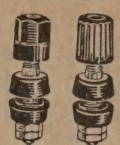
MINIATURE PRESS-FIT TEFLON BINDING POSTS



Type 3017. Mounts in ¼" "D" punched hole without hardware. "Memory" characteristic of Teflon locks unit in hole after insertion, and "D" Flat prevents rotation. For miniaturized equipment. Accepts 0.080" phone tip, #6 spade lug, miniature banana plug, alligator clip, or wire. Wrap-around solder turret. Captive head, molded nylon per MIL-P-20693A. Gold-plated brass insert and body. Virgin Teflon washer body, per MIL-P-19468. 5 amperes AC for 10°C rise, continuous duty. 1 kV, 60 Hz AC, continuous working voltage. 2.5 pF capacitance. Red, black, yellow, green, blue, or white—specify. Wt., 2 oz.

920 C 3017. 1-99.....Each .65
100-249.....Each .60 250-Up.....Each .57

SUPERIOR ELECTRIC BINDING POSTS



Exceptionally versatile five-way binding posts. T spade lugs, banana plugs, clip leads, up to No wire through center hole, or looped and clam around shaft. Ruggedly constructed of the fi materials. Brass current-carrying parts are g plated. Hex-nut types have durable nylon pl insulator and captive nut, meet MIL-P-20693 s except Type GP30NC which is nickel-pl grounding-type post. Fluted-nut types have low thermoplastic insulator and captive nut. All rated 30 amps at 1000 V. Mount in 1/16-¼" pa ½" mounting hole. 2 3/64 x ½" dia. Shpg. wt., 2 oz

HEX-NUT TYPES

Stock No.	Type	Color	Stock No.	Type	Co
930-0529	DF30YC	Yellow	930-0525	DF30RC	Red
930-0523	DF30GNC	Green	930-0521	DF30BLC	Blu
930-0527	DF30WTC	White	930-0549	GP30NC	Nic
930-0519	DF30BC	Black			

1-24.....Each .62 25-99.....Each .50 100-Up.....Each

FLUTED-NUT TYPES

930-0531	DF31BC	Black	930-0537	DF31RC	Red
930-0533	DF31BLC	Blue	930-0539	DF31WTC	Wh
930-0535	DF31GNC	Green	930-0541	DF31YC	Yel

1-24.....Each .62 25-99.....Each .50 100-Up.....Each

MINIATURE FLUTED-NUT TYPES

Rated 15 amps at 1000 V. Current-carrying parts are gold-pl brass. Plastic parts are of durable nylon. Meet MIL-P-20693, T IV specs. For 1/16-¼" panels. Mount in ⅜" hole. Size, 1 21/32 x 7/16". Choice of 6 colors. Shpg. wt., 2 oz.

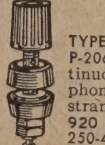
930-0507	DF21BC	Black	930-0513	DF21RC	Red
930-0509	DF21BLC	Blue	930-0515	DF21WTC	Wh
930-0511	DF21GNC	Green	930-0517	DF21YC	Yel

1-24.....Each .62 25-99.....Each .50 100-Up.....Each

AC DUAL-ADAPTER BINDING POST

Top-quality binding post with AC plug connect to 5 ways for extreme versatility. Ideal for deve mental laboratory applications, line voltage frequency monitoring, etc. Utilizes T DAP15BWC parallel-blade plug that fits stand 2-wire AC receptacle. Accepts spade lugs, ban plugs, clip leads, up to No. 12 wire through .0 diameter holes, or wire wrapped around sha Rated 15 amps at 125 volts. Has color-coded thu nuts, 1 white, 1 black. Shpg. wt., 3 oz.

930-0505. 1-9.....Each 2
10-Up.....Each 1



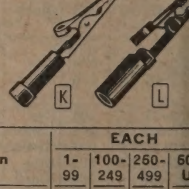
H. H. SMITH NYLON BINDING POST

TYPE 459. Fluted head post with head and washer per P-20693A. Rated 30 amps AC for 10° temperature rise, continuous duty. Working voltage, 2 kV at 60 Hz. Acc phone tip plug, spade lug, banana plug, alligator clip, strand. Mounts in ½" hole. Specify Red or Black.

920 C 0561. 1-99....Ea. .56 100-249.....Ea.
250-499.....Ea. .41 500-Up.....Ea.

H. H. SMITH INSULATED ALLIGATOR CLIPS

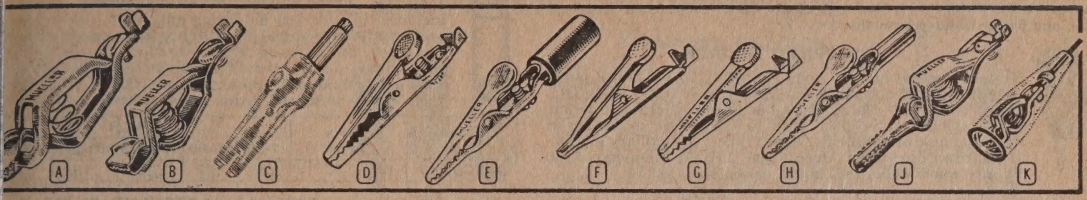
All have plastic insulated handles. Types 304, 305, and 310 are Figure K, others are Fig. L. Clips are cadmium plated steel. Rated at 5 amperes. 336 and 337 are all insulated to prevent shock or grounding. All accept standard tip plug except *tip and †banana plug. ‡Threaded insert to accept standard solderless tips. Av. shpg. wt. 1 oz.



Stock No.	Mfr's Type	Color	Description	EACH 1-99	100-249	250-499	5
920-0405	304	Red	With tip jack adapter	.42	.36	.35	
920-0406	304	Black	With tip jack adapter	.42	.36	.35	
920-0407	*305	Red	With tip & banana jack	.50	.43	.42	
920-0408	*305	Black	With tip & banana jack	.50	.43	.42	
920-0413	‡310	Silver	With tip jack adapter	.18	.15	.14	
920-0436	336	Red	With tip jack adapter	.46	.40	.39	
920-0437	336	Black	With tip jack adapter	.46	.40	.39	
920-0438	†337	Red	With banana plug adapt.	.31	.28	.26	
920-0439	†337	Black	With banana plug adapt.	.31	.28	.26	

Allied Electronics Is the World's Largest Supplier of Electronic Components for Indust

Mueller General-Purpose Test Clips



3-SIDED MESH-TEETH CLIPS

§Cadmium-plated steel; *solid copper; †with insulation-piercing needle. #Wt. per 100 pieces.

Stock No.	Mfr's Type	Amps	Size	#Wt. Lbs.	EACH 1-9	10-99	100-499	500-Up
0-0036	§25	40	3″	6	.24	.17	.14	.13
0-0044	§27	20	2 7/16″	3¼	.18	.12	.10	.09
0-0046	*27C	40	2 7/16″	3½	.31	.22	.19	.18
0-0097	§48B	10	2″	2	.15	.10	.09	.08
0-0099	*48C	20	2″	2¼	.22	.15	.13	.12
0-0105	*†50C	20	2¼″	2½	.36	.25	.21	.20
0-0107	*51C	20	2½″	2½	.25	.18	.15	.14

"PEE-WEE" TEST CLIPS

Mesh-teeth type for general purpose use. Type 45C of solid copper. Type 45 of cadmium-plated steel. #Wt. per 100 pcs.

Stock No.	Mfr's Type	Amps	Size	#Wt. Lbs.	EACH 1-9	10-99	100-499	500-Up
0-0085	45	5	1½″	1	.10	.07	.058	.055
0-0087	45C	10	1½″	1¼	.17	.12	.103	.098

HEAVY-DUTY SOLID COPPER CLIPS

High-conductivity, solid copper clips. Handle current loads of up to 200 amps. Lbs. per 100 pcs.: *6¾, †18, §41.

Stock No.	Mfr's Type	Amps	Marking	Size	EACH 1-9	10-99	100-499	500-Up
0-0038	*25C	75	unmarked	3″	.51	.36	.30	.29
0-0025	†21C	100	plus sign	4½″	1.34	.94	.80	.76
0-0026	†21C	100	unmarked	4½″	1.34	.94	.80	.76
0-0007	§11C	200	plus sign	6″	2.65	1.85	1.59	1.51
0-0009	§11C	200	unmarked	6″	2.65	1.85	1.59	1.51

LEAD-PLATED BATTERY CLIPS

For moderately heavy current loads, including battery charging, electroplating, and light welding. Lead-plated steel for complete tection and long life. Lbs. per 100 pcs.: *6¼, †15, §36.

0-0032	*24A	25	plus sign	2 7/8″	.29	.20	.17	.16
0-0034	*24A	25	unmarked	2 7/8″	.29	.20	.17	.16
0-0021	†21A	50	plus sign	4″	.52	.36	.31	.30
0-0023	†21A	50	unmarked	4″	.52	.36	.31	.30
0-0005	§11A	100	unmarked	6″	1.44	1.01	.86	.82

INSULATED ALLIGATOR CLIPS

§Cadmium-plated steel; *solid copper. Insulated with vinyl to protect against shocks and shorts. Av. per 100 pcs., 1¾ lbs.

Stock No.	Mfr's Type	Amps	Marking	Size	EACH 1-9	10-99	100-499	500-Up
0-0139	§63	5	Red insul.	2 1/8″	.23	.16	.14	.13
0-0137	§63	5	Black insul.	2 1/8″	.23	.16	.14	.13
0-0143	*63C	10	Red insul.	2 1/8″	.27	.19	.16	.15
0-0141	*63C	10	Black insul.	2 1/8″	.27	.19	.16	.15

70 SERIES ALLIGATOR CLIPS

Streamlined, simplified design. No. 70, cadmium-plated steel, solder connection; No. 70S, cadmium-plated steel, screw connections. No. 70CS, solid copper, screw connection. 1 lb. per 100.

Stock No.	Mfr's Type	Amps	Barrel Color	Size	EACH 1-9	10-99	100-499	500-Up
0-0150	70	5	.....	1 1/16″	.08	.06	.049	.046
0-0154	70S	5	.....	1 1/16″	.10	.07	.058	.055
0-0152	70CS	10	.....	1 1/16″	.16	.10	.094	.089

INSULATED-BARREL ALLIGATOR CLIPS

Made of cadmium-plated steel, except Types 60CHS are solid copper. Jaws open 5/16″. 1½ lbs. per 100 pcs.

0-0123	60HS	.....	Red	2 11/32″	.16	.12	.098	.093
0-0121	60HS	.....	Black	2 11/32″	.16	.12	.098	.093
0-0117	60CHS	.....	Red	2 11/32″	.22	.16	.134	.127
0-0115	60CHS	.....	Black	2 11/32″	.22	.16	.134	.127

"MICRO-GATOR" CLIPS

Similar to "Mini-gators" but with tiny tip for clipping to small terminals, and as heat sink. §Cadmium-plated steel; * copper.

0-0062	§34	.....		1 3/32″	.07	.05	.04	.039
0-0064	*34C	.....		1 3/32″	.09	.06	.05	.05

"MINI-GATOR" CLIPS

G Ideal for testing all types of miniature and subminiature equipment. 3/16″ jaw opening. 1 1/64″ O.D. tip when used with insulator. Type 30, cadmium-plated steel; Type 30C, solid copper, for #20 or smaller wire. Shpg. wt., ¼ lb. per 100.

Stock No.	Mfr's Type	Amps	Size	EACH 1-9	10-99	100-499	500-Up
860-0052	30	5	1 1/16″	.09	.06	.053	.051
860-0054	30C	10	1 1/16″	.11	.08	.065	.061

60 SERIES ALLIGATOR CLIPS

H Steel, except 60CS, solid copper. *Insulation-piercing needle. Fit banana plugs. Jaws open 5/16″. 2″ long. 1 lb. per 100.

Stock No.	Mfr's Type	Connection	EACH 1-9	10-99	100-499	500-Up
860-0113	60	Solder	.10	.06	.06	.058
860-0129	60S	Screw	.12	.08	.07	.066
860-0119	60CS	Screw	.18	.13	.108	.103
860-0126	*60NS	Screw	.23	.16	.136	.129
860-0127	60PR2	Crimp	.15	.10	.087	.083

CROCODILE CLIPS

J Cadmium-plated steel, except Type 85C is solid copper. Type 85T has phone tip on one jaw. Wt., 1½ lbs. per 100.

Stock No.	Mfr's Type	Size	Description	EACH 1-9	10-99	100-499	500-Up
860-0167	85	2⅛″	Screw Connection	.12	.08	.072	.069
860-0169	85C	2⅛″	Screw Connection	.24	.17	.142	.134
860-0171	85T	2 5/8″	Tip-Clip	.31	.22	.184	.175

SLIP-ON INSULATORS FOR CLIPS

K Tough, flexible vinyl insulators for above clips. Offer high dielectric strength; resistant to oils and grease. Cover entire clip except for end of nose. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Color	Use With Series	EACH 1-9	10-99	100-499	500-Up
860-0015	13	Red	11	.86	.60	.52	.49
860-0013	13	Black	11	.86	.60	.52	.49
860-0030	23	Red	21	.47	.33	.28	.27
860-0028	23	Black	21	.47	.33	.28	.27
860-0042	26	Red	24, 25	.29	.20	.17	.16
860-0040	26	Black	24, 25	.29	.20	.17	.16
860-0050	29	Red	27	.19	.13	.12	.11
860-0048	29	Black	27	.19	.13	.12	.11
860-0058	32	Red	30	.05	.03	.03	.02
860-0056	32	Black	30	.05	.03	.03	.02
860-0070	36	Red	34	.05	.03	.03	.02
860-0068	36	Black	34	.05	.03	.03	.02
860-0095	47	Red	45	.08	.05	.05	.04
860-0093	47	Black	45	.08	.05	.05	.04
860-0103	49	Red	48, 50	.12	.09	.07	.06
860-0101	49	Black	48, 50	.12	.09	.07	.06
860-0135	62	Red	60, 70	.06	.04	.04	.03
860-0133	62	Black	60, 70	.06	.04	.04	.03
860-0160	72	Red	70	.06	.04	.04	.03
860-0158	72	Black	70	.06	.04	.04	.03
860-0177	87	Red	85	.08	.05	.05	.04
860-0175	87	Black	85	.08	.05	.05	.04

"HIPPO" AND "PIGMY HIPPO-CLIPS"

Strong full-channel-constructed plier clips with two vinyl insulating sleeves. Handles are full size to the end for greater strength and current capacity. Standard "Hippos" are 6″ long, have 1 3/16″ jaw opening. "Pigmy-Hippos" are 3″ long, have 1⅛″ jaw opening. Built-in solder strap and cable clinching ears. Bright copper-plated steel. Type 41A is standard size; Type 46A, "Pigmy." Wt. per 100: *41 lbs.; †5¾ lbs.

Stock No.	Mfr's Type	Amps	Sleeve Color	Marking	EACH
860-0077	41A*	100	Black	minus sign	.60
860-0079	41A*	100	Red	plus sign	.60
860-0089	46A†	50	Black	unmarked	.18
860-0091	46A†	50	Red	unmarked	.18

E. F. Johnson Plugs, Jacks and Binding Posts

TYPE NUMBER DATA: Digits in Manufacturer's Type Number that indicate color (White—01, Red—02, Black—03, Green—04, Yellow—07, and Blue—10 have been listed as "X."

LOW-PRICED TIP JACK

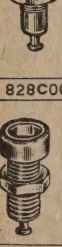
Tough, low-loss molded body. Capacity to 1/8" metal panel is only 2.0 pF; voltage breakdown test is 9,000 volts DC. Has formed cad.-plated phosphor bronze contact. Current rating: 10 amps. Supplied with 1/4"-32 nut for mounting in 17/64" dia. hole or double-flat keyed hole. No auxiliary mounting hardware required. Overall size, 1 1/32 x 3/8" diameter. 2 oz. Specify color: white, red, black, green, blue, yellow.

Stock No.	Mfr's Type	EACH				
		1-49	50-99	100-499	500-999	1000-Up
828C0016	105-XX	.13	.12	.11	.10	.08

STANDARD METAL-CLAD TIP JACK

Shock-proof polyamide and metal construction resists chipping or cracking. Highly resistant to extremes of heat, cold and moisture. Nickel-plated machined brass jacket protects nylon body—assures positive fastening to mounting surface. Has formed silver-plated phosphor bronze contact. Rated: 10 amps. Voltage breakdown is 7,000 VDC; capacity to 1/8" panel is 3.8 pF. With 1/4"-32 nut. Fit 17/64" hole. 1 1/16 x 9/32" dia. 2 oz. Specify color: white, red, black, green, blue, yellow.

828C0005	105-25X-1	.18	.16	.15	.14	.10



MIL TYPE METAL-CLAD TIP JACK

MS-16108, rev. F type jack. Body is protected by nickel-plated, machined brass jacket—resists chipping or cracking under hardest usage. Has gold-plated, beryllium copper contact, and brass terminal end. Current rating: 5 amps; voltage breakdown: 8000 VDC. Capacity to 1/8" metal panel is 3.8 pF. With nickel-plated phosphor bronze lock washer and 1/4"-32 nut for 17/64" hole. Size, 31/32 x 3/32" dia. 2 oz. Specify color: white, red, black, yellow.

828C0003	105-XX-200	.30	.27	.25	.23	.18

DELUXE TIP JACK

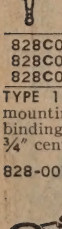
Capacity to 1/8 metal panel 2.0 pF. .081" tip. Silver-plated beryllium copper contacts. Body threaded 1/4"-32 for single nut mtg. With 1/4"-32 nut for mtg. in 17/64" dia. hole. Rated 10 amps; DC breakdown, 11,000 V. Length 29/32". Dia. 3/8". Shpg. wt., 2 oz. Specify color: white, red, black, green, blue, yellow.

828C0009	105-6XX	.18	.17	.15	.14	.11

STANDARD AND SUBMINIATURE TIP PLUGS

Completely insulated. Recessed head. Metal parts are nickel-plated brass. Standard: for solderless connection of up to No. 16 stranded wire; 10-amp rating. Pin size, 9/16" x .081" dia. Body, 7/8" x 3/8" dia. Subminiature: solder connection; 10-amp rating. Pin size, .080 x 21/64" dia. Body, 5/8 x 3/16" dia. 2 oz. Specify white, red, black, green, blue, yellow.

828C0007	105-3XX	.17	.16	.14	.13	.10
828C0014	105-7XX	.21	.19	.17	.16	.12



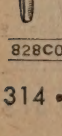
MINIATURE, STANDARD, JUMBO, SIX-WAY POSTS

Series 111-2, Min. 15 A. Breakdown, 5000 VDC. 1/4"-32 nut mtg. in 17/64" dia. round, "D," or double-flat hole. 1 5/16" long, 3/8" dia. Series 111-1, Std. 15 A. Breakdown, 8000 VDC. 5/16"-32 nut mtg. in 21/64" dia. round, "D," or double-flat hole. 1 15/16" long, 7/16" dia. Series 111-3, Jumbo. 40 A. Breakdown, 7000 VDC. 1/2"-20 nut mtg. in 1/2" dia. round, "D," or double-flat hole. 2" long, 5/8" dia. 1/2 oz. Specify: white, red, black, green, blue, yellow.

828C0037	111-2XX	.25	.23	.21	.19	.17
828C0036	111-1XX	.30	.29	.26	.24	.19
828C0038	111-3XX	.40	.37	.34	.30	.27

TYPE 111-20 MOUNTING PLATE. Pre-punched, etched aluminum mounting plate permits simple, accurate mounting of two nylon binding posts or two nylon banana jacks in 21/64" diameter holes on 3/4" centers. 1 1/4 x 1/2". Shpg. wt. 2 oz.

828-0035.....03



SOLDERLESS DUAL BANANA PLUG

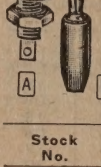
Shock resistant insulating body—retains strength. Provide strain relief to wire leads. Plug springs are nickel-silver. Body is nickel-plated, machined brass. Brass studs extend full length of plug pins for extra strength. Pins have accurate 3/4" spacing. Rated: 15 amps; plug to plug capacity: 1.3 pF; voltage breakdown: 10,000 VDC. Overall length, 1 19/32". 2 oz. Specify color: white, red, black, green, blue, yellow.

828C0020	108-2XX	.80	.71	.65	.59	.46

SLEEVE AND JACK ASSEMBLY

Includes tip jack, less mounting nut, in an inside thre insulating sleeve. Ideal for patch cords and panel m ings where an insulated rear connection of a tip jack i sired. Silver-plated, beryllium-copper contact; hot t dipped terminal end. Breakdown, 8,000 V. 1 1/16" x 3/8" 3 oz. Specify white, red, black, green, yellow.

Stock No.	Mfr's Type	EACH				
		1-49	50-99	100-499	500-999	1000
828C0011	105-7XX	.24	.22	.20	.18	.1

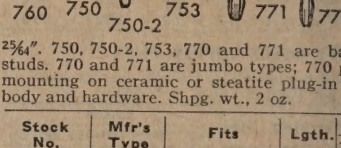


BANANA JACKS AND PLUGS

Low-loss body. Capacity to 1/16" metal panel, pF. Breakdown test 10,000 VDC. Jack has cadmi plated insert. Supplied with 5/16"-32 nut for mo ing jack in 21/64" diameter hole. Plugs have ni plated brass body. Solderless connection take to No. 16 stranded wire. Length: jack, 1 5/16"; p 1 3/8". Shpg. wt., 2 oz. Specify color: white, red, b green, blue, or yellow.

Stock No.	Mfr's Type	Fig.	EACH				
			1-49	50-99	100-499	500-999	1000-
828C0033	108-9XX	A	.11	.10	.09	.08	.06
828C0024	108-3XX	B	.21	.20	.18	.16	.13

NON-INSULATED PLUGS AND JACKS



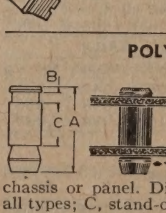
740 nickel-plated b jack, with solder minal and nut. for jumbo plugs, v solder terminal nut. 740 requires dia. mtg. hole; 25/64". 750, 750-2, 753, 770 and 771 are banana plugs. Have b studs. 770 and 771 are jumbo types; 770 plugs have long screw mounting on ceramic or steatite plug-in coil forms. Nickel p body and hardware. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fits	Lgth.	EACH			
				1-49	50-99	100-499	500-
828-0026	108-740	750, 750-2, 753	5/8"	.16	.15	.13	.1
828-0027	108-750	740	1 1/8"	.23	.22	.20	.1
828-0028	108-750-2	740	1 1/2"	.21	.19	.18	.1
828-0029	108-753	740	1 5/16"	.21	.19	.18	.1
828-0030	108-760	770, 771	1"	.50	.46	.43	.3
828-0031	108-770	760	1 25/32"	.40	.37	.34	.3
828-0032	108-771	760	1 1/8"	.65	.59	.54	.4

SUBMINIATURE VERTICAL JACKS

TYPE 105-85X. Rated at 5 amps. Operating voltage, 1 volts. Contact resistance less than 2 milliohms. B material, low-loss polyamide, meets MIL-M-20693A sp Beryllium copper contacts for firm contact. Sil plated. 7/16" long, 3/16" dia. Mounts single .052" hole. 2 Specify: white, red, black, green, yellow, blue.

47 E 6360 C. 1-49....Each .12 50-99.....Each
100-499.....Each .10 500-Up.....Each

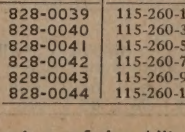


TEST POINT STRIP HANDLE

TYPE 266-402. Permits fast trouble shoot of PC boards. Low-loss polyamide body insulation resistance greater than 200 m ohms after MIL-T-5422B humidity test. 5 a capacity. Operating voltage, 1500 volts. C tact resistance less than 2 milliohms. Beryllii copper plated. Wt., 1 oz.

828-0183. 1-49...Each 1.35 50-99...Each 1.
100-499.....Each 1.13 500-Up..Each 1.

POLYAMIDE SPACER BUSHINGS



Low-loss polyamide spacer bushings all you to mount PC boards to panel or ch sis without the use of nuts or bolts. Can used for easy service. Mechanically sec and nonconductive combination. M chined from nylon snap in any predrill .152 ±.002 diameter hole in a 1/16" thi chassis or panel. Dimensions: A, overall length; B, .065-.070 all types; C, stand-off height. 4 oz. Sold in multiples of 50 only.

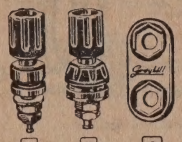
Stock No.	Mfr's Type	Dimensions		EACH		
		A	C	50-100	100-450	500-
828-0039	115-260-1	.396	.125	.14	.12	.11
828-0040	115-260-3	.521	.250	.14	.12	.11
828-0041	115-260-5	.646	.375	.14	.12	.11
828-0042	115-260-7	.771	.500	.16	.14	.12
828-0043	115-260-9	.896	.625	.16	.14	.12
828-0044	115-260-11	1.021	.750	.16	.14	.12

Use the Services of the Allied Electronics Facility Nearest Y

Binding Posts, Test Clips, Jacks and Terminals

GRAYHILL BINDING POSTS, CLIPS AND TERMINALS

BINDING POSTS AND DUAL MOUNTING BASES



TYPE 29-1 BINDING POST. Screw binding post for ⅜" dia. mtg. hole—allows ser spacing of posts. Takes banana plugs, es, spade lugs, prod tips, etc. Mounts on el up to 3/16" thick—insulation resistance 0,000 megohms; voltage breakdown 3000 ts AC. 1" in front of panel, .69" behind. " diameter. Shpg. wt., 4 oz.

TYPE 29-3 BINDING POST. Screw binding post for ½" dia. mounting hole. For in existing equipment or where wider spacing is desirable. Takes nana plugs, wires, spade lugs, prod tips, etc. Mounts on panel up 1/16" thick—insulation resistance 200,000 megohms; voltage breakwn 3800 volts AC. Post extends 1" in front of panel, .69" behind. " diameter. Shpg. wt., 4 oz.

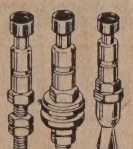
TYPE 29-33 BINDING POST. Spring loaded binding post—head gives 24 oz. of contact force. For ½" mounting hole in panels to " thick. Insulation resistance 200,000 megohms; voltage breakwn between studs and mounting panel, 3800 volts AC. Extends " in front of panel, .69" behind. .62" diameter. Insulating washer, ⅝" dia. Shpg. wt. 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-49	50-99	100-999	1000-Up
1-0621	29-1	A	Red—Screw type	.63	.50	.38	.35
1-0620	29-1	A	Black—Screw type	.63	.50	.38	.35
1-0631	29-3	B	Red—Screw type	.63	.50	.38	.35
1-0630	29-3	B	Black—Screw type	.63	.50	.38	.35
1-0641	29-33	B	Red—Spring loaded	.63	.50	.38	.35
1-0640	29-33	B	Black—Spring loaded	.63	.50	.38	35

TYPE 29B11 DUAL MOUNTING BASES. Use with Type 29-1 binding posts in table above. Makes assembled unit with two binding posts on ¾" centers. Base is molded phenolic to Type CFG specifications. Shpg. wt. 8 oz.

1-0612. Type 29B11-2. Red Base. 1-24..Ea. .19 25-499..Ea. .15
0-999.....Ea. .113 1000-Up.....Ea. .105
1-0611. Type 29B11-1. Black Base. 1-24 Ea. .19 25-499 Ea. .15
0-999.....Ea. .113 1000-Up.....Ea. .105

"PUSH-POST" PLUNGER TYPE BINDING POSTS



unger type binding posts for positive, quick nnections. Just depress button and place lead .06" slot—spring pressure assures firm contact. ith red or black buttons. Wt. per pkg., 7 oz.

TYPE 29-100. For 11/64" mounting hole less insulating washers—use as ground on panels up 3/16" thick. Extends only ⅛" above panel; 1½" erall length, ¼" dia. Wt. per pkg., 7 oz.

TYPE 29-104. Same as Type 29-100 above but with insulating washers to prevent grounding panel. For ⅜" mounting holes.

TYPE 29-101. "Push-Post" with standard banana plug converts any banana jack to a plunger type binding post. Nickel-plated ass. Thermoplastic button. ½" diameter, 1.80" long. Shpg. wt. r pkg., 7 oz.

Stock No.	Mfr's Type	Fig.	Color	EACH 1-24	25-49	100-999	1000-Up
301-0651	29-100R	D	Red	.56	.45	.338	.315
301-0650	29-100B	D	Black	.56	.45	.338	.315
301-0655	29-104R	E	Red	.75	.60	.45	.42
301-0656	29-104B	E	Black	.75	.60	.45	.42
301-0653	29-101R	F	Red	.75	.60	.45	.42
301-0652	29-101B	F	Black	.75	.60	.45	.42

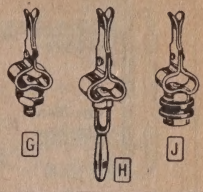
RAYTHEON TEST JACKS

op-quality test jacks for standard .080" diameter test ods. Meet MIL-MS-16108 rev. F specifications. Use thread- nickel-plated brass sleeve for mounting; beryllium-copper ring pin contacts. Mount securely with nut and washer. l are nylon insulated. Shpg. wt. pkg. of 25, 1 lb.

Stock No.	Mfr's Type	Color	Mtg. Hole	EACH 1-24	25-99	100-499	500-Up
004-0995	TJ-103R	Red	¼"	.36	.29	.25	.23
004-0997	TJ-105BL	Black	¼"	.36	.29	.25	.23
004-0999	TJ-018W	White	¼"	.36	.29	.25	.23

See Page 339 for Grayhill Standoff Terminals

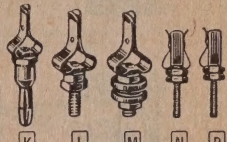
STANDARD TEST CLIPS



Test clips for panel mounting on test equipment. Permits rapid connection of wires or pigtail components. Type 2-0: for panels to ¼" thick. Has 8-32 stud. Type 2-1: converts banana jack to test clip. Type 2-4: same as Type 2-0, but with insulated washers. Shpg. wt., per pkg., 6 oz. *Sold in multiples of 10 only.*

Stock No.	Mfr's Type	Fig.	Description	Total Lgth.	EACH
801-0001	2-0	G	Threaded Stud Test Clip	1.56"	.25
801-0002	2-1	H	Banana Plug Test Clip	2.06"	.40
801-0004	2-4	J	Threaded Stud w/Ins. Washer	1.56"	.40

MINIATURE TEST CLIPS



Miniature version of above—extend only ¾" above mounting panel. Hex nut under clip permits tension adjustment. Nickel-plated brass or steel. Type 2-21: min. clip on std. banana plug. Type 2-20: for up to ¼" panels. Has 6-32 stud. Type 2-24: as 2-20, but with ins. washers. Per pkg., 5 oz.

801-0021	2-21	K	Banana Plug Test Clip	1.50"	.45
801-0020	2-20	L	Threaded Stud Test Clip	1.13"	.25
801-0024	2-24	M	Threaded Stud w/Ins. Washer	1.50"	.40

N P ULTRAMINIATURE TEST CLIPS

Tiny test clips require panel area of only 3/16x1/8" for single clip; ¼x ⅛" for double clip. ⅜" long 2-56 mtg. stud. Av. wt., 3 oz.

801-0042	2-42	N	Double Clip	.79"	.30
801-0041	2-41	P	Single Clip	.79"	.25

TEST CLIP ADAPTER

TYPE 2-2. For testing resistors, capacitors and other pigtail components. Plugs into std. banana jacks mounted on ¾" centers; spring clips accept wire leads. Metal parts are nickel plated. Hex nut permits tension adjustment of individual clips which extend 1⅛" above board. Board is molded phenolic to MIL-M-14. Shpg. wt., 2 oz.
801-0003. 1-9....Each 2.19 10-Up....Each 1.75

INSULATED TEST CLIPS

TYPE 16. Molded parts are phenolic to MIL-M-14. .008" silver overlay at point of contact. Contact res., .0015 ohm. Silver-plated brass terminals. 500-V insulation test. 2" long. 1 oz.
801-0351. Red. 801-0352. Black. 1-9..Each 1.75 10-Up..Each 1.40

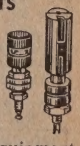
ADMIRAL CONTROLS "ADLOC" BINDING POST

• Spring Tension For Quick Connect . . Disconnect

Push down on top, insert wire (up to 12 gauge), release and positive contact is made instantly. Also for spade lugs, plugs, clamps and prods. Has a brass nickel-plated post, nylon plastic insulator. Rated 20 amps at 1000 V, rms. For .314" hole in panels 1/32" to ¼". 2 3/32x5/8". Suffix "B", black; "R", red. In Pkgs. of 5. Shpg. wt., 3½ oz.

Stock No.	Mfr's Type	EACH 1-9	10-99	100-199	200-Up
729-0031	AL2000B	.90	.79	.73	.68
729-0032	AL2000R	.90	.79	.73	.68

EBY MIL-TYPE WATERTIGHT BINDING POSTS

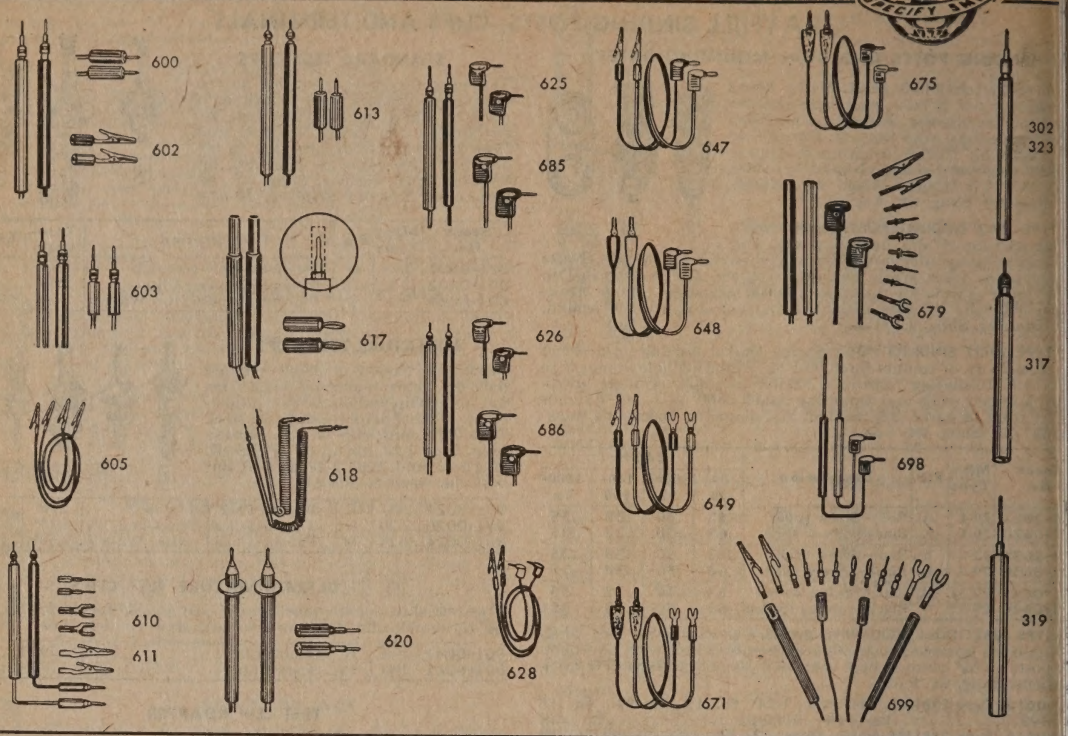


PB07FA01 Miniature. Fig. B. New watertight spring binding post for radio relay, multiplexer and telephone system applications. Built to MIL-P-55149/7. Maximum dia. of .400. Mounts on ½" centers. Accepts up to AWG #16 wire, which is gripped by a locking cam. Also accepts .080" test probes. Insulated from chassis. For 1/16" to ⅛" panels. 1.612" free length. Rated 1A, 100 VDC.

PB08NA01. (U-106/V, WB-8-CHA1). Fig. A. For sealed equipment requiring external connections. Developed for Signal Corps. Spring pressure. 15 9/64" when closed. *Specify red or black.

Stock No.	MC1 Type	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-Up
789-1813	PB07FA01	9766-176	2.26	1.89	1.57	1.34	1.17
789C806	PB08NA01/2*	9766-203-6/9	2.20	1.83	1.52	1.30	1.13

H. H. Smith Test Leads



No. 20 stranded, rubber-covered wire 50" long (unless otherwise stated). 5000 V test. Handles, plugs: molded butyrate per MIL-L-P349A, Type 3, Class MS; fiber per MIL-F-1148A, Grade CH; molded thermosetting plastic per MIL-P-14CFG. Av., 5 oz.

Solderless Tip Test Leads. Prods are 4" long with 3/8" O.D. Have molded butyrate handle and nickel-plated brass tip. Per Pair.

Stock No.	Mfr's Type	Meter End	EACH 1-11	EACH 12-Up
920-0600	600	phone tips	1.05	.95
920-0602	602	alligator clips	1.10	.99

Type 603 All Solderless Test Leads. 4" prod has 3/8" O.D., butyrate handle. Thermosetting plug. Nickel/brass tip. Per Pair.
920-0603. 1-11..Ea. 1.35 12-Up..Ea. 1.22

Alligator Clip Test Leads. Cadmium-plated steel clips.*Have vinyl plastic boots. Types 716, 717, 718 have midget clips. Per Pair.

Stock No.	Mfr's Type	Wire Length	EACH 1-11	EACH 12-49
920-0605	605	24"	.85	.78
920-0629	629*	12"	.92	.83
920-0657	657*	24"	.96	.86
920-0716	716*	12"	.92	.83
920-0717	717*	18"	.94	.85
920-0718	718*	24"	.96	.86

Test Lead Kits. 4" molded tenite handles have 3/8" O.D. Prods have banana plugs at one end, choice of solderless phone tip or needle tip at other. Each kit contains these fittings for snapping onto banana plugs: 2 phone tips, 2 alligator clips, 2 spade lugs.

Stock No.	Mfr's Type	Prods	EACH 1-11	EACH 12-Up
920-0610	610	phone tip	1.90	1.71
920-0611	611	needle tip	1.90	1.71

Type 613 Phone Tips. Prods are 4" long with 3/8" O.D. Have molded butyrate handle, nickel-plated brass body and nickel-plated steel needle. Per Pair.
920-0613. 1-11..Ea. 1.05 12-49..Ea. .95

Type 617 Banana Plugs. Plugs insert flush to insulated molded butyrate handle; 3x7/16" diameter prods have retractable cover. There are no exposed metal parts. Nickel-plated brass tip. Per Pair.
920-0617. 1-11..Ea. 2.00 12-Up..Ea. 1.80

Type 618 Retractile Solderless Test Leads. 12" stretch coil extends to 6'. Solderless, nickel-plated brass phone tips both ends. Molded butyrate handles. Molded thermosetting plugs. 4000 V; nom. O.D. .165". Per Pair.
920-0618. 1-11..Ea. 3.00 12-Up..Ea. 2.70

Type 620 Insulated Phone Tips. 5" long prod has 1/2" O.D., fiber handle, nickel/brass tip and finger guard. Fiber plug. Per Pair.
920-0620. 1-11..Ea. 2.20 12-Up..Ea. 1.98

Meter Test Leads With Solderless Prods. 4" prod has butyrate handle with 3/8" O.D. Nickel-plated brass tip and body. Molded thermosetting plastic elbow. Banana meter tip has 4-leaved phosphor-bronze nickel-plated spring. Per Pair.

Stock No.	Mfr's Type	Meter End	EACH 1-11	EACH 12-Up
920-0625	625	phone tip	1.50	1.43
920-0685	685	banana tip	1.70	1.53

Meter Test Leads With Needle Prods. Same as meter test leads above, but with nickel-plated steel needle prods. Per Pair.

Stock No.	Mfr's Type	Meter End	EACH 1-11	EACH 12-Up
920-0626	626	phone tip	1.50	1.35
920-0686	686	banana tip	1.70	1.53

Alligator Clip Test Leads. Cadmium-plated steel alligator clips have molded butyrate handles. Molded thermosetting plastic elbows* and meter plugs. Per Pair.

920-0628	628*	tip plugs	1.20	1.08
920-0647	647*	banana plugs	1.30	1.17
920-0649	649	spade lugs	1.20	1.08

Crocodile Clip Test Leads With Boots. Cl are cadmium/steel. *Butyrate hand Vinyl boots. †Thermosetting elbows. Pair.

Stock No.	Mfr's Type	Meter End	EACH 1-11	EACH 12-
920-0648	648†	banana plugs	1.30	1.1
920-0671	671*	spade lugs	1.20	1.0
920-0675	675†	tip plugs	1.20	1.0

Universal Test Lead Kits. Completely int changeable—50 leads in one! All pa adapt into handles supplied. Leads, 54 Type 699 std. kit comes with 12 testing t and connectors; Type 679 miniature k with 10 miniature accessories.
920-0679. 679.1-11 Ea. 3.00 12-Up Ea. 2.
920-0699. 699.1-11 Ea. 3.00 12-Up Ea. 2.

Type 698 "Slim Jim" Test Leads. 4" butyra prod is 3/8" O.D.; has 3 1/2" cadmium-plat steel tip, vinyl tubing. Thermosetting bows have phone tips. Per Pair.
920-0698. 1-11..Ea. 1.35 12-Up..Ea. 1.

302 Solderless Prod. Threaded, 4" plast handle, 3/8" dia. Nickel-plated phone t
920-0402. Red. 920-0403. Black. 6
1-24.....Each .30 25-49...Each .
50-99.....Each .27 100-Up.....Each .

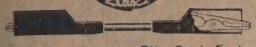
323 Solderless Prod. Bone fiber handle, mol ed to nickel-plated brass tip. .245 insi dia.—for heavy-duty wire. 5 7/32" long.
920-0327. Red. 920-0328. Black. 8 o
1-24.....Each .35 25-49...Each .
50-99.....Each .33 100-Up.....Each .

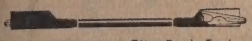
317 Phono Needle Prod. Brass, nickel-plate body with replaceable steel phono-ty needle. Plastic handle. 4 13/16" long. 4 oz.
920-0420. Red. 920-0421. Black.
1-24.....Each .33 25-49...Each .
50-99.....Each .30 100-Up.....Each .

319 Heavy-Duty Prod. Threaded. Bras nickel-plated tip. Plastic handle. 5 3/16" lon
920-0424. Red. 920-0423. Black. 8 o
1-24.....Each .30 25-49...Each .
50-99.....Each .27 100-Up.....Each .

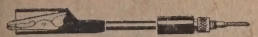
Call Your Nearest Allied Electronics Facility for Larger-Quantity Price

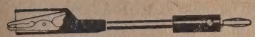
H.H. Smith Jumpers and Patch Cords

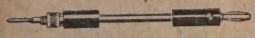

Std. Alligator Clip Both Ends


Min. Alligator Clip Both Ends

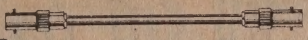
Banana Plug Both Ends

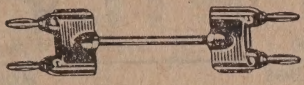

Std. Alligator Clip to Pin Plug


Std. Alligator Clip to Banana Plug

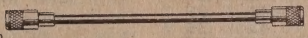

Pin Plug to Banana Plug

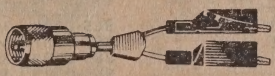
BNC Male Plug Both Ends

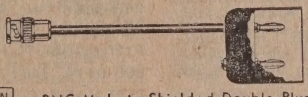

BNC Female Plug Both Ends

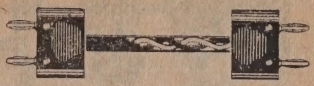

Double Banana Plug Both Ends

BNC Male Plug to Alligator Clips

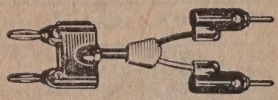

UHF Male Plug Both Ends


UHF Male to Alligator Clips

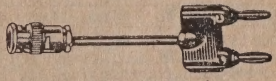

BNC Male to Shielded Double Plug


Double Plug Both Ends

Double Plug to Alligator Clips


Miniature Dual Banana Plug to Cross Patch Pin Plugs

Min. Dual Banana Plug to Min. Cross Patch Banana Plugs


Min. Dual Plug to BNC Male

selection of jumpers, and standard patch cords. Unshielded s use #18 AWG 20,000-V insulated wire. Handles are tenite /or molded bakelite. Cadmium-plated steel clips; nickel-plated brass tips; vinyl plastic boots. Have No. 20, 5000-volt insulation. Shielded leads use RG58C/U coax cable, except †RG11A/U; ‡low-capacity cable; §twisted pair. Shpg. wt. 5 oz. *Specify Color.

UNSHIELDED JUMPERS

Stock No.	Mfr's Type	Ft.	Color	Fig.	EACH 1-24	25-49	50-99	100-Up
C1683*	1596-12-102	1	Red	A	.57	.54	.51	.46
C1683*	1596-12-103	1	Black	A	.57	.54	.51	.46
C1685*	1596-36-102	3	Red	A	.61	.58	.55	.49
C1685*	1596-36-103	3	Black	A	.61	.58	.55	.49
C1687*	1596-60-102	5	Red	A	.65	.62	.59	.52
C1687*	1596-60-103	5	Black	A	.65	.62	.59	.52
C1688*	1597-12-102	1	Red	B	.57	.54	.51	.46
C1688*	1597-12-103	1	Black	B	.57	.54	.51	.46
C1691*	1597-36-102	3	Red	B	.61	.58	.55	.49
C1691*	1597-36-103	3	Black	B	.61	.58	.55	.49
C1693*	1597-60-102	5	Red	B	.65	.62	.59	.52
C1693*	1597-60-103	5	Black	B	.65	.62	.59	.52
-1950	1863-12-102	1	Red	C	.72	.68	.65	.58
-1951	1863-12-103	1	Black	C	.72	.68	.65	.58
920-1953	1863-36-102	3	Red	C	.76	.72	.68	.61
920-1954	1863-36-103	3	Black	C	.76	.72	.68	.61
920-1956	1863-60-102	5	Red	C	.80	.76	.72	.64
920-1957	1863-60-103	5	Black	C	.80	.76	.72	.64
920-1960	1865-36-102	3	Red	D	.91	.86	.82	.73
920-1961	1865-36-103	3	Black	D	.91	.86	.82	.73
920-1963	1865-60-102	5	Red	D	.95	.90	.86	.76
920-1966	1866-36-102	3	Red	E	.95	.90	.86	.76
920-1967	1866-36-103	3	Black	E	.95	.90	.86	.76
920-1968	1866-60-102	5	Red	E	1.02	.97	.92	.82
920-1969	1866-60-103	5	Black	E	1.02	.97	.92	.82
920-1970	1868-36-103	3	Black	F	.71	.67	.64	.57

COAXIAL CABLE SHIELDED STANDARD PATCH CORDS

-1650	1589-12	1	Black	G	5.35	5.08	4.82	4.28
-1652	1589-36	3	Black	G	5.55	5.27	5.00	4.44
-1654	1589-60	5	Black	G	5.75	5.46	5.18	4.60
-1672	1869-36	3	Black	H	6.30	5.99	5.67	5.04
-1674	1869-60	5	Black	H	6.50	6.18	5.85	5.20
-1610	1580-12	1	Black	J	4.35	4.13	3.92	3.48
-1613	1580-36	3	Black	J	4.55	4.32	4.10	3.64
-1615	1580-60	5	Black	J	4.75	4.51	4.28	3.80
-1586	1537-12‡	1	Gray	K	5.35	5.08	4.82	4.28
-1588	1537-36‡	3	Gray	K	5.55	5.27	5.00	4.44
920-1590	1537-60‡	5	Gray	K	5.75	5.46	5.18	4.60
920-1980	1872-36†	3	Black	M	5.55	5.27	5.00	4.44
920-1982	1872-60†	5	Black	M	5.75	5.46	5.18	4.60
920-1987	1873-36‡	3	Black	N	6.30	5.99	5.67	5.04
920-1988	1873-60‡	5	Black	N	6.50	6.18	5.85	5.20
920-1976	1871-36†	3	Black	L	5.55	5.27	5.00	4.44
920-1978	1871-60†	5	Black	L	5.75	5.46	5.18	4.60
920-1560	1530-36§	3	Gray	P	4.55	4.32	4.10	3.64
920-1564	1531-36§	3	Gray	R	5.55	5.27	5.00	4.44
920-1568	1531-60	5	Gray	R	5.75	5.46	5.18	4.60

MINIATURE SHIELDED PATCH CORDS

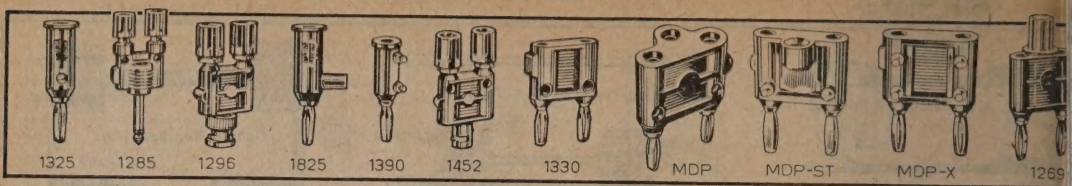
tyrate handles per Fed. Spec. L-P349A, Type 3, class MS. -174/U coax. cable. Miniature dual banana plugs mate with niature dual binding posts or banana jacks having ½" ctrs.

*Cross-patch pin plugs have .080" tip and jack in rear, banana jack in rear, banana jack in side. ‡Color coded red/black. §Standard dual banana plug one end, miniature other end. †Min. both ends.

Stock No.	Mfr's Type	Ft.	Color	Fig.	EACH 1-24	25-49	50-99	100-Up
20-1576	1535-12*	1	Red/Blk‡	S	5.35	5.08	4.82	4.28
20-1579	1535-36*	3	Red/Blk‡	S	5.55	5.27	5.00	4.44
20-1581	1535-60*	5	Red/Blk‡	S	5.75	5.46	5.18	4.60
20-1695	1599-12†	1	Gray	L	4.35	4.13	3.92	3.48
20-1697	1599-36†	3	Gray	L	4.55	4.32	4.10	3.64
20-1699	1599-60†	5	Gray	L	4.75	4.51	4.28	3.80
20-1832	1738-12	1	Blk/Red‡	T	5.35	5.08	4.82	4.28
20-1834	1738-36	3	Blk/Red‡	T	5.55	5.27	5.00	4.44
920-1836	1738-60	5	Blk/Red‡	T	5.75	5.46	5.18	4.60
921-1820	1729-12§	1	Black	L	4.35	4.13	3.92	3.48
921-1822	1729-36§	3	Black	L	4.55	4.32	4.10	3.64
921-1824	1729-60§	5	Black	L	4.75	4.51	4.28	3.80
921-1850	1748-12	1	Gray	W	5.35	5.08	4.82	4.28
921-1852	1748-36	3	Gray	W	5.55	5.27	5.00	4.44
921-1854	1748-60	5	Gray	W	5.75	5.46	5.18	4.60

Specify Color on Stock No's with "C"

Pomona Banana Plugs and Patch Cords



MODEL 1325 SINGLE BANANA PLUGS

Solderless stack-up type with one-piece nickel-plated beryllium copper. Spring tip. Internal set screws eliminate soldering. Plugs fit standard .166" banana jacks. Rated 15 amps, continuous. 5000 WVDC. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-49	50-99	100-Up
885-0301	1325	Black	.63	.50	.45	.43	.35
885-0302	1325	Red	.63	.50	.45	.43	.35
885-0303	1325	Orange	.63	.50	.45	.43	.35
885-0304	1325	Yellow	.63	.50	.45	.43	.35
885-0305	1325	Green	.63	.50	.45	.43	.35
885-0306	1325	Blue	.63	.50	.45	.43	.35
885-0307	1325	White	.63	.50	.45	.43	.35

MODEL 1285 PHONE PLUG ADAPTER. Adapts phone jack to ¾"-spaced binding posts. Thermoplastic body. Shpg. wt. 3 oz.

885-0283	1285	Black	5.34	4.85	4.37	4.13	3.40

MODEL 1296 BNC BINDING-POST ADAPTER. Adapts BNC receptacle to ¾"-centers binding posts. Thermoplastic body. 3 oz.

885-0289	1296	Black	5.45	4.95	4.46	4.21	3.47

MODEL 1825 SAFETY-TYPE SOLDERLESS BANANA PLUG. Collar eliminates shock hazard, acts as strain relief. Internal set screw. Nickel-plated beryllium copper spring. .166" dia. jack, plug. Specify: Black, Red, Orange, Yellow, Green, Blue, Gray, White. 2 oz.

885C0461	1825	Specify	.63	.50	.45	.43	.35

MODEL 1390 ISOLATION BANANA PLUG. Top stack-up receptacle is isolated from lower plug. .166" jack, plug. Gold-flashed turret terminals. Specify: Black, Red. 2 oz.

885C0345	1390	Specify	1.56	1.25	1.13	1.06	.88

MODEL 1452 BINDING POST ADAPTER. BNC receptacle, insulated binding posts on ¾" centers with .166" banana jacks. Stack-up connections. .166" dia. crossholes. 500 V peak. 3 oz.

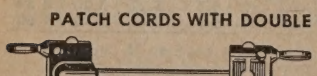
885C0372	1452	.....	5.45	4.95	4.46	4.21	3.47

MODEL "B" BANANA PLUG PATCH CORDS

Vertical and horizontal stacking. One-piece heat-treated beryllium copper spring. Rated 15 amps continuous; 30 intermittent. 18-gauge wire. 10,000 WVDC. Shpg. wt. 5 oz.

Stock No.	Mfr's Type	Color	Lgth. In.	EACH 1-9	10-24	25-49	50-99	100-Up
885-0030	B-4	Black	4	1.88	1.50	1.35	1.28	1.05
885-0031	B-4	Red	4	1.88	1.50	1.35	1.28	1.05
885-0031	B-8	Black	8	1.88	1.50	1.35	1.28	1.05
885-0034	B-8	Red	8	1.88	1.50	1.35	1.28	1.05
885-0037	B-12	Black	12	1.88	1.50	1.35	1.28	1.05
885-0038	B-12	Red	12	1.88	1.50	1.35	1.28	1.05
885-0041	B-18	Black	18	1.88	1.50	1.35	1.28	1.05
885-0042	B-18	Red	18	1.88	1.50	1.35	1.28	1.05
885-0045	B-24	Black	24	1.88	1.50	1.35	1.28	1.05
885-0046	B-24	Red	24	1.88	1.50	1.35	1.28	1.05
885-0049	B-36	Black	36	1.88	1.50	1.35	1.28	1.05
885-0050	B-36	Red	36	1.88	1.50	1.35	1.28	1.05
885-0053	B-48	Black	48	1.94	1.55	1.40	1.33	1.10
885-0054	B-48	Red	48	1.94	1.55	1.40	1.33	1.10
885-0057	B-60	Black	60	2.00	1.60	1.45	1.38	1.15
885-0058	B-60	Red	60	2.00	1.60	1.45	1.38	1.15

PATCH CORDS WITH DOUBLE PLUG ON EACH END



36" cords with an MDP plug on each end. Type 2BA-36 is 2-conductor 18-gauge twisted wire. Type 2BB-36 is shielded micro-phone cable. 2BC-36 is RG58C/U shielded coaxial cable. Wt., 5 oz.

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-49	50-Up
885-0208	2BA-36	Gray	4.95	4.46	4.21	3.47
885-0214	2BB-36	Gray	4.95	4.46	4.21	3.47
885-0227	2BC-36	Black	4.95	4.46	4.21	3.47

DOUBLE-PLUG TYPE. Above, but 2 alligator clips on one end. 2BB-AL-36; mike cable. 2BC-AL-36: coax cable. Shpg. wt. 4 oz.

885-0219	2BB-AL-36	Gray	5.95	5.36	5.06	4.17
885-0231	2BC-AL-36	Black	5.95	5.36	5.06	4.17

MODEL 1330 DOUBLE BANANA PLUG

Recess for mounting small components. Set screws. ¾" spa Stacking jacks at top. Shpg. wt. 5 oz.

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-49	50-99	10
885-0311	1330	Black	.94	.75	.68	.64	
885-0312	1330	Red	.94	.75	.68	.64	

MDP MOLDED DOUBLE "STACK UP" PLUGS

Double plugs to permit multiple stacking. Fit standard ba jacks. ¾" spacing. Made of tough thermo-plastic molded dir on the metal body of plug. Set screws secure cable leads. Gr connections marked. One-piece nickel-plated beryllium co springs. 15 amps continuous, 30 amps initial. 5000 WVDC. 5

885-0080	MDP	Black	.94	.75	.68	.64	
885-0081	MDP	Red	.94	.75	.68	.64	
885-0082	MDP	Orange	.94	.75	.68	.64	
885-0083	MDP	Yellow	.94	.75	.68	.64	
885-0084	MDP	Green	.94	.75	.68	.64	
885-0085	MDP	Blue	.94	.75	.68	.64	
885-0086	MDP	Gray	.94	.75	.68	.64	
885-0087	MDP	White	.94	.75	.68	.64	

TYPE MDP-ST. Has solder turret terminals.

885-0114	MDP-ST	Black	1.19	.95	.86	.81	

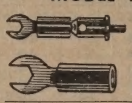
TYPE MDP-X. Four-terminal isolation plug.

885-0115	MDP-X	Red	3.58	3.25	2.93	2.76	2

TYPES 1269 AND 1270. BNC receptacle and plug adapters, pe BNC connectors to be used with eqpt. having banana jacks. adapts jack to plug, 1270 adapts jack to receptacle. Wt., 4 oz.

885-0267	1269	Black	3.25	2.95	2.66	2.51	2
885-0268	1270	Black	4.35	3.95	3.56	3.36	2

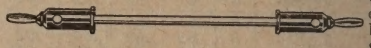
MODEL 1614 INSULATED SPADE LUG ADAPTER



Nickel-plated brass adapter with thermoplasti sulation molded to banana jack and spade lug b Operating temp., —25° C. to +85° C. 15 a cont., 30 amps int. 5000 VDC. Specify Red Black. Shpg. wt., 2 oz.

815C0399	1614	Specify	.43	.35	.32	.30	

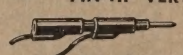
MODEL 1440 HORIZONTAL STACKING PATCH COR



One banana plug e end. Fit any stand banana jacks. gauge stranded w One-piece nickel-plated beryllium copper spring. Av. wt., 4

Stock No.	Mfr's Type	Color	Lgth. In.	EACH 1-9	10-24	25-49	50-99	100
885-0354	1440-12	Black	12	1.56	1.25	1.13	1.06	.8
885-0355	1440-12	Red	12	1.56	1.25	2.13	1.06	.8
885-0358	1440-24	Black	24	1.56	1.25	1.13	1.06	.8
885-0359	1440-24	Red	24	1.56	1.25	1.13	1.06	.8
885-0362	1440-36	Black	36	1.56	1.25	1.13	1.06	.8
885-0363	1440-36	Red	36	1.56	1.25	1.13	1.06	.8

PIN-TIP VERTICAL STACKING PATCH CORDS



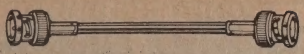
Durable, extra-flexible-lead patch co for ease of handling and long life. Go flashed brass pin-tip, 0.080" diame ½" long. Tip jacks accept 0.080" diameter pin. Extra-flexible p vinyl-insulated wire. Operating temperature, 0° C to +105° Rated 5 amps continuous, 10 amps intermittent. 5000 WVDC. 5

Stock No.	Mfr's Type	Color	Lgth. In.	EACH 1-9	10-24	25-49	50-99	100-
885-0139	P-4	Black	4	2.18	1.75	1.58	1.50	1.2
885-0140	P-4	Red	4	2.18	1.75	1.58	1.50	1.2
885-0143	P-8	Black	8	2.18	1.75	1.58	1.50	1.2
885-0144	P-8	Red	8	2.18	1.75	1.58	1.50	1.2
885-0147	P-12	Black	12	2.18	1.75	1.58	1.50	1.2
885-0148	P-12	Red	12	2.18	1.75	1.58	1.50	1.2
885-0151	P-18	Black	18	2.18	1.75	1.58	1.50	1.2
885-0152	P-18	Red	18	2.18	1.75	1.58	1.50	1.2
885-0155	P-24	Black	24	2.18	1.75	1.58	1.50	1.2
885-0156	P-24	Red	24	2.18	1.75	1.58	1.50	1.2
885-0159	P-36	Black	36	2.18	1.75	1.58	1.50	1.2
885-0160	P-36	Red	36	2.18	1.75	1.58	1.50	1.2

You Can Always Count on Allied Electronics for Fast, Reliable Servi

)mona Patch Cords, Lead Holders, "Black Boxes"

MODEL 2249 CRIMP MALE BNC PATCH CORDS



) male BNC con- on both ends , to UG88E/U). 8C/U shielded 4 oz.

tock No.	Mfr's Type	Lgth. in.	EACH 1-9	10-24	25-49	50-Up
-0552	2249-C-12	12	4.60	4.14	3.91	3.22
-0553	2249-C-24	24	4.60	4.14	3.91	3.22
-0554	2249-C-36	36	4.60	4.14	3.91	3.22
-0555	2249-C-48	48	4.60	4.14	3.91	3.22
-0556	2249-C-60	60	4.60	4.14	3.91	3.22

PATCH CORD WITH BNC ON EACH END

BNC-C-36. For video and se. Has UG88E/U male connector at each end of G58-C/U shielded coax cable. Cable has polyethylene in- on, vinyl jacket. Single-contact low-voltage BNC. 6 oz.

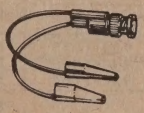
)064. 1-9.....Each 5.95 10-24.....Each 5.36
.....Each 5.06 50-Up.....Each 4.17

EL 2BC-BNC-36 DOUBLE BANANA PLUG TO BNC MALE

le banana plug on ¾" ers on one end; 3E/U male BNC on RG58C/U shielded 36" long. Wt. 4 oz.

)234. 1-9.....Each 5.95 10-24.....Each 5.36
.....Each 5.06 50-Up.....Each 4.17

NC RECEPTACLE TO TEST CLIPS



2631. BNC receptacle UG1094/U with thermoplastic molded insulation. Two ium plated steel minigator test clips; and red insulators. #20 wire. 500V 3 oz.

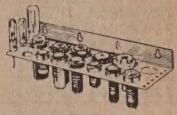
2631. 1-24 Each 3.45 25-49...Each 3.10
.....Each 2.93 100-Up Each 2.42

INSULATED ALLIGATOR CLIP LEAD

TYPE AL-B. Cadmium-plated steel alligator clips; #18 wire with polyvinyl ins. −25° to +105°C. Specify: Red, Black. 3 oz.

Stock No.	Mfr's Type	Lgth. In.	EACH 1-9	10-24	25-49	50-Up
885-0010	AL-B-24	24	1.10	.99	.94	.77
885-0011	AL-B-36	36	1.10	.99	.94	.77

SOCKET-ADAPTER AND TOOL HOLDER



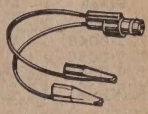
MODEL 2898. Holds seven 7/8" and six 1 9/32" socket adapters plus 12 service tools. Steel, baked green enamel. 3½x11".
885-0660. Shpg. wt., 14 oz.....Ea. 2.50

TEST-LEAD HOLDERS

File your test leads within easy reach. Cold-rolled steel, baked enamel finish. Mount easily. For cable sizes indicated below. 11x3½" wide. Shpg. wt., 14 oz.

Stock No.	Mfr's Type	Cable Dia.	Color	EACH 1-24	25-49	50-Up
885-0382	1508	.210"	Orange	2.95	2.65	2.51
885-0631	2708	.450"	Blue	2.95	2.65	2.51

MODEL 2886 BNC PLUG TO TEST CLIPS



Molded "breakout" converts coax to test cable. Tough thermoplastic insulation molded to connector and wire. BNC plug connector; two minigator clips of cadmium-plated steel with black and red vinyl insulators. #20 wire, 7" long, polyvinyl ins. 500 V peak. Wt. 2 oz.
885-0654. 1-9..Each 4.50 10-24...Each 4.05
25-49.....Each 3.83 50-Up...Each 3.15

SHIELDED AND UNSHIELDED "BLACK BOXES"

SHIELDED ALUMINUM "BLACK BOXES"

for compact packaging. Die-cast aluminum housing with blue, baked enamel ; .040" anodized aluminum cover. With screws. Solder terminals for inside ections. Fully shielded for RF use. Operating temperature, −55° C to +150° C. king voltage, 500 volts peak. Noise rejection, over 70 dB. Type 2392 has three jacks in "T". 3000 Series, shielded with card guide. Cards below. Board A, ot ‡B. *No. of holes. †Copper clad on one side. §Unpainted. #Types 3311, , 3312 and 3313 are 3" high. ††Dimensions include flange. Av. shgp. wt. 6 oz.

ock o.	Mfr's Type	Connectors 1st End	2nd End	EACH 1-9	10-24	25-49	50-99	100-Up
0575	2390	BNC Jack	BNC Jack	7.54	6.85	6.17	5.84	4.80
0576	2391	BNC Jack	BNC Plug	7.63	7.85	7.05	6.67	5.48
0577	2392	Three BNC Jacks		10.45	9.50	8.55	8.07	6.65
0582	2397	None	None	1.65	1.50	1.35	1.28	1.05
0585	2400§	None	None	1.65	1.50	1.35	1.28	1.05
0593	2413	UHF Jack	UHF Plug	11.94	10.85	9.75	9.22	7.58
0591	2411	"N" Jack	"N" Plug	10.84	9.85	8.88	8.38	6.90
0597	2417	None	None	1.65	1.50	1.35	1.28	1.05
0602	2428§	None	None	1.65	1.50	1.35	1.28	1.05
0670	2901	None	None	6.44	5.85	5.27	4.97	4.10
0672	2903	BNC Jack	BNC Plug	11.94	10.85	9.75	9.22	7.58
0821	3302	BNC Jack	BNC Jack	11.94	10.85	9.75	9.22	7.58
0829	3312	BNC Jack	BNC Jack	14.14	12.85	11.57	10.92	9.00
0822	3303	BNC Jack	BNC Plug	13.04	11.85	10.67	10.07	8.30
0830	3313#	BNC Jack	BNC Plug	15.24	13.85	12.47	11.77	9.70
0823	3304	"N" Jack	"N" Jack	13.04	11.85	10.67	10.07	8.30
0824	3305	"N" Jack	"N" Plug	16.34	14.85	13.37	12.62	10.40
0820	3301	None	None	7.54	6.85	6.17	5.84	4.80
0828	3311#	None	None	9.74	8.85	7.97	7.52	6.20
0845	3316#	None	None	9.74	8.85	7.97	7.52	6.20
0835	3321	Paper Epoxy Card 12x7*		.55	.50	.45	.43	.35
0837	3323	Glass Epoxy Card 12x7*		.72	.65	.59	.55	.46
0839	3325	Glass Epoxy Card 12x7*†		.83	.75	.68	.64	.53
0840	3326	Glass Epoxy Card 23x13*‡		.95	.85	.77	.72	.60
0841	3327	Shielding Divider		.95	.85	.77	.72	.60

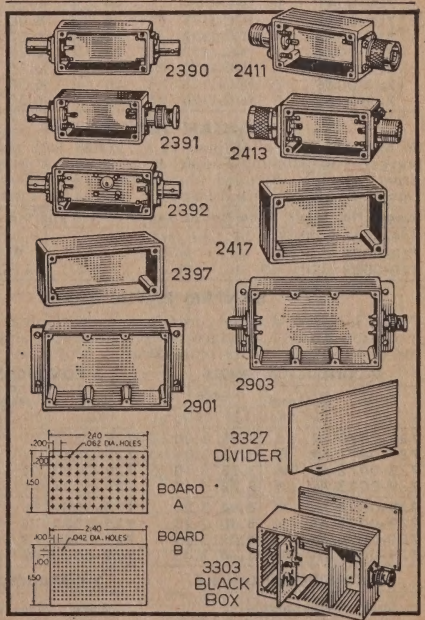
UNSHIELDED PHENOLIC "BLACK BOXES"

potting and encapsulating. Molded housing of thermosetting electrical grade olic; cover of punched XXP laminated paper base phenolic. Operating tem- ture, −25° C to +125° C. Cover mounts with two self-tapping screws, in- ed. Black color. Types 2098 and 2224 have .166" banana jacks at top, .166" na plugs at bottom on ¾" centers. Working voltage, 5000 VDC. Shpg. wt., 3 oz.

ock o.	Mfr's Type	Description	Size	EACH 1-9	10-24	25-49	50-99	100-Up
0528	2105	Junior Size	1.75x1.44x0.69"	.94	.85	.77	.72	.60
0526	2103	Queen Size	2.25x1.00x1.00"	.94	.85	.77	.72	.60
0527	2104	King Size	2.38x1.53x1.53"	.94	.85	.77	.72	.60
0520	2098	Banana Plug	2.48x1.44x0.69"	3.80	3.45	3.10	2.93	2.42
0539	2224	Banana Plug	3.11x1.53x1.53"	3.80	3.45	3.10	2.93	2.42

DIMENSIONS

Series	Size, In.	Series	Size, In.
2300	0.88x1.13x2.25	2900	5.24x2.63x1.73††
2400	1.13x1.38x2.25	3300	4.13x2.63x1.66#

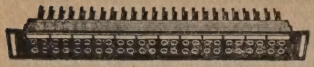


2105 Junior

2098 2224 Box with Banana Plug

Jack Panels, Patch Boards, Cords

ADC BROADCAST TYPE JACK PANELS

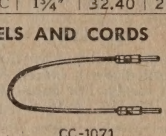


Steel-reinforced phenolic panels. Jacks use any standard plug with 5/8" spacing. All panels are 3 9/16" deep, fit standard 19" relay racks. Types PJ-340 and PJ-390 have double designation strips, brackets, and jacks on 5/8" centers. Other types: single designation strips and perpendicularly paired jacks. CC—closed circuit. Shpg. wt.: double row, 5¼ lbs.; single row, 3½ lbs.

Stock No.	Mfr's Type	No. Jacks	Rows	Jack Type	Panel Height	EACH 1-9	EACH 10-Up
729X0057	PJ-340	52	Double	CC	1¾"	49.50	41.25
729X0061	PJ-390	52	Double	2—CC	1¾"	64.80	54.00
729X0058	PJ-341	48	Double	CC	2⅛"	42.75	35.63
729X0062	PJ-391	48	Double	2—CC	2⅛"	57.30	47.75
729X0060	PJ-343	24	Single	CC	1¾"	25.14	20.95
729X0063	PJ-393	24	Single	2—CC	1¾"	32.40	27.00

ADC COAXIAL PATCH PANELS AND CORDS

CM-1022



CC-1071

These components are designed for patching high frequency signals. For use in microwave, video, telemetry, and data transmitting applications. Patch cords have compatible single plugs for 75-ohms: *Western Electric (CR1041); †RCA (CP-1141).

PATCH PANELS

Stock No.	Mfr's Type	Row	Type of Coax. jack	EACH 1-4	EACH 5-Up
729-0048	CM-1022	Single	CJ-1000	130.00	104.00
729-0050	CM-1122	Single	CJ-1100	130.00	104.00
729-0049	CM-1027	Double	CJ-1000	255.00	202.00
729-0051	CM-1127	Double	CJ-1100	255.00	202.00

COAXIAL PATCH CORDS

Stock No.	Mfr's Type	Length (in.)	EACH 1-24	EACH 25-Up
729-0036	*CC-1071	6	6.00	4.80
729-0037	*CC-1072	12	6.00	4.80
729-0038	*CC-1073	18	6.25	5.00
729-0039	*CC-1074	24	6.25	5.00
729-0040	*CC-1075	30	6.50	5.20
729-0041	*CC-1076	36	6.50	5.20
729-0042	†CC-1171	6	6.00	4.80
729-0043	†CC-1172	12	6.00	4.80
729-0044	†CC-1173	18	6.25	5.00
729-0045	†CC-1174	24	6.25	5.00
729-0046	†CC-1175	30	6.50	5.20
729-0047	†CC-1176	36	6.50	5.20

BANTAM JACK PANELS

96 miniature jacks (48 prs.) in a 1¾x19" jack panel. Spaced to prevent cross patching of adjacent circuits when using double plugs. Front panel is extruded aluminum. Molded-plastic insert mtg. Double row panel with designation strip above each row.

Stock No.	Mfr's Type	No. of Jacks	Jack Type	1-9 EA.	10-Up EA.
729-0086	PJ-731	Less Jacks		19.20	16.00
729-0087	PJ-737	96	CC	92.40	77.00
729-0088	PJ-739	96	2-CC	116.40	97.00

BANTAM PATCH CORDS

Plastic jacketed, shielded cords complete with plugs having molded insulation between conductors. Available with single and double two and three conductor plugs. Feature cord strain relief.

2-CONDUCTOR SINGLE

Stock No.	Type PJ-	Length (in.)	EACH 1-24	EACH 25-Up
729-0070	701	6	3.60	3.00
729-0071	702	12	3.66	3.05
729-0072	703	18	3.72	3.10
729-0073	704	24	3.78	3.15
729-0074	705	30	3.84	3.20
729-0075	706	36	3.90	3.25
729-0076	708	48	4.02	3.35
729-0077	710	60	4.14	3.45

3 CONDUCTOR SINGLE

Stock No.	Type PJ-	Length (in.)	EACH 1-24	EACH 25-Up
729-0078	711	6	4.32	3.60
729-0079	712	12	4.38	3.65
729-0080	713	18	4.44	3.70
729-0081	714	24	4.50	3.75
729-0082	715	30	4.56	3.80
729-0083	716	36	4.62	3.85
729-0084	718	48	4.74	3.95
729-0085	720	60	4.86	4.05

2 CONDUCTOR DOUBLE

Stock No.	Type PJ-	Length (in.)	EACH 1-24	EACH 25-Up
729-0089	751	6	4.56	3.80
729-0090	752	12	4.62	3.85
729-0091	753	18	4.68	3.90
729-0092	754	24	4.74	3.95
729-0093	755	30	4.80	4.00
729-0094	756	36	4.86	4.05
729-0095	758	48	4.98	4.15
729-0096	760	60	5.04	4.20

3 CONDUCTOR DOUBLE

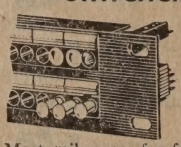
Stock No.	Type PJ-	Length (in.)	EACH 1-24	EACH 25-Up
729-0087	761	6	6.03	5.03
729-0098	762	12	6.21	5.18
729-0099	763	18	6.39	5.33
729-0100	764	24	6.57	5.48
729-0101	765	30	6.75	5.63
729-0102	766	36	6.93	5.78
729-0103	768	48	7.29	6.08
729-0104	770	60	7.47	6.23

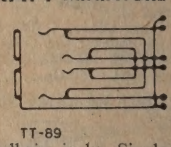
SWITCHCRAFT STANDARD JACK PANELS

Excellent standard for switching and distribution of audio si in broadcasting sta theaters, PA installat etc. Double-row steel-reinforced black phenolic panels. Mou brackets slotted to fit all standard 19" relay racks. Plastic co designation strips. *With military-type MT-332A jacks. †Telep type T-332A jacks. §Less jacks; wt., 1¾ lbs. Av. shpg. wt., 5½

Stock No.	Mfr's Type	Jacks	Size HxWxD	EACH 1-24	EACH 25-49	EACH 50-99	EACH 10
932X1490	2400	48§	2⅛x19x1¾"	9.45	8.66	7.88	
932X1492	2432A	24 pr.†	2⅛x19x1¾"	44.10	40.43	36.75	
932X1497	2532A	24 pr.*	2⅛x19x1¾"	52.35	47.99	43.63	

SWITCHCRAFT MINIATURE JACK PANELS





TT-89

Series TT "tini phone" compon have new design t industry's need f reliable, compact p field system. Jack els handle 96 j Meet mil. spec. for full-size jacks. Single, twin-plug patch c space-saving switches, jewel-assembly lamp jacks.

TINI-TELEPHONE JACK PANELS

Stock No.	Mfr's Type	Description	EACH 1-24	EACH 25-U
932-1459	1600	Blank panel	18.00	16.
932-1472	1632A	With Jacks	87.00	79.
932-1475	1634B	With Jacks	110.40	101.
932-1480	1700	Blank panel	21.00	19.
932-1484	1789	With Jacks	156.00	143.

TINI-TELEPHONE PATCH CORDS

Stock No.	Mfr's Type	Length (in.)	Plug Type	EACH 1-24	EACH 25
932-0260	TT-101	6	2 cond., single	3.36	3
932-0263	TT-104	24	2 cond., single	3.54	3
932-0268	TT-122	12	3 cond., single	4.14	3
932-0270	TT-124	24	3 cond., single	4.26	3
932-0275	TT-144	24	3 cond., twin	4.44	4

TINI-TELEPHONE JACKS

Stock No.	Mfr's Type	Stack Height	EACH 1-24	EACH 25-49	EACH 50-
932-0245	TT-31	27/64"	.72	.66	
932-0246	TT-32A	13/32"	.87	.80	
932-0247	TT-32B	15/32"	.84	.77	
932-0250	TT-34B	½"	1.02	.94	
932-0255	TT-89	1 1/16"	3.00	2.75	2.

TINI-TELEPHONE SWITCH (SPDT)

932-0276	TT-303L	½"	2.25	2.07	1.

TINI-TELEPHONE LAMP JACK

Stock No.	Type	Description	1-24, EA.	25-49, EA.	50-Up
932-0279	TT-420	Lamp Jack	.78	.72	.6
932-0277	TT-405	Jewel Assy.-White	.21	.19	.1

VECTOR PATCH BOARDS

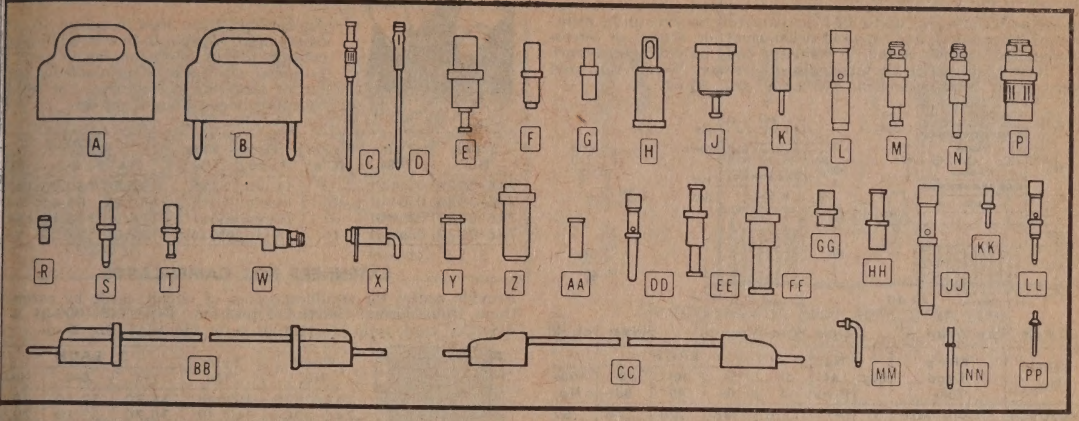
Used for test panels, automation equipm paging, etc. Independent gold-flashed w around contacts spaced on .265" cen rated at 15 amps and 1000 VAC. Less .002 ohm contact resistance. Satin b phenolic except *ivory epoxy paper. Bu ets for flush or recessed mounting. 8 oz

Stock No.	Mfr's Type	Contacts and Size	EACH 1-49	EACH 50-
977-0701	PB110-2	10/.60x2.98"	3.25	2
977-0703	PB210-2	20/.86x2.98"	4.25	3
977-0705	PB510-2	50/1.66x2.98"	6.45	5
977-0707	*PB1010	100/3.25x3.25"	10.75	9
977-0710	PB1010-2	100/2.98x2.98"	10.85	9
977-0714	PB1020-2	200/2.98x5.63"	21.60	19
977-0716	PB1520-2	300/4.31x5.63"	32.35	29

Patchcord. For above. .090" diameter nickel-plated prongs. C by length: 6", black; 9", yellow; 15", blue. Shpg. wt., 8 oz.

Length	Single Conductor Each End: Stock No.	Mfr's Type	Per Bundle of 25	Piggy Back Each E: Stock No.	Mfr's Type	EA
6"	977-0560	K2.06	3.04	977-0568	K9.06	
9"	977-0561	K2.09	3.08	977-0569	K9.09	
15"	977-0562	K2.15	3.53	977-0570	K9.15	

Miniature Connectors and Patch Cords CAMBION®



mbion miniature connectors for high-density circuit and packaging applications. Made reliability and flexibility in interconnecting modern miniaturized components, IC's and boards. Available in wide range of styles: jacks, plugs, taper-pin receptacles and com-nation units, in sizes from .016" to .080". Cage-design jacks have beryllium copper contacts. nnectors are in packages of 100 or 25 (Av. shpg. wt., 2 oz.); patch cords are in packages 10 (Av. shpg. wt., 10 oz.). *For 1/16" PC board; also available for 1/32" or 3/32" board. †Specify: ck, Red or Blue. ‡Thru-hole. #For Wire-Wrap connections to in-line integrated circuit.

PATCH CORD KIT

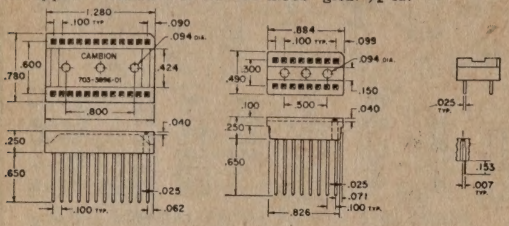
TYPE 3892-01-01. Contains 100 assorted patch cords with .040" pins. Wt. ½ lb.
746-1532 ..... 50.00

Stock No.	Mfr's Type	Fig.	Description	Jack/ Pin Dia.	Pkg. Qty.	PRICE EACH (Sold Only in Pkg. Qty. Indicated) 10-99	100-400	500-900	1000-Up
746C1483	3775-01-03†	A	Shorting Jack; .200" ctrs.	.040"	25	.98	.75	.70	.62
746C1484	3776-01-03†	A	Shorting Jack; .400" ctrs.	.040"	25	1.08	.82	.76	.67
746C1105	2871-01-03†	B	Shorting Plug; .200" ctrs.	.040"	25	.38	.28	.26	.23
746C1478	3771-01-03†	B	Shorting Plug; .400" ctrs.	.040"	25	.42	.32	.29	.26
746C1479	3771-02-03‡	B	Shorting Plug; .500" ctrs.	.040"	25	.42	.32	.29	.26
746-1462	3745-01-03#	C	Comb. Jack; Wire-Wrap term.	.022"	25	.30	.22	.21	.18
746-1495	3844-01-03#	C	Comb. Jack; Wire-Wrap term.	.018x.011"	25	.30	.22	.21	.18
746-1497	3848-01-03#	D	Solder Turret Term.; Wire-Wrap	.025"	100	.....	1.32	1.17	.902
746-1290	3324-02-03*	E	Jack; swage mount	.060-.062"	25	.40	.30	.28	.25
746-1270	3309-01-03*	F	Jack/Jack	.025/.040"	25	.41	.32	.29	.26
746-1375	3394-02-03*	G	Jack; PC swage type	.025"	25	.34	.26	.24	.21
746-1555	4354-01-319	H	Press-mount Jack; .215" dia.	.080"	25	.44	.34	.31	.28
746-1570	4355-01-319	H	Press-mount Jack; .185" dia.	.080"	25	.24	.18	.17	.15
746-1540	4352-01-319†	J	Insul. Press-mount Jack; .148"	.040"	25	.34	.26	.24	.21
746-1292	3327-01-03	K	Plug-Jack; non-insulated	.025/.040"	25	.22	.17	.16	.14
746-1236	3289-01-0310	K	Plug-Jack; insulated	.025/.040"	25	.38	.28	.26	.25
746-1295	3367-01-03	L	Jack for patch cords	.040"	25	.34	.26	.24	.21
746-1296	3378-01-0310	L	Above, with insulation tubing	.040"	25	.40	.30	.28	.25
746-1090	2378-01-08*	M	Jack/Terminal	.045"	25	.34	.26	.24	.22
746-1094	2650-01-08*	N	Plug-Jack	.045"	25	.42	.32	.29	.26
746-1088	2320-01-08*	P	Printed Circuit Jack	.062"	25	.32	.25	.23	.20
746-1165	3230-01-03	R	PC Jack; dip solder	.025"	25	.34	.26	.24	.21
746-1285	3310-02-03*	S	Plug-Jack; swage mount	.040/.040"	25	.40	.30	.28	.25
746-1300	3320-02-03*	T	Jack/Terminal	.040"	25	.40	.30	.28	.25
746-1095	2655-01-08	W	Side-Mounted Jack	.045"	25	.52	.39	.36	.32
746-1405	3422-01-03	X	Side-Mounted Jack; test point	.040"	25	.42	.32	.29	.26
746-1510	3888-01-03	X	Side-Mounted Jack; test point	.080"	25	.72	.55	.50	.45
746-1330	3388-01-03	Y	PC Jack; dip solder	.040"	25	.34	.26	.24	.21
746-1390	3398-01-03	Z	PC Jack; dip solder	.080"	25	.40	.30	.28	.25
746-1435	3704-01-03	AA	PC Jack; dip solder	.040"	25	.17	.13	.12	.105
746-1465	3750-01-03	AA	PC Jack; dip solder	.018x.011"	25	.17	.13	.12	.105
746-1480	3772-01-03	AA	PC Jack; dip solder	.016-.020"	25	.17	.13	.12	.105
746-1420	3703-01-03	AA	PC Jack; dip solder	.025"	25	.17	.13	.12	.105
746C1450	3705-01-03†	BB	2" Piggyback Patch Cord	.040"	10	1.06	.88	.76	.76
746C1240	3306-02-03†	CC	4" Patch Cord	.040"	10	.60	.50	.43	.38
746C1345	3389-02-03†	CC	4" Piggyback Patch Cord	.025"	10	.96	.80	.68	.60
746-1045	1781-01-03	DD	.061" Taper Plug	.053"	100	.....	.095	.095	.073
746-1060	2115-03-04‡	EE	.061" Taper Recept.; feed-thru	.053"	100	.....	.096	.096	.074
746-1047	1799-02	FF	.061" Taper Plug-Recept.	.053"	100	.....	.06	.06	.046
746-1015	1015-02-04*	GG	.061" Taper Receptacle	.053"	100	.....	.054	.054	.042
746-1075	2186-02-04*	HH	.061" Taper Receptacle	.053"	100	.....	.072	.072	.055
746-1315	3369-03-03	JJ	Pin; MS3191 Crimp	.080"	100	.....	.13	.13	.10
746-1150	3220-02-05*	KK	Pin, .188" Length (.060" mtg. dia.)	.045"	100	.....	.033	.033	.025
746-1360	3393-02-03*	KK	Pin, .188" Length (.058" mtg. dia.)	.025"	100	.....	.039	.039	.030
746-1180	3231-02-03*	KK	Pin, .125" Length (.040" mtg. dia.)	.025"	100	.....	.064	.064	.05
746-1255	3308-01-03	LL	Pin; MS3191 Crimp	.040"	100	.....	.112	.112	.087
746-1030	1521-02-03*	MM	Right-Angle PC Pin	.040"	100	.....	.10	.099	.077
746-1120	2970-02-03*	NN	Pin (.300" pin length)	.040"	100	.....	.053	.053	.041
746-1135	2971-02-03*	NN	Pin (.150" pin length)	.040"	100	.....	.045	.045	.035
746-1195	3232-02-03*‡	NN	Pin (.300" pin length)	.040"	100	.....	.062	.062	.048
746-1210	3233-02-03*‡	NN	Pin (.150" pin length)	.040"	100	.....	.052	.052	.040
746-1225	3241-02-03*‡	NN	Pin (.100" pin length)	.040"	100	.....	.065	.065	.05
746-1525	3889-01-03	PP	Pin .188" Length, (.031" mtg. dia.)	.025"	100	.....	.05	.05	.039

CAMBION® IC Sockets and Circuit Boards

DUAL IN-LINE IC SOCKETS

Molded diallyl phthalate bodies. Spring tempered, phosphor bronze contacts. Accepts pins up to .024" in diameter. Socket can be printed-circuit-mounted and secured with rivet or screw, or press-mounted into panel. Bosses on insulator body provide interference fit. *Solder tab electro-tin terminals, others have Wire-Wrap, gold over copper. Terminations on .100"x.300" grid. ½ oz.

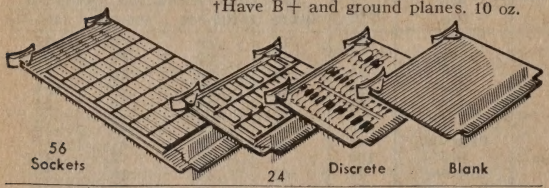


24-pin Wire-Wrap [A] 16-pin Wire-Wrap [C] Solder Tab [B]

Stock No.	Mfr's Type 703-	Fig.	No. of Pins	EACH 1-4	5-9	10-49	50-99	100-Up
746-0904	3788-01-0416	C	14*	1.08	.98	.88	.78	.67
746-0905	3789-01-0416	C	1⁴⁄₁₆*	1.15	1.05	.95	.84	.72
746-0906	3790-01-0416	A	24*	2.14	1.94	1.75	1.55	1.32
746-0907	3791-01-0416	A	36*	2.80	2.54	2.29	2.03	1.75
746-0911	3893-01-0316	A	36	3.04	2.76	2.48	2.21	1.90
746-0914	3896-01-0316	A	24	2.40	2.19	1.97	1.75	1.50
746-0915	3897-01-0316	B	14	1.20	1.09	.98	.87	.75
746-0916	3898-01-0316	B	1⁴⁄₁₆	1.34	1.22	1.10	.98	.84

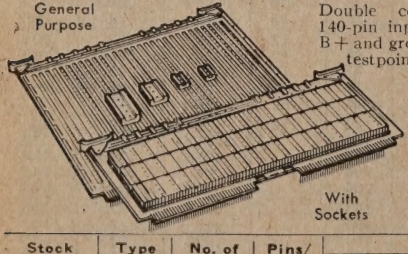
HIGH DENSITY WIRE-WRAP CAMBI-CARDS

Support IC's and discrete components in tight package. 70-pin input/output edge connector. *Have space for discretes. †Have B+ and ground planes. 10 oz.



Stock No.	Type 715-	No. of Sockets	Pins/ Socket	Size, In.	EACH 1-4	5-9	10-Up
746-0978	1013-01	24	14†	4½x4½	56.70	51.00	45.40
746-0977	1011-01	24	16†	4½x4½	58.80	52.90	47.00
746-0975	1005-01	16*	16†	4½x4½	58.80	52.90	47.00
746-0988	1105-01	56*	16†	4½x9¼	104.00	93.60	83.20
746-0974	1004-01	10*	24†	4½x4½	56.70	51.00	45.40
746-0987	1104-01	25*	24†	4½x9¼	99.80	89.80	79.80
746-0980	1015-01	None	.....	4½x4½	28.00	25.20	22.40
746-0981	1016-01	Copper Clad Bd.		4½x4½	20.00	18.00	16.00
746-0991	1115-01	None	.....	4½x9¼	37.00	33.30	29.60
746-0992	1116-01	Copper Clad Bd.		4½x9¼	23.00	20.70	18.40
746-0972	1002-01	Discretes only		4½x4½	36.80	33.10	29.40
746-0986	1102-01	Discretes only		4½x9¼	42.00	37.80	33.60
746-0971	1001-01	Blank Cards for		4½x4½	26.30	23.70	21.00
746-0985	1101-01	Misc. Components		4½x9¼	30.50	27.50	24.40

140-PIN WIRE WRAP CAMBI-CARDS



Double connectors have 140-pin input/output with B+ and ground planes. Ten testpoints. Size, 9¾x4½" except *9¾x9¼". Types 1015 and 1115 are general purpose cards without sockets. 1016 and 1116 are Copper Clad boards with connector. 10 oz.

Stock No.	Type 714-	No. of Sockets	Pins/ Socket	EACH 1-4	5-9	10-Up
746-0950	1011-01	54	16	118.60	106.70	94.90
746-0952	1013-01	54	14	114.40	103.00	91.50
746-0958	1111-01	126*	16	204.30	183.90	163.40
746-0960	1113-01	126*	14	176.40	158.80	141.10
746-0954	1015-01	None	.....	39.90	35.90	31.90
746-0962	1115-01	None*	.....	45.00	40.50	36.00
746-0955	1016-01	Copper Clad Board		25.00	22.50	20.00
746-0963	1116-01	Copper Clad Board*		28.00	25.20	22.40

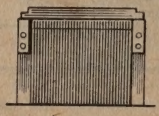
BREADBOARDS FOR IN-LINE IC SOCKETS

Available in three sizes to accept 16, 3 64 standard 1⅛-pin in-line IC's. Plugg concept allows interchanging of each Supplied with jacks or terminals for pa ing or soldering of jumpers. For all except Sylvania (round). 11 oz.

Stock No.	Type 705-	No. of IC's	IC Type	Size, In.	EACH 1-4	5-9	10
746-0920	0264-01	32	14-pin	8x5	158.80	150.90	147
746-0926	0364-01	16	14-pin	4½x5	90.90	86.40	84
746-0923	0269-01	32	16-pin	6½x11½	176.90	168.10	164
746-0929	0369-01	16	16-pin	6½x6¼	102.60	97.50	95

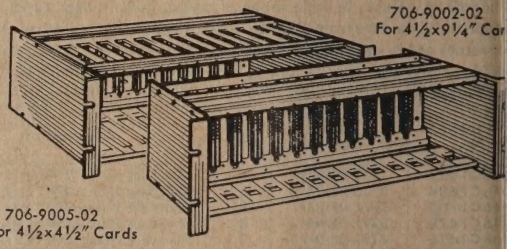
EXTENDERS FOR CAMBI-CARDS

Provide access for troubleshooting of circuit cards by extend them from normal functional position. Type 715-1000-01 is 4½x4½" card; type 715-1100-01 is for 4½x9¼" card. 5 oz.



Stock No.	Type 715-	EACH 1-4	5-9	10-
746-0970	1000-01	35.70	32.10	28.
746-0984	1100-01	35.70	32.10	28.

13-POSITION CARD FILES



For high-density wire-wrap Cambi-Cards. 19" wide, With po planes. For automatic or hand-wiring applications. Can hold IC's.

Stock No.	Type 706-	EACH 1-4	5-Up	Stock No.	Type 706-	EACH 1-4	5-U
746-0943	9005-02	196.40	176.80	746-0940	9002-02	199.40	179.

[D] 70-Pin Connector

PRE-CUT WIRE KIT

(Not illus.) Saves wire-wrapping time. Conta 1050 lengths of pre-cut, stripped and tin #30 AWG solid copper wire with white Ky insulation. Includes 100 each of 1", 1½", 2½", 3", 3½", 4" and 4½" lengths; 50 each 5", 6", 7", 8" and 9" lengths. Also available individual packets through 25" size in red, bla or white; prices on request. 6½ oz.

746X1020. 718-1010-01-0119.....39.

[E] Insertion Tool

[D] 70-PIN WIRE-WRAP CARD CONNECTO

Flat base provides firm platform for accur mounting to power planes. Type 7015 has wi wrap pins; type 7029, solder tab pins. 3 oz.

Stock No.	Type 706-	EACH 1-4	5-9	10-24	25-
746-0935	7015-01	7.50	6.75	6.40	6.0
746-0937	7029-01	6.45	5.80	5.50	5.1

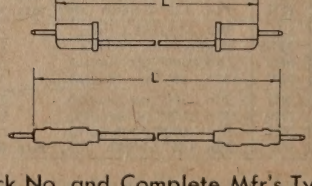
[E] IC INSERTION/EXTRACTION TOOL

Positions IC for insertion or extraction securely gripping between leads and under bo

746-0933. 706-3739-01. 1-9.....Each 2.

10-Up.....Each 1.

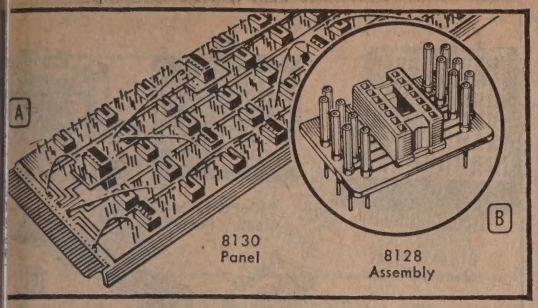
PATCH CORD KIT FOR INTEGRATED CIRCUITS



Kit includes 100 .040" diamet pin patch cords. Primarily d signed for Integrated Circ patching, but can be used f any application requiring .04 pins. Cords come in assort colors and lengths of 2, 4, 6 a 8 inches. Perfect for Cambi "705" series. Shpg. wt. ½

746-1532. 446-3892-01...50.

Specify Stock No. and Complete Mfr's Type No. When Orderin



A B BREADBOARD PANELS AND ASSEMBLIES

8 DUAL IN-LINE BREADBOARD ASSEMBLIES. Single pattern assemes for use as individual unit or with Series 8130 Breadboard emblies (also Series 8089 and 8100) to permit stacking. Takes al in-line integrated circuits with 14 leads in two rows of seven 28-DG1 takes 16-lead). Accepts all lead diameters. Contact cing, .300″ between rows, .100″ between leads. Size, 1½x1x½″. ., 2 oz. Usable with all panels and accessories on this page.

0 DUAL IN-LINE BREADBOARD AND TEST PANELS. Take 25 or 50 l in-line integrated circuits having 14 leads of any diameter, set two rows of seven; except 8130-36DG1R-25, for 16-lead IC's. ntact spacing, .300″ between rows, .100″ between leads. Temperre range, —65° to +150° C. Size, 18x7x2″. Packages can be inted easily without soldering/welding leads. Bus bars provide nmon power and ground take-offs at each station. Takes stanrd PC 36-pin .156″ connector. Type 8128 assembly is used for cking. Wt., 1¼ lbs. Takes all breadboard accessories on this page.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-99	100-499	500-Up
8-0490	8128-CG1	B	14-Lead Ass'y	4.56	4.21	3.84
8-0491	8128-DG1	B	16-Lead Ass'y	5.56	4.51	4.09
8-0493	8130-36CG1R	A	50-Pattern Panel	1-4 . . Each 275.50		
8-0495	8130-36CG1R-25	A	25-Pattern Panel	1-4 . . Each 143.00		
8-0498	8130-36DG1R-25	A	25-Pattern Panel	1-4 . . Each 150.00		

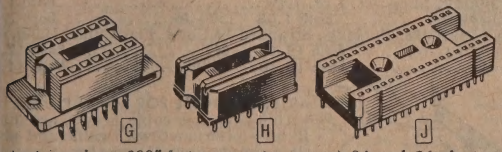
AL IN-LINE EXTRACTOR TOOL T114-1.
8-0055. Wt., 3 oz. 50

NTACT HARDWARE FOR 8089, 8076, 8100, 8095 (2 oz.

Stock No.	Mfr's Type	Fig.	Description	PKG. OF 50
8-0370	8076-4G3	D	Jumper terminal	10.05
8-0369	8076-4G2	F	Contact adapter .257″ high	9.20
8-0008	LSG-2AG2-1	E	Contact ass'y .419″ high	7.75
8-0009	LSG-2AG3-1	E	Contact ass'y .607″ high	8.25

8-0419. 8076-18P1 Board Separator Key. Wt., 1 oz. 05

DUAL IN-LINE SOCKETS



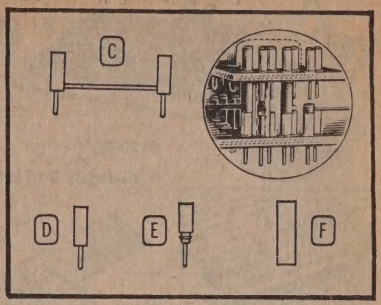
ntact spacing, .300″ between rows, except 24 and 36-pin types, 00″, .100″ between leads. Contoured entry holes guide leads nly into socket. Molded diallyl phthalate body, berryllium copr, gold-plated contacts, except *low-profile type with phenolic dy, tin-plated contacts. PC board or chassis mounting with sad-, Universal terminals. Take all lead dia., flat or round. R suffix, ner rail for easier insertion. Order extractor tool for 24 or 36-pin pe from table. **Sockets are sold in multiples of five except 24.** -pin. 2 oz.

Stock No.	Mfr's Type	Fig.	Mounting	Contacts	EACH 5-95	100-499	500-995	1000-Up
8-0126	314-AG1A	G	PC	14	.84	.73	.63	.56
8-0141	315-AG1A	G	PC	16	.93	.81	.71	.63
8-0132	314-AG5D-2R	H*	PC	14	.45	.40	.35	.30
8-0130	314-AG5D-R	H*	PC	14	.70	.61	.53	.47
8-0146	316-AG5D-R	H*	PC	16	.93	.81	.71	.65
8-0128	314-AG3A	G	Chassis	14	.94	.83	.72	.64
8-0143	316-AG3A	G	Chassis	16	1.06	.93	.81	.71
8-0055	T114-1		Extractor				EACH .50	

8-0158. 324-AG2D. 24-pin Type. (Fig. J). 1-99 . . . . . Each 2.05
0-499 . . . Each 1.79 500-999 . . . . Each 1.56 1000-Up . . . Each 1.36
8-0165. 336-AG2D. 36-pin Type. (Fig. J). 1-99 . . . . . Each 2.28
0-499 . . . Each 1.99 500-999 . . . . Each 1.74 1000-Up . . . Each 1.51

Additional Series 8058 Sockets on Page 104

Extractor



C JUMPERS FOR 8089, 8076, 8100, 8095

For horizontal or vertical-horizontal interconnections—can be stacked for "Y" connections and bus combinations. Sold in multiples of 10 only. 1 oz.

Stock No.	Mfr's Type	Lgth.	Color	EACH 10-90	100-Up
718-0388	8076-12G 1-4	4″	Black	.425	.37
718-0392	8076-12G 2-4	4″	Red	.425	.37
718-0396	8076-12G 3-4	4″	Blue	.425	.37
718-0400	8076-12G 4-4	4″	Green	.425	.37
718-0404	8076-12G 5-4	4″	Orange	.425	.37
718-0408	8076-12G 6-4	4″	Yellow	.425	.37
718-0411	8076-12G 7-4	4″	Brown	.425	.37
718-0389	8076-12G 1-6	6″	Black	.44	.385
718-0393	8076-12G 2-6	6″	Red	.44	.385
718-0397	8076-12G 3-6	6″	Blue	.44	.385
718-0401	8076-12G 4-6	6″	Green	.44	.385
718-0405	8076-12G 5-6	6″	Orange	.44	.385
718-0409	8076-12G 6-6	6″	Yellow	.44	.385
718-0412	8076-12G 7-6	6″	Brown	.44	.385

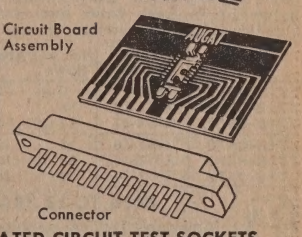
718-0372. 8076-12AS1 Assortment of 140 PC Jumpers. Includes ten 2″ wire, five 4″ wire, five 6″ wire in each color. 6 oz. 60.00

8075 TEST SOCKETS FOR FLAT PACKS

Cover

PC test socket for flat packs up to ⅜x⅜″ and 14 leads on .050″ spacing. Cover grips leads to PC contacts. 8075-1G2 with 15-pin PC connector, 8075-1G1 less connector.

Flat Pack

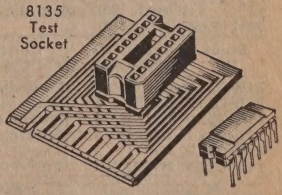


8075-1G2. With connector. Shpg. wt., 4 oz.
718-0338. 1-99 . . . . Ea. 4.36
100-499 . . . . . Ea. 3.70
500-Up . . . . . Ea. 3.13

8075-1G1. Less connector. Shpg. wt., 2 oz.
718-0335. 1-99 . . . . . Ea. 2.20
100-499 . . . . . Ea. 1.81
500-Up . . . . . Ea. 1.48

DUAL IN-LINE INTEGRATED-CIRCUIT TEST SOCKETS

Boards take 8-pin dual row, polarized connectors. PC Board: 1/16″ glass epoxy. NEMA Grade 11. Copper circuitry. For all lead sizes. Size, 1⅜x1⅝″. Suffix G1, no connector. *14-lead, †16-lead. G2, 4 oz.; G1, 2 oz.


8135 Test Socket

Stock No.	Mfr's Type 8135-	EACH 1-99	100-499	500-Up
718-0503	DG1*	3.20	2.64	2.16
718-0504	DG2*	6.44	5.11	4.28
718-0505	EG1†	3.41	2.84	2.36
718-0506	EG2†	6.65	5.31	4.48

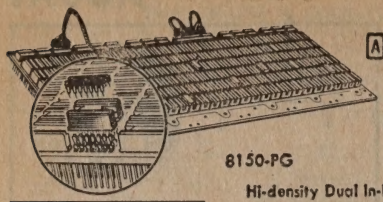
Double-Sided Board for 14- or 16-lead Dual In-Line Circuits

*SERIES 8058 MINIATURE TRANSISTOR SOCKETS

Mechanically and electrically dependable 3- and 4-contact TO-5 transistor sockets. Teflon insulated. Long-life beryllium copper contacts per QQ-C-530. Brass terminal sleeve per QQ-B-626. Contacts and terminal sleeve are gold plated .000040″ thick per MIL-G-45204 over nickel plate .00005/.0001″ thick. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Dia.	Contacts	EA. (Mult. of 5) 5-95	100-495	500-Up
718-0281	8058-1G23	.406″	3	.61	.53	.46
718-0282	8058-1G24	.406″	4	.75	.66	.57
718-0286	8058-1G29	.406″	3	.61	.53	.46
718-0313	8058-45G1	.406″	3	.61	.53	.46

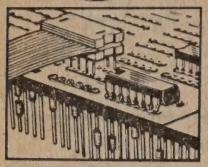
AUGAT Integrated Circuit Sockets, Breadboards

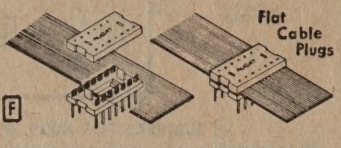


8150-PG

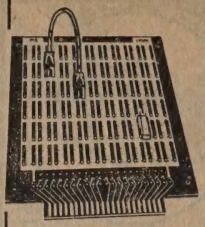
8136-RG

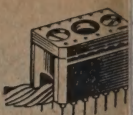
Hi-density Dual In-Line Boards





Flat Cable Plugs

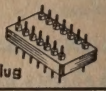




8136KG High-Density Panel

8136PG High-Density Panel

14-Lead Plu



Adapter Plug

Socket Tool

HI-DENSITY DUAL IN-LINE BOARDS, ACCESSORIES

B SERIES 8136-KG. For 14-lead flat-pack dual in-line IC's. Patterns on double-sided board with power and ground planes connected to two contacts in each pattern. Large contoured, closed entry contacts for easy insertion. Contacts are positive-retention type, gold over nickel-plated beryllium copper. 1/8" thick tin-plated glass epoxy PC board with copper circuitry both sides. Temperature range, —65° to +150° C. Gold-plated connector take-off fingers. Type 8136-KG1, 5.850" wide; 8136-KG130, 5.850" wide. SERIES 8136-PG. Same features as above, but does not have connector fingers. 6.875" wide. Av. shpg. wt., 1½ lbs.

A SERIES 8136-RG. Above, but —65° to +150° C; 60 patterns. 60-finger connector take-off each side. 7.363x7.010". 1¼ lbs.

A SERIES 8150-PG. Similar to above, but 30 patterns, without connector fingers. Accepts interface plugs for input/output. 6.875x 2.675". Wire-Wrap terminals. *No pwr. gnd. pins. 1½ lbs.

Stock No.	Type 8136-	No. Pat.	Lgth., In.	Terminals	EACH 1-4	EACH 5-Up
718-0511	KG1	60	6.938	Wire-Wrap	130.50	116.50
718-0512	KG1-30	30	4.238	Wire-Wrap	76.00	68.00
718-0518	PG1-30	30	2.675	Wire-Wrap	58.50	52.00
718-0519	PG1-60	60	5.375	Wire-Wrap	113.50	101.50
718-0520	PG1-90	90	8.075	Wire-Wrap	169.00	151.00
718-0521	PG1-120	120	10.775	Wire-Wrap	224.00	199.50
718-0522	PG1-150	150	13.475	Wire-Wrap	280.00	249.50
718-0523	PG1-180	180	16.175	Wire-Wrap	334.00	299.00

UNIVERSAL WIRE WRAP BOARD 8136 SERIES

Same as 8136PG, but accepts comb. of 14, 16, 24 and 36 lead dual-in-line I.C.'s. Each 9-row section accepts 3 inter-facing plugs Double-sided, with power and ground planes outside of contact row.

Stock No.	Type 8136-	No. of Rows	Pane Width +0.25	EACH 1-4	EACH 5-Up
718-0567	UG1-9	9	2.675	63.00	56.50
718-0568	UG1-18	18	5.375	123.00	110.00
718-0569	UG1-27	27	8.075	184.00	164.50
718-0570	UG1-36	36	10.775	244.50	218.00
718-0571	UG1-45	45	13.475	305.00	273.00
718-0572	UG1-54	54	16.200	365.00	326.00

8060 TO-18 TRANSISTOR SOCKETS

Miniature Teflon® sockets for TO-18 cases. Contacts beryllium copper, closed entry type, gold over nickel—plated. .256" max. dia. Pin circle, .140" max. dia. 1 oz. Sold in multiples of 5.

Stock No.	Type 8060-	No. Cont.	Contact Type	EACH 5-95	EACH 100-495	EACH 500-995	EACH 1000-Up
718-0316	IG3	3	Printed circuit	.64	.56	.49	.42
718-0317	IG4	4	Printed circuit	.78	.69	.60	.52
718-0320	IG7	3	Printed circuit	.64	.56	49	.42
718-0321	IG8	4	Printed circuit	.78	.69	.60	.52
718-0322	IG9	3	Turret	.61	.53	.46	.40
718-0323	IG10	4	Turret	.75	.66	.57	.50

CRYSTAL SOCKETS

Resists vibration; permits easy crystal insertion and removal. Take HC-6/U, HC-13/U crystals, except *takes HC-18U crystals. †Anti-rotation tab. 1 oz.

Stock No.	Mfr's Type	Description	Insul.	EACH 1-99	EACH 100-499	EACH 500-999	EACH 1000-Up
718-0180	8000-AG2	Horiz. or	Teflon®	.70	.65	.60	.47
718-0185	8000-AG6	vert. mtg.	Nylon	.40	.36	.32	.29
718-0181	8000-AG3†	Horiz.	Teflon	.70	.65	.60	.47
718-0187	8000-AG7†	PC mtg.	Nylon	.40	.36	.32	.29
718-0198	8000-DG1†	PC mtg. rd.	Teflon	1.00	.95	.88	.82
718-0199	8000-DG2	con. tails	Nylon	1.00	.95	.88	.82
718-0207	8004-IG1*†	Horiz. mtg.	Teflon	.65	.60	.55	.42
718-0213	8004-IG7*†	PC mtg.	Nylon	.37	.33	.29	.26

Stock No.	Mfr's Type	No. Pat	Pins/ Pattern	EACH 1-4	EACH 5-Up
718-0561	8136-RG2	60	14	139.00	124.5
718-0563	8136-RG4	60	16	150.50	134.5
718-0621	8150-PG1-30	30	14	51.50	46.0
718-0631	8150-PG3-30	30	14*	53.50	48.0
718-0637	8150-PG5-30	30	16	57.00	51.0

14005-1P1 CONNECTOR FOR TYPE 8136-RG. Shpg. wt., 4 oz.
718-0705. 1-4.....Each 13.20 5-Up.....Each 11.

14005-2P1 CONNECTOR FOR TYPE 8136KG. Shpg. wt., 2 oz.
718-0712. 1-99 ..Each 4.99 100-499. Each 4.37 500-Up..Each 3.

C 14-LEAD ADAPTER PLUGS. For interposing components and c structions with PC boards and sub-strates. Sold in multiples five. Wt. 2 oz.

Stock No.	Type 8136-	Size	Row Space	EACH 5-95	EACH 100-495	EACH 500-
718-0589	29G1	.750x.600x.450"	.300"	1.54	1.21	1.0
718-0596	30G3	.750x.600x.950"	.800"	1.57	1.23	1.0

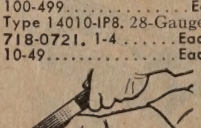
D 1P14-1. 14-LEAD INTERFACING PLUG. Combines patterns single board. Unassembled, pins self-lock. Accepts *26 AW (max.) wire. Top, side or end entry of wire. .750x.600x.450". 1
718-0075. 1-99...Each 1.26 100-499..Each 1.10 500-Up...Each .

E 718-0585. 8136-23G1 Socket Terminal Replacement Kit. Sock terminal, removal tool. Wt., 4 oz. 1-Up.....Each 6.

718-0004. LSG-AFG1 Socket Terminal Only.
Pkg. of 100.....Each 18.

F FLAT 14-PIN CABLE PLUG AND CABLE

Type 2P14-1. Standard IC pattern plug for use with 28 gauge strai ed 14 conductor flat cable (Type 14010-IP8 cable listed belo Unique assembly design permits installation of plug either at ends of the cable or any desired bussing location without stripp wire. For Augat 8136 Series packaging panels, plugs directly i IC panel without soldering. Used for interfacing, input/outp connections, testing, and cable termination into PC board.
718-0089. Shpg. wt. 1 oz. 1-99.....Each 1.
100-499.....Each 1.08 500-Up.....Each .9
Type 14010-IP8. 28-Gauge Stranded 14 Cond. Flat Cable. 100-ft. r
718-0721. 1-4.....Each 19.10 5-9.....Each 17.
10-49.....Each 13.40 50-Up.....Each 11.



ASSEMBLY TOOL FOR 14-PIN PLUGS. U with 14-pin flat cable header assemb Base is positioned with cable and pl then simply pressed together. Shpg. 1 lb.
718-0066. Type T2P14.....49.

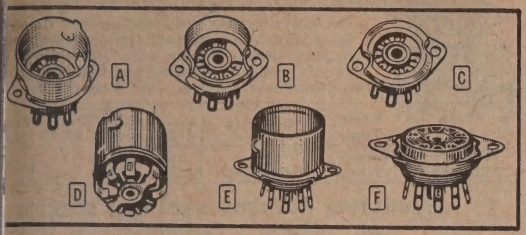
SERIES 8092 TEST SOCKETS FOR TRANSISTORS AND INTEGRATED CIRCUITS

Test sockets with chamfered lead holes for easy ins tion, raised boss to prevent sharp lead-bending and easy component removal. "Push-fit" mounting. L contact resistance after 50,000 insertions. For minimu ½-in. leads. Teflon® insulator, gold-plated contac Rated 2 amps. *Pin circle. †RO-52 outline. Sold multiples of five. 2 oz.

Stock No.	Mfr's Type	Con-tacts	*Dia.	Mtg. Hole	EACH 5-95	EACH 100-495	EACH 500-
718-0446	8092-1G1	3	.200"	.437"	1.20	1.05	.9
718-0447	8092-1G2	4	.200"	.437"	1.44	1.26	1.1
718-0448	8092-1G3	6	.312"	.687"	2.18	1.90	1.6
718-0449	8092-1G4	†6	.400"	.687"	2.18	1.90	1.6
718-0450	8092-1G5	8	.400"	.687"	2.80	2.45	2.1
718-0451	8092-1G6	10	.402"	.687"	3.33	2.91	2.5
718-0452	8092-1G7	12	.510"	.750"	4.02	3.51	3.0

Elco Tube, Transistor and IC Sockets

"E-Z MATE", PC, TUBE SOCKETS



MIL "E-Z MATE" SOCKETS

-S-12883A. Special tube sockets have positioning key for unerr- accuracy. No time wasted, no pin damage. Great for designers. have center shield. Hardware, brass, tin lead plated. Contact terial, phosphor bronze, silver plated, tin dipped. All have .128" unting holes. Ceramic or mica types; ceramic types do not have Z Mate feature. Av. wt., 2 oz. Contact Allied for prices on quantities 5000 or more.

A 9-PIN BASE SHIELD TYPE

Stock No.	Military Number	Mfr's Type	Insulating Material	EACH 1-499	500-1499	1500-Up
3-2268	TS103C01	05-0915-04	Ceramic	.40	.32	.27
3-2265	TS103P01	05-0915-02	Mica	.28	.22	.19

B 7-PIN BASE SHIELD TYPE

3-1078	TS102P01	05-0715-01	Mica	.25	.20	.17

C 7-PIN SADDLE—TOP MOUNTING

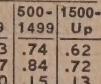
3-2211	TS102C02	05-0711-04	Ceramic	.34	.27	.23
3-1074	TS102P02	05-0711-03	Mica	.22	.18	.15

E-Z MATE 7 AND 9-PIN COMMERCIAL SOCKETS

sockets, (except figure D), have E-Z Mate positioning-key. Virlly eliminates all pin damage. Permits the proper positioning of es, with unerring accuracy. *Has silver-plated pins; †phosphor nze; §beryllium copper. All others are made with brass pins. ted at 1 amp. and 500 volts rms. Maximum contact resistance is w .003 ohm. Insulation resistance is rated at 1000 megohms min- m. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type 05-	Fig.	Description and Mounting	EACH 1-499	500-1499	1500-Up
3-1098	0765-01*†	D	7-pin for 1/16" PC	.93	.74	.62
3-2280	0965-01*§	D	9-pin for 1/16" PC	1.07	.84	.72
3-1065	0705-02	E	7-pin shielded top	.20	.15	.13
3-2248	0901-03†	F	9-pin RMA saddle, top	.16	.12	.11

UHF PC STANDOFF TUBE SOCKETS



nted circuit standoff sockets for 7 and 9-pin minia- e tubes for UHF applications—low-loss mica filled ulator. Contacts are made of silver-plated, tin- ped phosphor bronze. Shpg. wt., 2 oz.

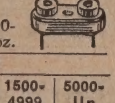
Stock No.	Mfr's Type	Pins	EACH 1-99	100-499	500-1499	1500-4999	5000-Up
78-1090	05-0730-01	7	.39	.31	.236	.203	.162
78-2210	05-0930-01	9	.38	.30	.234	.202	.159

JAN CRYSTAL SOCKETS

ystals sockets made to JAN standards. Type 05-0210- meets MIL No. TS0205C01 spec. .050" pin dia. 2 oz.

Stock No.	Mfr's Type	Terminal Plating	EACH 1-99	100-499	500-1499	1500-4999	5000-Up
78-1050	05-0210-01	Cadmium	.21	.17	.135	.116	.092
78-1051	05-0210-04	Silver	.23	.19	.149	.128	.102

PRINTED-CIRCUIT TRANSISTOR SOCKET

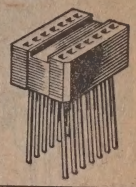


pecially designed for printed circuit boards—in- ator material of low-loss mica filled phenolic. All ntacts are of silver-plated beryllium copper and d-flashed. 3-pin sockets are for point contact and nction-type transistors. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Pins	EACH 1-99	100-499	500-1499	1500-4999	5000-Up
78-2215	05-0786	3	.22	.173	.134	.116	.092

IC AND TRANSISTOR SOCKETS

DUAL IN-LINE PACKAGE RECEPTACLES



For 14-lead dual in-line packages having .100x .300" grid spacing. Accepts round or flat leads, any length. Low-profile, diallyl phthalate, glass-filled insulator per MIL-M-14F, type SDGF. Gold-over-nickel plated, spring-temper phosphor bronze contacts. .025" tails (.642" long) for wire-wrap terminations (Type 383). Closed entry contact holes. Mount on .500x.800" centers. Use with either 1/16" or 3/32" PC board. Suffix 001, black; suffix 002, white. Av. shpg. wt., per pkg., 6 oz.

Stock No.	Type 00-8358-	EACH 1-24	25-99	100-999	1000-9999	10,000-Up
778-1400	014-383-001	.95	.76	.68	.61	.52
778-4007	014-383-002	.95	.76	.68	.61	.52

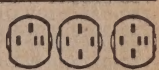
SERIES 8359 WIRE-WRAP DUAL IN-LINE IC RECEPTACLES

For all standard dual in-line IC's with 14 or 16 pins. Only .260" high. Replaceable contacts. Packaging density: inline mounting on .800" centers (14-pin) or .900" centers (16-pin); side-by-side mounting on .500" centers. Rated 2 A. Diallyl phthalate. Black, with white or black lid. Per pkg., 6 oz.

Stock No.	Mfr's Type 00-8359-	Pins	Lid Color	EACH 1-24	25-99	100-999	1000-9999	10,000-Up
778-1430	014-383-001	14	White	1.07	.86	.78	.67	.58
778-1434	014-383-002	14	Black	1.07	.86	.78	.67	.58
778-1438	016-383-001	16	White	1.18	.95	.86	.75	.64
778-1442	016-383-002	16	Black	1.18	.95	.86	.75	.64

TYPE 3300 .016" DIAMETER TRANSISTOR SOCKETS

Screw-on saddle mtg., printed circuit or mtg. ring types. For 3-pin transistors with inline pins, or 3 and 4-pin transistors with pins on .200" diam. circle of any configuration. Conform to MIL-P-14. Beryllium copper contacts. *Requires ring below. Av. shpg. wt., 2 oz.



Stock No.	Mfr's Type	Fig.	Description	EACH 1-99	100-499	500-1499	1500-4999	5000-Up
778-2350	05-3301	G	Saddle Mtg.	.33	.26	.20	.171	.137
778-2353	05-3303	G	Printed-Circuit	.26	.21	.163	.14	.112
778-2355	05-3304	G	*Ring Mounting	.26	.21	.163	.14	.112
778-2357	05-3305	G	Printed-Circuit	.26	.21	.163	.14	.112
778-2361	05-3307	H	*Ring Mounting	.37	.25	.194	.167	.133
778-2366	05-3308	H	Printed-Circuit	.31	.25	.192	.165	.13
778-2370	05-3315	J	*Ring Mounting	.36	.29	.228	.193	.155
778-2675	65-0004	....	Ring Only	.05	.04	.032	.028	.024

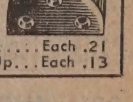
RETAINER-RING TRANSISTOR SOCKETS

High quality. Designed to hold transistors firmly in place on chassis or mounting board. Assure positive lead contacts. 3-pin types are for point contact or junction type transistors; 4-pin types are for linotetrar type transistors. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Pins	EACH 1-99	100-499	500-1499	1500-4999	5000-Up
778-2225	05-0799	3	.20	.16	.128	.109	.087
778-2228	05-0803	4	.25	.20	.144	.135	.108

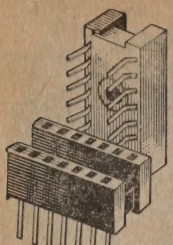
Retainer Ring Only. For Type 2300 above. Wt. 3 oz.
778-2594. 1-49.....Each .03
50-499.....Each .02 500-Up.....Each .016

CINCH LOW-PROFILE TO-5 SOCKET



Feature gold-plated beryllium copper contacts, with integral double springs. Socket height, 0.130" above PC board. Plastic body, molded from 20% glass-filled nylon for high heat resistance. 750-1361. Wt. 2 oz. 1-9....Each .26 10-24.....Each .21 25-49....Each .168 50-99....Each .14 100-Up...Each .13

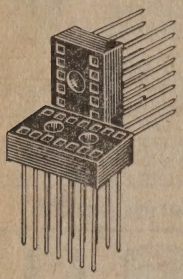
CINCH Cinch-Jones IC, Transistor and Tube Socke



DUAL IN-LINE INTEGRATED CIRCUIT SOCKETS

D.I.P. SERIES. Bowed contacts provide .006 ohm maximum resistance. Accepts standard 14, 16 or 24 lead dual in-line integrated circuit pkg. with round or flat leads. 14-DIP, 16-DIP, 24-DIP have electrotin plated beryllium copper contacts with GP black phenolic body; types with suffix -1 have gold plated beryllium copper contacts with diallyl phthalate. Current, 1 amp; 1800 V rms between adjacent contacts. Temp. range, —65° to +150° C. 14-contact, .770x .424x31/32" incl. leads; 16-contact, .870x.424 x31/32"; 24-contact, 1.296x.746x31/32". 1 oz.

Stock No.	Mfr's Type	No. Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-1040	14-DIP	14	.82	.66	.55	.44	.42
750-1041	14-DIP-1	14	1.07	.86	.71	.57	.54
750-1044	16-DIP	16	.91	.73	.61	.49	.46
750-1045	16-DIP-1	16	1.17	.94	.78	.63	.60
750-1050	24-DIP	24	1.36	1.10	.92	.74	.71
750-1051	24-DIP-1	24	1.61	1.29	1.08	.87	.83



LOW PROFILE WIRE WRAP D.I.P. SOCKETS

Low profile wire-wrap D.I.P. sockets are available in 14 and 16 pin contact sizes. Accept IC packages with flat or rolled leads and variation in thickness or diameter, .014/.019". Maximum lead insertion depth from face of socket, 0.170". Socket body provides tapered channels to guide IC leads. Dielectric housing molded from glass nylon (*black; †white). Contact fabricated from fine grain phosphor-bronze material. Restricted entry protects against oversize leads, insures alignment. Gold or tin finish. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Contacts	Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0236	14-W-DIP	14*	Electro-Tin	.80	.64	.54	.43	.41
750-0237	14-W-DIP-1	14†	Electro-Tin	.80	.64	.54	.43	.41
750-0238	14-W-DIP-2	14*	Gold-Plated	1.04	.83	.69	.55	.52
750-0251	14-W-DIP-3	14†	Gold-Plated	1.04	.83	.69	.55	.52
750-0258	16-W-DIP	16*	Electro-Tin	.98	.78	.65	.52	.49
750-0259	16-W-DIP-1	16†	Electro-Tin	.98	.78	.65	.52	.49
750-0272	16-W-DIP-2	16*	Gold-Plated	1.22	.98	.82	.65	.62
750-0273	16-W-DIP-3	16†	Gold-Plated	1.22	.98	.82	.65	.62

6, 8 AND 10-ICS SOCKETS FOR INTEGRATED CIRCUITS

Socket is designed specially for integrated circuits that mount in 6, 8 or 10-lead, TO-5 cases. Offers exceptionally convenient and simple means for installation and removal of integrated circuits. Also permits in-circuit testing and maintenance. Rugged, durable construction of diallyl phthalate. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	No. of Contacts	EACH 1-24	25-49	50-99	100-249	250-Up
750-0885	6-ICS	6	.55	.44	.37	.30	.29
750-0960	8-ICS	8	.66	.53	.45	.35	.34
750-1020	10-ICS	10	.73	.58	.49	.40	.37

SUBMINIATURE SOCKETS FOR TUBES AND TRANSISTORS

Used extensively for hearing aids, pocket radios, and other equipment which requires subminiature tubes. Mica-filled, low-loss bakelite with silver-plated beryllium copper contacts. 2H5 can be used as a transistor socket. *8SMP socket with mounting plate attached. 2H3, 2H5, 2H7 and 8SM sockets are with mounting ring. 4-prong tubes use 2H5 socket. Av. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Pins	EACH 1-24	25-49	50-99	100-249	250-Up
750-0819	2H3	A	3	.35	.24	.20	.16	.15
750-0820	2H5	B	5	.30	.19	.16	.14	.13
750-0822	2H7	B	7	.52	.34	.28	.23	.22
750-0973	8SM	C	8	.77	.50	.42	.34	.33
750-0975	8SMP*	D	8	.98	.62	.53	.42	.40

NOVAR TUBE SOCKETS

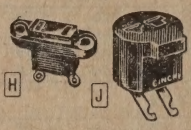
Meet or surpass EIA standards. Molded high dielectric black bakelite or mica-filled loss bakelite. Have cadmium-plated brass tacts. Provide maximum fatigue strength mating force with tube pins. Same dimens as octal sockets—layouts and cutouts for sockets will accommodate novar sockets. 1½" mtg. centers.

Stock No.	Mfr's Type	Bakelite	EACH 1-24	25-49	50-99	100
750-0993	9NS-B	Black	.20	.12	.11	
750-0995	9NS-M	Mica-filled	.22	.14	.12	

SUBMINIATURE NUVISTOR 5-PIN TUBE SOCKETS

Constructed of type MFE, loss phenolic insulation; s of cold rolled steel, cadm plated. Contacts are coppe loy cadmium-plated for soldering. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Mount	1-24	25-49	50-99	100-249
750-0878	5NS-1	E	Screw	.36	.22	.19	.16
750-0879	5NS-2	F	Printed circuit	.57	.37	.31	.25
750-0877	5NS	G	Ring type	.23	.15	.13	.12



SPECIAL-PURPOSE SOCKETS

Meet or surpass designer specs.

These soc have specia configurati

H CHASSIS-MOUNTING AC SOCKET

Socket has lug terminals. Rated 10 amps at 250 volts, or 15 a at 125 volts. Mounting hole, 25/64x25/32". 1½x1½" overall. Wt.,

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-99	100-249
750-0829	2R2	AC Socket	.21	.17	.15	.13

J CETRON TUBE SOCKET

Black bakelite socket accepts CE701 and CE702 Cetron tubes. special alloy spring-brass contacts. Shpg. wt., 1 oz.

750-0815	2B2	Socket	.79	.63	.53	.42

K POWER TRANSISTOR SOCKET

Wax-impregnated XP bakelite socket has formed thread for screw. .104/110" diameter hole in CR plate. Shpg. wt., 3 oz.

750-0832	2TS-1	Socket	.13	.11	.10	.09

L MAGNAL SOCKET

Mica-filled bakelite, 11-prong socket for cathode ray and televi tubes. Accepts 5BP1, 2AP1, 1P21, and 3KP1 tubes. Less moun ring (see table, below). Av. shpg. wt., 4 oz.

750-0855	3M11	Socket	5.99	4.78	3.99	3.19
750-0858	3R11	Steel mtg. ring	.74	.58	.48	.39

M DUODECAL CRT SOCKET

Mica-filled, phenolic socket has 12 prongs. Accepts 10BP4, 2I 5TP4, etc.; RCA 6199. Meets JETEC B12-43 specs. Wt., 4 oz.

750-0856	3M12	Socket	2.42	1.93	1.61	1.29

N DIHEPTAL CRT SOCKETS

Black bakelite or mica-filled 14-prong sockets. Accept RCA 6 and 5819 photo tubes. Meets JEDEC B12-37. Less mounting (order from table, below). Av. shpg. wt., 5 oz.

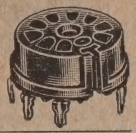
Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-99	100-249
750-0841	3B14	Black	2.10	1.69	1.41	1.12
750-0857	3M14	Mica-filled	2.22	1.76	1.48	1.18
750-0859	3R14	Steel mtg. ring	.83	.65	.55	.44

Call the Nearest Allied Electronics Office for All Your Electronic Nee

Special Sockets and Connectors

CINCH-JONES TUBE SOCKETS, PLUGS, SHIELDS AND BASES

STAND-OFF TYPE SOCKETS FOR PRINTED CIRCUITS



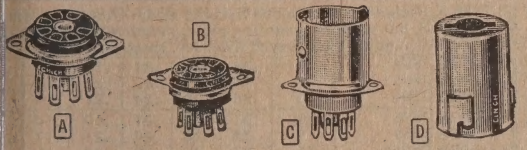
nd-off sockets rest on shoulder of the con- tail—provide air gap for cooling and elimi- ing possibility of a moisture trap. Designed 1/16" printed circuit boards having bottom ultry. All are constructed of general-purpose k phenolic casting with hot tinned brass tacts. Type 7PC-B1 is for 7-pin miniature es, 9PC-B1 for 9-pin miniature tubes. 1 oz.

Stock No.	Mfr's Type	Pins	EACH 1-24	25-49	50-99	100-249	250-Up
0-0916	7PC-B1	7	.13	.09	.08	.07	.06
0-0998	9PC-B1	9	.18	.12	.105	.095	.084

PRINTED CIRCUIT SOCKETS WITH SHIELD BASES

nted circuit sockets have attached bayonet-type eld base with ground tab. For use with 1/16" printed uit boards. Low-loss mica-filled phenolic castings h phosphor bronze contacts. Center shield and und tab are hot-tinned brass for easy soldering. kel-plated brass base. Av. shpg. wt., 2 oz.

0-0919	7PC-M2	7	.99	.79	.66	.53	.51
0-1001	9PC-M2	9	1.10	.88	.74	.59	.57



MINIATURE TUBE SOCKETS, SHIELDS AND BASES

ket saddles, shield base, shields are steel. 7-pin sockets, shield es mount on 7/8" ctrs.; sockets require 5/8" hole. 9-pin sockets, eld bases mount on 1 1/8" ctrs.; sockets require 3/4" hole. Strap s are curved strips with 2 threaded holes that take place of 2 s in mounting miniature sockets. Diameter of rivet holes: †.125", 98". *JAN/MIL type. Socket made to MIL-12883-A; shield made JAN-S-23A. Brass base, cadmium plated with a chromate treat- nt. Silver plated contacts; tails hot tin dipped. Molded castings type MFE material. Phosphor bronze contacts. Meet JAN/MIL 102P01. Wt., 1 oz., except sockets, 2 oz.

A TOP-MOUNTING SOCKETS

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-99	100-Up
0-0900	7AB1	§7-pin black bakelite	.19	.12	.11	.10
0-0980	9AB	§9-pin black bakelite	.19	.12	.11	.10
0-0981	9AM	§9-pin mica-filled bakelite	.23	.13	.12	.10

B BOTTOM-MOUNTING SOCKETS

0-0902	7EB	§7-pin black bakelite	.16	.11	.10	.08
0-0904	7EM	§7-pin mica-filled bakelite	.19	.12	.11	.10
0-0983	9EB	§9-pin black bakelite	.19	.12	.11	.10
0-0984	9EM	§9-pin mica-filled bakelite	.23	.13	.12	.11

C TOP-MOUNT SHIELD BASE SOCKETS ("J" Slot)

0-0941	7XB1	†7-pin black bakelite	.24	.14	.12	.11
0-0942	7XC	†7-pin ceramic	.58	.37	.32	.24
0-0943	7XM1	†7-pin mica-filled bakelite	.28	.18	.15	.13
0-0912	7JM-2	7-pin JAN/MIL*	.38	.23	.20	.16
0-1014	9XB	§9-pin black bakelite	.28	.18	.15	.13
0-1015	9XC	§9-pin ceramic	.46	.29	.24	.20
0-1016	9XM	§9-pin mica-filled bakelite	.30	.20	.16	.14

D TUBE SHIELDS ("J" Slot)

0-0923	7S3	1 3/4" high, 7-pin	.29	.17	.14	.13
0-0924	7S4	2 1/4" high, 7-pin	.39	.25	.22	.17
0-1005	9S2	1 15/16" high, 9-pin	.35	.23	.19	.15
0-1006	9S3	2 3/8" high, 9-pin	.66	.43	.36	.28

WAFER-TYPE SOCKETS

urdily constructed, laminated bakelite tube ckets. All are equipped with solder-coated ass contacts. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Mtg. Ctrs.	Contacts	EACH 1-24	25-49	50-99	100-Up
389-2008	8W1	15/16"	8 (octal)	.16	.10	.09	.08
389-2009	8W2	1 1/2"	8 (octal)	.16	.10	.09	.08
750-1012	9W1	1 1/8"	9 (min.)	.21	.13	.12	.11

MULTI-CONTACT PLUGS & SOCKETS

Mount in 1 1/64" keyed hole (use 8RO retainer ring, 2nd table below). Type 8PB fits octal socket; 11RB takes 11PB plug; 16F shield fits all. Wt., 1 oz.

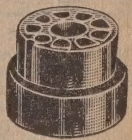
Stock No.	Type	Fig.	Description	EACH 1-24	25-49	50-99	100-Up
750-0962	8PB	E	8-Contact Plug	.31	.21	.18	.15
750-1025	11PB	E	11-Contact Plug	.41	.24	.21	.18
750-1027	11RB	F	11-Contact Socket	.41	.26	.22	.18
750-1047	16F	....	Snap-on Shield	1.06	.73	.57	.45

BAKELITE AND CERAMIC OCTAL SOCKETS

Saddle types have 4 ground lugs. Fig. G have 1 1/2" centers, clinch-on steel saddle; 1 1/8" dia. Fig. H 1 5/16" centers, press-on saddle; 1" dia. Fig. J: 1 1/64" dia., have keyway and retaining ring 8RO, extra ring. 8AP permits rivet mtg. of Fig. J types (slotted 1 1/2" to 1 7/8" centers). "Mtg." column is rivet-hole dia. or chassis thickness. Retainer ring and adapter plate for use with these sockets are listed at bottom of table below. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Description	Mtg.	EACH 1-24	25-49	50-Up
750-0955	8EB	G	Black	.143"	.19	.12	.116
750-0956	8EM	G	Mica-filled	.143"	.23	.13	.12
750-0950	8AB	H	Black	.136"	.19	.12	.116
750-0951	8AM	H	Mica-filled	.136"	.23	.13	.12
750-0965	8R1	J	Black	1/16"	.22	.18	.15
750-0967	8R3	J	Mica-filled	1/16"	.26	.22	.19
750-0971	8RO	....	Retainer ring		.13	.10	.09
750-0952	8AP	....	Adapter plate		.15	.11	.10

VIDICON SOCKETS



TYPE 7VT. 7-contact socket designed for RCA vidicon camera tubes 6198 and 7038. Mica base with silver-plated phosphor bronze contacts. Meets JETEC E8-11. Shpg. wt., 3 oz.

750-0947 1-24....Ea. 2.60 25-49.....Ea. 2.07
50-99..Ea. 1.73 100-249..Ea. 1.39 250-Up Ea. 1.32

TYPE 8VT. 8-contacts. For RCA vidicon camera tubes. Silver-plated phosphor bronze contacts. Meets JETEC E8-11 specs. Shpg. wt., 3 oz.

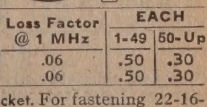
750-0978 1-24.....Ea. 2.60 25-49.....Ea. 2.07
50-99.....Ea. 1.73 100-249.....Ea. 1.39
250-Up.....Ea. 1.32

TYPE 20-PM PHOTOMULTIPLIER TUBE SOCKET

20-contact socket for RCA photomultiplier tubes. Accepts 6810, C7187A, C7122, 7265, or others with similar bases. Durable MAI-60 alkyd glass fibre base. Meets JETEC 20-102. Shpg. wt. 2 oz.

750-1049.....1-24 Ea. 5.49 25-49...Ea. 5.31
50-99.....Each 4.43 100-249.....Each 3.55
250-Up.....Each 3.37

GRAYHILL TRANSISTOR SOCKETS

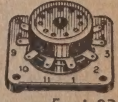


For TO-12 and TO-33 types. Leads fit on 100-mil grid for printed circuits. Terminal numbers molded on bottom of sockets; top faces have key ribs for alignment with transistor tab. Mica-filled phenolic per MIL-M-14. Type MFE. 22-11 (Fig. T) fits 3/8" hole. 22-16-4 (Fig. S) can be soldered in printed circuits or fastened in "D" hole. 1 oz.

Stock No.	Mfr's Type	Fig.	No. of Pins	Mtg.	Loss Factor @ 1 MHz	EACH 1-49	50-Up
801-0471	22-16-4	K	4	Ring	.06	.50	.30
801-0466	22-11	L	4	Screw	.06	.50	.30

M 801-2080. Mounting Ring for 22-16-4 Socket. For fastening 22-16-4 socket above, in punched "D" hole. Wt., 1 oz.....Each .02

POMONA 11-CONTACT RELAY SOCKET



TYPE 2811. Above-chassis mount. Diallyl phthalate base and socket. Beryllium copper contacts rated 600V rms at 10 amps. 2x2x.85". 5 oz.

888-0605. 1-9.....Ea. 3.43 10-24.....Ea. 2.75
25-49 Ea.....2.48 50-99.....Ea. 2.34 100-Up.....Ea. 1.93

Amphenol Standard and Relay Sockets

RELAY SOCKETS

TYPE 146-817. 11-contact melamine socket for fast and easy mounting of most 11-pin relays. Has replaceable contacts on ¾" terminals, screw-type terminals. Contacts rated 10 amps at 600 V rms. Has two .156" mounting holes on 3⅞" centers. 4 tie points. Shpg. wt. 1 lb.

713-5017. 1-24.....Each 3.47 25-99.....Each 2.91
100-249.....Each 2.44 250-Up.....Each 2.09

BARRIER-TYPE OCTAL RELAY SOCKETS

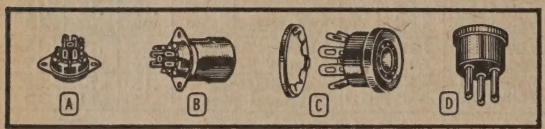
Maximum EIA working voltage of sockets is 2000 DC. All have bronze cloverleaf contacts. Each contact rated 8 amps. Inter-electrode capacitance is 2.6 pF. 8 screw terminals. Top mounting, except *bottom mounting. †Includes 4 molded-in threaded inserts for use as tie points. Size, 3⅛x1⅝x2⅝". Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-5003	146-103	2.05	1.64	1.45	1.27	.94	.94
713-5004	146-104†	2.05	2.04	1.71	1.53	1.18	1.18
713-5011	146-203*	2.05	1.64	1.45	1.27	.94	.94
713-5012	146-204*†	2.05	2.04	1.71	1.53	1.18	1.18

MAGNAL SOCKET

TYPE 49-SS11L. Has 1 1/16" pin circle to accept 11-prong CR tubes. Low-loss steatite. 1⅝" mtg. hole. With retaining ring. Shpg. wt., 7 oz.

713-0017. 1-24..Each 2.01 25-49....Each 1.61
50-99.....Each 1.35 100-249..Each 1.21
250-499.....Each .94 500-Up..Each .94



BAKELITE AND MICA-FILLED MINIATURE SOCKETS

High-grade miniature type. 147 series mount in ⅝" chassis hole; ⅞" mtg. ctrs., with ⅛" screw holes. 59 series mount in ¾" chassis hole and have 1⅛" mtg. ctrs. with .095" rivet holes, (except 59-403, .125"). ‡Black bakelite. †Mica-filled bakelite. Av. wt., 1 oz.

[A] WITHOUT TUBE SHIELD BASE

Stock No.	Mfr's Type	Fig.	Contacts	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-5050	‡147-500	A	7	.48	.38	.32	.28	.22	.22
713-5052	†147-505	A	7	.49	.39	.33	.29	.23	.23
713-5056	†147-913	B	7	.58	.46	.38	.34	.27	.27

[B] WITH TUBE SHIELD BASE

Stock No.	Mfr's Type	Fig.	Contacts	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-1909	‡59-409	A	9	.55	.44	.37	.33	.26	.26
713-1910	†59-410	A	9	1.29	1.03	.86	.77	.59	.59
713-1903	†59-403	B	9	.90	.72	.60	.54	.42	.42
713-1907	†59-407	B	9	.64	.51	.43	.38	.30	.30

[C] RETAINER RING SOCKETS

Mount in ⅝" round or "D" shaped hole with retainer ring provided. May be used with 91-MPM plugs. All are black bakelite. 1 oz.

Stock No.	Mfr's Type	Prongs	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-2925	78-S3S	3	.19	.15	.13	.11	.09	.09
713-2927	78-S4S	4	.28	.22	.19	.17	.13	.13
713-2929	78-S5S	5	.29	.23	.20	.18	.14	.14
713-2931	78-S6S	6	.30	.24	.20	.18	.14	.14

[D] MINIATURE PLUGS

Compact, high-dielectric. Nickel-plated brass prongs recessed to prevent shorts from pulled-back insulation. For cables with up to six conductors. Contacts polarized to assure proper connections. Rated 5 amps @ 500 V. Fit Amphenol Series 78-S sockets. Wt. 2 oz.

Stock No.	Mfr's Type	Prongs	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-2355	71-3S	3	.20	.16	.13	.12	.09	.09
713-2360	71-4S	4	.24	.19	.16	.14	.11	.11
713-2366	71-5S	5	.26	.21	.17	.15	.12	.12
713-2374	71-6S	6	.30	.24	.20	.18	.14	.14

STANDARD SOCKETS

[E] TYPE MIP. Bakelite body with molded-in steel plate. *Req 1⅛" hole; mounting centers, 1⅝"; others have 1½" mtg. §Requires 1⅝" hole. ‡Mica-filled bakelite. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Prongs	EACH 1-24	25-49	50-99	100-249	250-499	5
713-2800	77MIP4§	4	.30	.24	.20	.18	.14	
713-2803	77MIP5§	5	.34	.27	.22	.20	.15	
713-2805	77MIP6§	6	.36	.29	.24	.22	.17	
713-2810	77MIP8§	Octal	.39	.31	.26	.23	.18	
713-3700	88-8*	Octal	.33	.26	.22	.20	.15	
713-3703	88-8X*	Loctal	.36	.29	.24	.22	.17	
713-2809	77MIP8T§‡	Octal	.55	.44	.37	.33	.25	
713-2813	77MIP9§	9	.35	.28	.24	.21	.17	
713-2815	77MIP11§	11	.38	.30	.25	.23	.18	
713-2816	77MIP11T‡	11	.39	.31	.26	.23	.18	
713-2818	77MIP12§	12	.48	.37	.31	.28	.22	
713-2821	77MIP20§	20	.88	.70	.59	.57	.41	

[F] TYPE S. High-dielectric moded bakelite body. Units are sam Type RS, but without mounting plate; mount with retainer r supplied. All require 1 1/64" keyed hole. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Prongs	EACH 1-24	25-49	50-99	100-249	250-499	
713-2926	78S4	4	.31	.25	.21	.19	.14	
713-2928	78S5	5	.34	.27	.22	.20	.15	
713-2930	78S6	6	.36	.29	.24	.22	.17	
713-2934	78S8	Octal	.31	.25	.21	.19	.14	
713-2938	78S9	9	.35	.28	.24	.21	.17	
713-2939	78S11	11	.41	.33	.28	.24	.19	

[G] TYPE RS. Have removable mounting plate. All of the units lis below mount in 1 1/64" hole. Slotted mounting holes to fit cen from 1½ to 1⅞". Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Prongs	EACH 1-24	25-49	50-99	100-249	250-499	
713-2926	78RS4	4	.39	.31	.26	.23	.18	
713-2928	78RS5	5	.41	.33	.28	.25	.19	
713-2930	78RS6	6	.44	.35	.30	.26	.20	
713-2914	78RS8	Octal	.43	.34	.28	.25	.19	
713-2923	78RS11	11	.55	.44	.37	.33	.26	

[G] TYPE RSS. Ultra-low-loss steatite body. Excellent for use in hi frequency transmitting equipment. All are universal type; h removable mounting plate with slotted holes 1½ to 1⅞". Mount hole required, 1¼" except Type 49RSS7L, 1 21/64". Av. wt., 5

Stock No.	Mfr's Type	Prongs	EACH 1-24	25-49	50-99	100-249	250-499	
713-1311	49RSS4	4	1.18	.95	.80	.71	.55	
713-1312	49RSS5	5	1.20	.96	.81	.72	.56	
713-1314	49RSS7L	7 Large	2.30	1.84	1.54	1.38	1.07	1.
713-1316	49RSS8	Octal	1.33	1.07	.87	.78	.61	

OCTAL SOCKETS

TYPE 77-MIP8FK FLOATING OCTAL. Live-rub grommets in enlarged mounting holes of stu steel plate. Mounts in 1 3/16" hole with two holes on 1½" centers. With grommets, mou ing screws, nuts, washers. Shpg. wt., 5 oz.

713-2812. 1-24.....Each .51 25-49.....Each .4
50-249.....Each .341 250-499.....Each .2
500-999.....Each .245 1000-Up.....Each .2

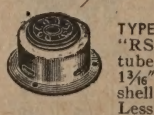
TYPE 168-015 SADDLE OCTAL. Constructed w sturdy steel plate and molded bakelite body. 1" diameter hole; ¾" mounting holes on 1 centers. Has 4 solder lugs, spaced 90° apa Mount from below chassis. Shpg. wt., 5 oz.

713-5588. 1-24...Each .40 25-49.....Each
50-99.....Each .27 100-249...Each
250-499.....Each .19 500-Up....Each

DUODECAL TV SOCKET

TYPE 59-402. For CR tubes. 12 prongs spaced 1.063" dia. Low-loss bakelite; removable cap. 5

713-1902. 1-24..Each 1.16 25-49.....Each
50-249.....Each .78 250-499....Each .6
500-999.....Each .559 1000-Up...Each .4



ACS SOCKET-SHELL

TYPE 23-1S. Lightweight aluminum for Types "RR "RS," and "S" tube sockets, except for 7-pin la tube sockets, such as Type 49RSS7L. Sockets exte 1⅜" above or below chassis surface. Body diameter shell, 1 1/16". Requires 1¾" diameter mounting ho Less socket. Av. shpg. wt., 5 oz.

713-0501. 1-24.....Each .33 25-49.....Each
50-99.....Each .22 100-249.....Each
250-499.....Each .16 500-Up.....Each

Plugs, Sockets, Chimneys and Connectors

AMPHENOL PLUGS AND SOCKETS

STANDARD AND GROUNDING PLUGS, SOCKETS

1 series is 2 pole; 160 series is 2 pole with grounding lug. Black ylon rated 15 A at 120 V AC/DC. •U.L. Recog. except Fig. A ypes which mount in 1 11/64″ keyed hole with retaining ring supplied. ig. B types have molded-in mtg. plates except, §retaining-ring-ounted plate; require 1 9/32″ mtg. holes and have 5/32″ slotted holes n 1½″ to 1⅞″ ctrs., except 61-MIP-61F, 1 3/16″ mtg. hole, 5/32″ oles on 1½″ ctrs. Fig. C types mount in 1 7/16″ hole, have two 5/32″ oles on 1¾″ ctrs. †7/16″ I. D. grommet instead of ⅜″ clamp. Wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Desc.	EACH 1-49	50-99	100-249	250-499	500-Up
13-2112	61-M	A	male	.46	.39	.34	.30	.27
13-2101	61-F	A	female	.42	.36	.31	.27	.25
13-2113	61-M1	B	§male	.54	.46	.40	.35	.32
13-2102	61-F1	B	§female	.49	.42	.37	.32	.29
13-2117	61-MIP-61F	B	female	.45	.39	.34	.30	.27
13-2115	61-M10	C	male	.65	.56	.49	.43	.39
13-2110	61-F10	C	female	.62	.53	.46	.40	.37

Stock No.	Mfr's Type	Fig.	Desc.	EACH 1-49	50-99	100-249	250-499	500-Up
713-5210	160-10N	A	female	.95	.82	.71	.63	.57
713-5211	160-11N	A	male	1.14	.98	.85	.68	.63
713-5202	160-2N	B	female	1.02	.88	.76	.67	.61
713-5204	160-3N	B	male	1.41	1.21	1.06	.92	.84
713-5203	160-4N	C	female	1.19	1.02	.89	.78	.71
713-5205	160-5N	C	male	1.56	1.34	1.17	1.03	.93
713-5206	160-6N	†D	female	1.07	.92	.81	.70	.64
713-5207	160-7N	†D	male	1.35	1.16	1.01	.88	.80
713-5208	160-8N	D	female	1.14	.98	.86	.75	.68
713-5209	160-9N	D	male	1.43	1.22	1.06	.93	.84

"S" TYPE MINIATURE 9-PIN TUBE SOCKET

Type 78-A9P. High dielectric phenolic. Designed to mount quickly and easily, without screws or rivets, on panel or chassis up to .050″ thick in 1 11/64″ keyed hole. With retaining ring. Av. wt., 5 oz.

713-2902. 1-49 ..... Each .45
50-99 ..... Each .38 100-249 ..... Each .36
250-499 ..... Each .26 500-Up ..... Each .26

H. H. EBY SOCKETS

TRANSISTOR SOCKETS FOR TO-3 CASE

One-piece bakelite. Contacts cadmium-plated brass. Special-design mounting plate and terminal assures complete electrical isolation of the base connections from the chassis. 6-32 mounting holes on 1.187″ centers. Wt., 1 oz.

Stock No.	Mfr's Type	Description	EACH 1-99	100-249	250-499	500-Up
789-1824	9866-15-1	Standard	.60	.44	.25	.15
789-1826	9866-15-5	With raised boss	.60	.44	.25	.15

TRANSISTOR SOCKETS

One-piece integral saddle design. Mounts with rivets or #2 screws. Contacts: silver plated beryllium copper with gold flash. Mica-filled phenolic per MIL-M-14. Type 9866-13-6 for TO-5, 9, 11, 16, 29, 31, 39, 43 cases. Type 9866-13-4 for TO-12, 33, 42 cases. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	No. Pins	EACH 1-99	100-249	250-499	500-Up
789-1821	9866-13-6	E	3	.43	.39	.25	.13
789-1819	9866-13-4	F	4	.47	.41	.28	.16

CRYSTAL SOCKET

TYPE 9748-16-10. Molded crystal socket for use with all standard HC-6/U crystals having .050″ pins. One-piece design, general purpose phenolic insulating material. Contacts are cadmium-plated brass. Specially well suited for use where shock or vibration are problems. Rated at 500 volts. Current, 1 ampere. Operating temperature: 100°C. Dielectric withstanding voltage, 1200 volts rms. Maximum individual contact resistance, .03 ohms. Shpg. wt., 1 oz.

789-1810. 1-49 ..... Each .63 50-99 ..... Each .50
100-249 ..... Each .33 250-999 ..... Each .32 1000-Up Each .31

SERIES 86 STANDARD TYPE CP PLUGS

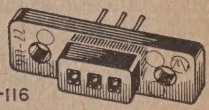
Bakelite plugs for use as chassis connectors. Retainer-ring mounting. Use adapter plate below for replacement mtg. With mtg. ring for 1 11/64″ holes. †Have guide post and aligning key. Av. wt., 2 oz.

Stock No.	Mfr's Type	Pins	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
713-3602	86-CP4	4	.37	.30	.25	.22	.17	.17
713-3603	86-CP5	5	.37	.30	.25	.22	.17	.17
713-3604	86-CP6	6	.40	.32	.27	.24	.19	.19
713-3605	86-CP7S	7-Small	.41	.33	.28	.25	.19	.19
713-3606	86-CP8†	Octal	.40	.32	.27	.24	.19	.19
713-3607	86-CP9†	9	.41	.33	.28	.25	.19	.19
713-3610	86-CP11†	11	.43	.34	.28	.25	.20	.20
713-3611	86-CP12†	12	.44	.35	.29	.26	.20	.20

Adapter Plate Type 12-001-03. Nickel-plated steel. For all Type CP plugs above. 1½″ to 1⅞″ centers. Wt., 1 oz.
713-0085 ..... Each .05

SOCKETS FOR SCR'S

77-115


77-116

Three-contact Nylon receptacle accepts I.R. IR106, Motorola MCR 406, G.E. C106. Nickle-silver contacts: Nylon insulator. Voltage: 500 V rms. Current: 5 A. Contact Spacing .200″ center. Mounting: *77-115 press-fits into rectangular panel or chassis cut-out, .340/.330 x .164/.161″. For PC board. †77-116 designed with integrally molded mtg. flange with two .125″ dia. mtg. holes on .625″ ctrs. Requires cut-out .325 x .200″. Wt., per pkg., 2 oz.

Stock No.	Mfr's Type	Description	EACH 1-24	25-49	50-249	250-499	500-Up
713-2865	*77-115	Press fit	.26	.21	.171	.141	.121
713-2866	†77-116	Mounting flange	.26	.21	.71	.14	.12

EIMAC TUBE SOCKETS, CHIMNEYS, CONNECTORS

G

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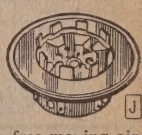
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TUBE SOCKETS. Maintain a free-moving air-stream for cooler operation, longer tube life. Types SK600 and SK610 have built-in 2700 pF, 400-volt screen grid bypass capacitors; all other types are without bypass capacitors. For correct chimney to use with air-system tube sockets, see listing below. Av. wt., 15 oz.

Stock No.	Mfr's Type	Fig.	For Tube Types	EACH
776-5034	SK410	G	4-250A, 4-400A, 4-125A, 3-4002, 3-400Z	10.70
776-5042	SK510	H	3-1000Z	10.70
776-5046	SK600	J	4CX250B/F, 4CX250A/F, 4X150A/D, 7580	12.00
776-5050	SK610	J	Same as SK600; cathode gnd. contact.	13.60
776-5053	SK640	K	Same as SK600.	10.00

CHIMNEYS. (Not illus.) For use with air-system tube sockets shown above. Av. shpg. wt., 8 oz.

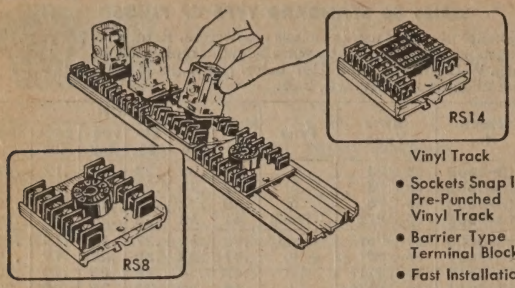
Stock No.	Type	For Socket	EACH
776-5032	SK406	SK410	6.50
776-5040	SK506	SK510	12.00
776-5048	SK606	SK600, SK610, SK640	.75

HEAT-DISSIPATING CONNECTORS. Provide maximum heat dissipation. Permit longer tube life through cooler plate and grid seal operation. Machined from solid dural rod; with screws. Fit tube types listed below. Av. shpg. wt., 2 oz.

Stock No.	Type	For Tube Types	EACH
776-5025	HR-6	2-150D, 2-240A, 4-65A, 4D21/4-125A, 5D22/4-250A, 4-400A, 100TH-TL plate, 250TH-TL plate, 250R plate, 304TH-TL grid	2.20
776-5027	HR-8	2-450A, 2-2000A, 253, 3-1000Z, 4-1000A, 4PR60A, 6C21, 450TH-TL, 750TL, 866A, 872A, 1500T, 2000T, 8020 (100R) plate	2.85

Relay and Tube Sockets, Nylon Connectors

CURTIS TRACK-MOUNTED RELAY SOCKET ASSEMBLIES



- Sockets Snap Into Pre-Punched Vinyl Track
- Barrier Type Terminal Blocks
- Fast Installation

PC track-mounted socket assemblies (up to 24) snap vertically in or out of 48" pre-punched vinyl track (below). Design gives spring retention of each assembly. Sockets can be spaced out in track, leaving spaces for marking strips; have recessed slotted center post so relays can be rocked out without danger of fracturing posts. Glass epoxy G-10 board, wave soldered and coated for moisture protection and insulation. Barrier type terminal blocks with screws are permanently marked. RS14,-15 for miniature 4PDT relays (P&B KHP, Sigma 67, Guardian 1300 etc.) with 2 coil leads and ground have 2-56 wire clamp for wire sizes to #16. Others have 6-32 screws for wire to #12. RS12 for 3PDT (P&B KUP14, Sigma 68R3 etc.); RS16 for 2PDT (P&B KUP11, Sigma 68R2 etc.). Av. wt. 4 oz.

RELAY SOCKET ASSEMBLIES

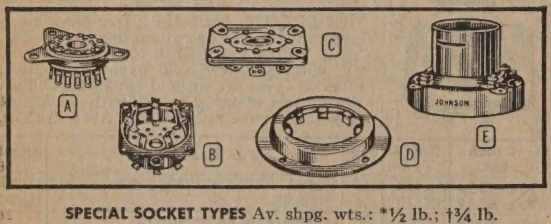
Stock No.	Mfr's Type	Contacts	A	V	Size, Inches WxDxH	EACH
759-8410	RS8	Octal	10	250	2 7/8x2x1 3/32	1.95
759-8413	RS11	11	10	250	2 7/8x2 7/8x1 3/32"	2.85
759-8414	RS12	12	10	250	3 3/8x2 7/8x1 1/16	3.50
759-8416	RS14	14	5	125	2 7/8x2x2 9/32	4.65
759-8417	RS15	15	5	125	2 5/16x2 1/4x2 9/32	4.65
759-8418	RS16	16	10	250	3 3/8x2 1/4x1 1/16	2.75

PRE-PUNCHED VINYL TRACK

Pre-punched with 2" center-to-center mounting slot dimension. Mount with only 2 or 3 holes per track. Cut to any length. Wt. 6 oz.

Stock No.	Type	WxL	For Sockets	EACH
759-8430	TR1	2 3/16x48"	RS15 only	2.00
759-8431	TR2	2 3/4x48"	RS8-11-12-14-16	2.40

E. F. JOHNSON TUBE SOCKETS



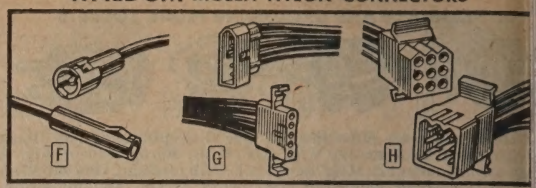
SPECIAL SOCKET TYPES Av. shpg. wts.: *½ lb.; †¾ lb.

Stock No.	Mfr's Type	Fig.	Pins	Description	EACH 1-9	10-49	50-Up
828-0050	122-244-1*	C	4	Steatite. For "super jumbo" tubes.	2.20	1.98	1.75
828-0051	122-275-1†	C	5	Steatite. For giant 5-pin base tubes.	2.70	2.42	2.15
828-0045	122-101-100*	B	7	Steatite with base-shield and retainer springs.	3.70	3.32	2.94
828-0057	124-311-100*	A	11	Silicone base. For 8072, 8121, 8462, other UHF tubes.	1.30	1.17	1.04

BAYONET SOCKETS Av. shpg. wts.: *½ lb.; †¾ lb.; §1 lb.

828-0052	123-209-1†	E	4	For "UX" base tubes. 4 mtg. holes 2 5/16" centers.	2.30	2.07	1.83
828-0053	123-211-1§	E	4	Porcelain base. For "jumbo" tubes. 2 13/16" mtg. centers.	2.95	2.65	2.35
828-0055	124-113-1*	D		1450 pF screen bypass capacitor. 1000 VDC. For 124 series sockets.	5.10	4.52	4.52

WALDOM MOLEX NYLON CONNECTORS



Polarized, except single type. Male and female terminals of sam diameter can be mixed in same housing. Crimping tools below. R receptacle; P-plug; †amps per circuit. U.L. Listed. Less contacts Sold only in multiples of 5 or 10.

MINIATURE CONNECTORS

Stock No.	Mfr's Type	No. of Circuit	Fig.	†	EACH (MULTIPLES OF 10) 10-90	100-490	500-Up
989-1110	1625-1P	1	F	5	.08	.055	.042
989-1111	1625-1R	1	F	5	.07	.049	.036
989-1112	1625-3P	3	G	5	.12	.108	.08
989-1113	1625-3R	3	G	5	.14	.12	.09
989-1114	1625-4P	4	G	5	.32	.24	.18
989-1115	1625-4R	4	G	5	.31	.239	.177

STANDARD CONNECTORS

Stock No.	Mfr's Type	No. of Circuits	Fig.	†	EACH (MULTIPLES OF 10) 10-90	100-490	500-Up
989-1100	1619P	1	F	12	.08	.049	.041
989-1101	1619R	1	F	12	.06	.045	.035
989-1080	1545P	2	G	12	.16	.125	.094
989-1081	1545R	2	G	12	.16	.126	.094
989-1063	1396P	3	G	12	.09	.07	.05
989-1064	1396R	3	G	12	.10	.075	.056
989-1070	1490P	4	G	9	.13	.10	.073
989-1071	1490R	4	G	9	.15	.11	.082

Stock No.	Mfr's Type	No. of Circuits	Fig.	†	EACH (MULTIPLES OF 5) 5-95	100-495	500-Up
989-1145	1653P	5	G	9	.20	.154	.115
989-1146	1653R	5	G	9	.28	.163	.126
989-1037	1261P	6	H	9	.17	.128	.101
989-1038	1261R	6	H	9	.19	.145	.114
989-1043	1292P	9	H	9	.20	.151	.119
989-1044	1292R	9	H	9	.27	.164	.129
989-1050	1360P	12	H	7.5	.23	.17	.133
989-1051	1360R	12	H	7.5	.24	.176	.138
989-1055	1375P	15	H	7.5	.28	.199	.156
989-1056	1375R	15	H	7.5	.31	.224	.176

Stock No.	Mfr's Type	No. of Circuits	Fig.	†	EACH (MULTIPLES OF 5) 5-95	100-495	500-Up
989-1116	1625-5P	5	G	5	.19	.133	.109
989-1117	1625-5R	5	G	5	.27	.168	.138
989-1118	1625-6P	6	H	5	.18	.125	.103
989-1119	1625-6R	6	H	5	.21	.141	.116
989-1140	1649-8P	8	G	5	.27	.153	.126
989-1141	1649-8R	8	G	5	.26	.185	.148
989-1122	1625-9P	9	H	5	.19	.133	.109
989-1123	1625-9R	9	H	5	.21	.15	.124
989-1124	1625-12P	12	H	5	.23	.157	.129
989-1125	1625-12R	12	H	5	.23	.159	.131
989-1126	1625-15P	15	H	5	.30	.219	.18
989-1127	1625-15R	15	H	5	.33	.247	.20
989-1175	1772-36P	36	H	4	1.15	.84	.681
989-1176	1772-36R	36	H	4	1.19	.875	.713

PIN TERMINALS FOR ABOVE HOUSINGS

F, female; M, male. .093" for standard conn.; .062" for miniature.

Stock No.	Mfr's Type	Mating Dia.	Wire Size	PRICE PER 100 100-900	1000-4900	5000-Up
989-1029	1189F	.093"	16-20	3.50	2.15	1.46
989-1030	1190M	.093"	16-20	3.50	2.15	1.46
989-1060	1380M	.093"	18-28	3.50	2.15	1.46
989-1059	1381F	.093"	18-28	3.50	2.15	1.46
989-1091	1560M	.062"	18-22	4.20	2.70	1.82
989-1090	1561F	.062"	18-22	4.20	2.70	1.82
989-1185	1854M	.062"	24-30	4.20	2.70	1.82
989-1184	1855F	.062"	24-30	4.20	2.70	1.82

CRIMPING TOOLS (includes an Ejector Tool)

Stock No.	Hand Tool	For	EACH	Stock No.	Prod. Tool	For	EACH
989-1182	HT1919	1189-1381	4.95	989-1027	HT1031C	1189-1381	35.00
989-1194	HT1921	1560-1855	4.95	989-1166	HT1719C	1560-1561	55.00
				989-1188	HT1885	1854-1855	55.00

Depend on Allied Electronics for Reliable Nationwide Service

Hubbell and Eagle Electrical Connectors

HARVEY HUBBELL CONNECTORS

MIDGET-SIZE CONNECTORS

2-WIRE NONPOLARIZED TYPES

Type 7428 male cap and Type 7427 female connector are brown bakelite with metal cable clamps for 5/16 to 1/2" O.D. cords. Type 7466 male base and Type 7468 female base are bakelite with metal housings. Rated 10 amps at 250 V; 15 amps, 125 V. Wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	10-49	50-Up
809-1033	7428	A	Male Cap	.57	.51	.44
809-1032	7427	B	Female Conn.	1.04	.93	.81
809-1052	7466	C	Male Base	1.24	1.10	.96
809-1054	7468	D	Female Base	1.50	1.33	1.16

3-WIRE POLARIZED TYPES

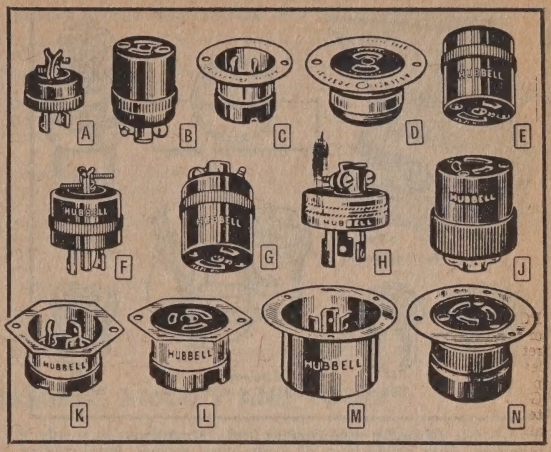
Similar to above connectors, but for use with 3-conductor cables. Insulation is black bakelite. Clamps will accommodate cords from 1/32" to 27/64" O.D. Polarization prevents incorrect connection. Rated 10 amps at 250 V, or 15 amps at 115 V. Wt., 3 oz.

809-1060	7485	A	Male Cap	1.35	1.20	1.05
809-1059	7484	B	Female Conn.	1.94	1.73	1.51
809-1061	7486	C	Male Base	1.72	1.53	1.34
809-1062	7487	D	Female Base	2.10	1.87	1.64

3-WIRE GROUNDING TYPES

Midget "Twist Lock" series designed specifically for 15 amp, 125 V grounding applications. Hollow brass grounding sleeve in cap mates with brass split pin to provide safe, positive connection. All are 1 33/32" dia. *With cord grips. Wt., 3 oz.

809-1068	7591	E	Female Conn.	2.26	2.00	1.75
809-1070	7593	F	Female Conn.*	2.37	2.10	1.84
809-1071	7594	G	Male Cap*	1.77	1.57	1.38



Feature unique "Twist Lock" design for positive, lock-fast electrical connections. Units lock with a twist of the cap—simply plug in—twist—and they lock! Never disconnect accidentally regardless of the treatment they are subjected to. Insure a maximum of safety and a minimum of time-loss. Meet National Electrical Code Standard *U.L. Recog.

STANDARD-SIZE CONNECTORS

3-WIRE POLARIZED TYPES

Type 7572 male cap, Type 7556 male base and Type 7557 female base have rust-resistant metal housings. Type 7555 female connector is bakelite. Clamps take cords from 19/64" to 5/16" O.D. All are rated 10 amps at 250 V; 15 amps, 125 V. *Armored. Wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	10-49	50-Up
809-1067	7572	H	Male Cap*	1.60	1.42	1.24
809-1064	7555	J	Female Conn.	2.53	2.25	1.97
809-1065	7556	K	Male Base	2.10	1.87	1.64
809-1066	7557	L	Female Base	2.32	2.06	1.81

STANDARD-SIZE CONNECTORS (Cont'd)

HEAVY-DUTY 3-WIRE POLARIZED TYPES

Type 7311 male cap, Type 7327 male base and Type 7328 female base have rust-resistant metal housings. Type 7313 female connector is bakelite. Clamps take cords from 7/16" to 3/4" O.D. Rated 20 amps at 250 V, or 10 amps at 575 V. *Armored. Wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	10-49	50-Up
809-1011	7311	H	Male Cap*	2.30	2.04	1.79
809-1013	7313	J	Female Conn.	3.54	3.14	2.75
809-1018	7327	M	Male Base	2.73	2.42	2.12
809-1019	7328	N	Female Base	4.18	3.71	3.25

EAGLE ELECTRICAL ACCESSORIES, ALL U.L. LISTED

P TYPE 179 RUBBER HANDLE PLUG. Approved for 2-wire 15 amp use. Use with Fig. L for extension cords. Wt. 4 oz.
789-1440. 1-24...Ea. .17 25-99...Ea. .153
100-Up.....Ea. .136

R Type 84B Flat Rubber Side-Outlet Plug. Prongs molded into vinyl; insulated binding screws. Rated 15 amps at 125 volts. Shpg. wt. 2 oz.
789-1435. 1-24...Ea. .22 25-99...Ea. .198
100-Up.....Ea. .176

S Type 919B BAKELITE PLUG. With finger grip. Cap size, 1 1/8x1 7/16x1 9/16". Screw terminals. 15 amps. Brown. 4 oz.
789-1480. 1-24...Ea. .17 25-99...Ea. .153
100-Up.....Ea. .136

T TYPE 400B VINYL CUBE TAP. Brass spring prongs. 3-way outlet. Rated 15 amps at 125 volts. Shpg. wt. 8 oz.
789-1460. 1-24...Ea. .28 25-99...Ea. .252
100-Up.....Ea. .224

W TYPE C900B JIFFY PUSH-PULL PLUG. No wire stripping. Push POSJ cable through hole in cap. Pull for pos. conn. 6 oz.
789-1478. 1-24...Ea. .14 25-99...Ea. .126
100-Up.....Ea. .112

X TYPE 183B FLAT RUBBER PLUG. Molded cap. Easily disassembled. Screw terminal wiring. Rated 15 amps at 125 V; 10 amps at 250 V. Shpg. wt. 3 oz.
789-1442. 1-24...Ea. .20 25-99...Ea. .18
100-Up.....Ea. .16

Y TYPE 203 PARALLEL GROUND PLUG. Rubber handle. "U" ground. 3-wire. Two fit standard duplex receptacle. 2 oz.
789-1447. 1-9...Ea. .60 10-24...Ea. .54
25-Up.....Ea. .48

Z TYPE 178 RUBBER LINE CORD CONNECTOR. Dia., 1 1/4". Rated 15 amps at 125 volts. Cable clamp. Shpg. wt. 3 oz.
789-1439. 1-24...Ea. .46 25-99...Ea. .41
100-Up.....Ea. .368

AA TYPE 224 LARGE PARALLEL-SLOTS CONNECTOR. Rubber handle cap. Bronze contacts. Cable clamp. Rated 15 amps at 125 volts. Shpg. wt. 3 oz.
789-1456. 1-9...Ea. .50 10-24...Ea. .45
25-Up.....Ea. .40

BB TYPE 222 PARALLEL GROUND RUBBER CONNECTOR. 3 bronze contacts. 15 amps @ 125 V. Cord hole, 3/5". Cable clamp. Shpg. wt. 3 oz.
789-1452. 1-9...Ea. 1.20 10-24...Ea. 1.08
25-Up.....Ea. .96

CC TYPE 832 BAKELITE PARALLEL GROUND ADAPTER: Adapts 3-prong plugs for use in standard 2-prong AC outlets. Double-wipe contacts 15 amps @ 125 V 3 1/4" lead with "C" lug. Shpg. wt. 3 oz.
789-1472. 1-9...Ea. .43 10-24...Ea. .40
25-Up.....Ea. .35

DD TYPE 86B FLAT RUBBER CORD CONNECTOR. Matches Figs. D, H. Double-wipe contacts. Insulated screws. 3 oz.
789-1465. 1-9...Ea. .46 10-24...Ea. .41
25-Up.....Ea. .368

EE TYPE 202 LARGE RUBBER HANDLE PLUG. Cord hole dia., .600". Cord clamps. 3 oz.
789-1446. 1-9...Ea. .29 10-24...Ea. .26
25-Up.....Ea. .23

FF TYPE 419 VINYL PARALLEL GROUND ADAPTER. Same function as Fig. CC. Lead with "C" lug. 15 amps @ 125 V. 3 oz.
789-1462. 1-9...Ea. .28 10-24...Ea. .25
25-Up.....Ea. .22

GG FUSED PLUG. Cylindrical receptacles hold two 10 amp glass fuses. Less 3AG fuses (see Index). 3 oz.
729-5050. 1-9...Ea. .37 10-Up...Ea. .35

SOLDERLESS WIRE-CONNECTORS

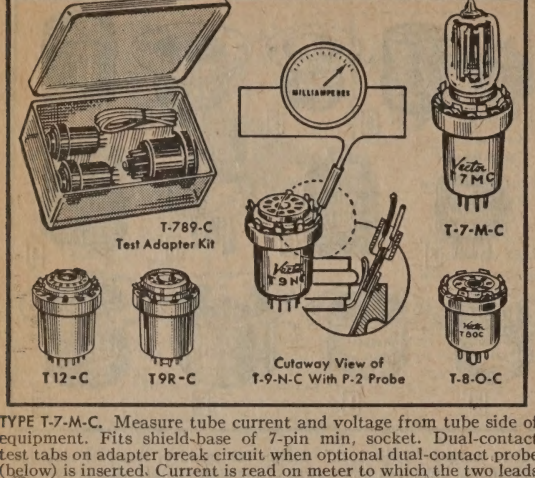
Solderless phenolic wire connectors. Strip two wire ends; push into connector, screw cap down—wires are firmly interconnected. U.L. Listed. Av., 1 1/4 lbs. Per Pkg. of 12.

Stock No.	Mfr's Type	Wire Size	EACH 1-99	100-Up
789-1420	33	16-18	.02	.01
789-1424	44	14-18	.02	.01
789-1426	66	12-18	.03	.02

*Recognized Under the Component Program of Underwriter's Laboratories, Inc.

Vector Adapters, Turrets, Plugs and Cases

VOLTAGE AND CURRENT TEST ADAPTERS



TYPE T-7-M-C. Measure tube current and voltage from tube side of equipment. Fits shield-base of 7-pin min. socket. Dual-contact test tabs on adapter break circuit when optional dual-contact probe (below) is inserted. Current is read on meter to which the two leads of the probe have been connected. Voltage is measured by connecting both probe leads in parallel to same voltmeter terminal. Cap., approx. 1 pF. Flashover voltage, over 1500 VDC. Phenolic body, 1.47″ long (less prongs). Shpg. wt., ¾ oz.

TYPE T-8-O-C. Fits standard 8-pin octal tube clamps. Same specifications as T-7-M-C above except length, less prongs is 1.5″. 1½ oz.

TYPE T-9-N-C. Fits into shield base for 9-pin miniature types. Same specifications as T-7-M-C above. Shpg. wt., ¾ oz.

TYPE T-9-R-C. Fits 9-pin Novar socket. Lgth., 1.81″. 2 oz.

TYPE T-12-C. Fits 12-pin Compactron socket. Lgth., 1.81″. 2 oz.

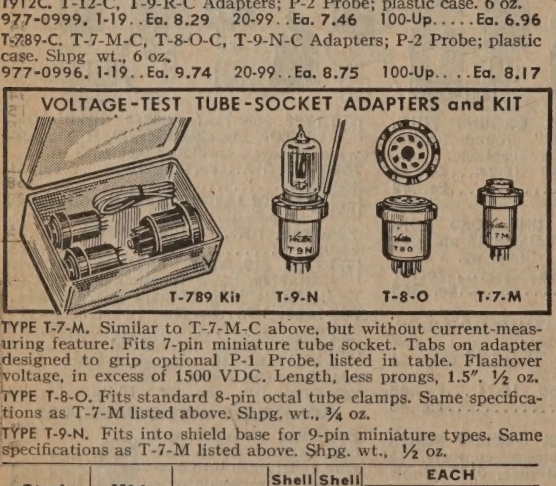
Stock No.	Mfr's Type	Socket	Shell Body Dia.	Shell Skirt Dia.	EACH 1-19	20-99	100-Up
977-0911	T-7-M-C	7-Pin Min.	.74″	1.03″	3.16	2.28	2.12
977-0915	T-8-O-C	8-Pin Oct.	1.26″	1.56″	3.98	2.87	2.68
977-0919	T-9-N-C	9-Pin Min.	.87″	1.16″	3.37	2.43	2.27
977-0921	T-9-R-C	9-Pin Novar	1.26″	1.56″	4.56	3.29	3.07
977-0935	T-12-C	12-Pin Comp.	1.26″	1.56″	4.81	3.47	3.23
977-0637	P-2	Dual Side Plug-in Probe			.98	.79	.79

COMPLETE SOCKET ADAPTER KITS

T912C. T-12-C, T-9-R-C Adapters; P-2 Probe; plastic case. 6 oz.
977-0999. 1-19..Ea. 8.29 20-99..Ea. 7.46 100-Up.....Ea. 6.96

T-789-C. T-7-M-C, T-8-O-C, T-9-N-C Adapters; P-2 Probe; plastic case. Shpg wt., 6 oz.
977-0996. 1-19..Ea. 9.74 20-99..Ea. 8.75 100-Up...Ea. 8.17

VOLTAGE-TEST TUBE-SOCKET ADAPTERS and KIT



TYPE T-7-M. Similar to T-7-M-C above, but without current-measuring feature. Fits 7-pin miniature tube socket. Tabs on adapter designed to grip optional P-1 Probe, listed in table. Flashover voltage, in excess of 1500 VDC. Length, less prongs, 1.5″. ½ oz.

TYPE T-8-O. Fits standard 8-pin octal tube clamps. Same specifications as T-7-M listed above. Shpg. wt., ¾ oz.

TYPE T-9-N. Fits into shield base for 9-pin miniature types. Same specifications as T-7-M listed above. Shpg. wt., ½ oz.

Stock No.	Mfr's Type	Socket	Shell Body Dia.	Shell Skirt Dia.	EACH 1-19	20-99	100-Up
977-0910	T-7-M	7-Pin Min.	.75″	1.03″	2.31	1.67	1.55
977-0914	T-8-O	8-Pin Oct.	1.25″	1.56″	2.43	1.76	1.64
977-0918	T-9-N	9-Pin Min.	.87″	1.16″	2.43	1.76	1.64
977-0636	P-1	Plug-in Probe			.65	.47	.44

TYPE T-789 COMPLETE 3-SOCKET KIT

Includes all 3 adapters, and P-1 Probe, in plastic case. 6 oz.
977-0995. 1-19..Ea. 6.27 20-99..Ea. 5.64 100-Up...Ea. 5.27

SOCKET TURRETS

Dependable terminal structures for limited space applications. Simplify construction of electronic equipment. Components mount on phenolic form. Turrets are ½″ dia. Octal units fit 1″ hole; 7-pin miniature, ⅝″ hole; 9-pin min., ¾″ hole Av. 3 oz.

2½″ TURRETS. Have 9 terminals in two rings, spaced 1⅜″ apart.

Stock No.	Mfr's Type	Socket	EACH 1-9	10-49	50-199	200-499	500-Up
977-1139	10-0-9T	Octal	.90	.72	.65	.50	.48

2″ TURRETS. 9 terminals in two rings, spaced 1″ apart.

Stock No.	Mfr's Type	Socket	EACH 1-9	10-49	50-199	200-499	500-Up
977-1123	8-O-9T	Octal	.85	.68	.61	.48	.46
977-1119	8-M-9T	7-Pin Min.	.98	.79	.71	.55	.53
977-1121	8-N-9T	9-Pin Min.	.98	.79	.71	.55	.53

1½″ TURRETS. Have 6 terminals in one ring only.

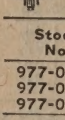
Stock No.	Mfr's Type	Socket	EACH 1-9	10-49	50-199	200-499	500-Up
977-1109	6-M-6T	7-Pin Min.	.90	.72	.65	.50	.48
977-1111	6-O-6T	Octal	.76	.61	.55	.43	.41
977-1110	6-N-6T	9-Pin Min.	.90	.72	.65	.50	.48

TRANSISTOR SOCKET TURRET

Provides single transistor mounting with a place for associated circuit components. Combination transistor socket mounted in end of ½″ phenolic post with two rings of 12 terminals. Requires a .361″ hole for socket and two ⅛″ holes ¾″ apart for 4-40 threaded saddle holes. 3 oz.

Stock No.	Mfr's Type	Lgth.	Ring Spacing	EACH 1-9	10-49	50-199	200-499	500-Up
977-1106	6-A-12T	1½″	⅞″	1.52	1.22	1.10	.85	.82

SQUARE MINIATURE PLUG-IN CASES



For building modular plug-in units. Tube socket, tubular term. post, plug, and shield can. Can sizes: B, 1.37″ sq., 2½″ high, C, 2″ sq., 2½″ high. Plug and socket are mica-filled phenolic. *8-pin octal. †9-pin novar. Wt., 5 oz.

Stock No.	Type	EACH 1-9	10-49	50-199	200-499	500-Up
977-0110	*B10	1.96	1.57	1.41	1.10	1.05
977-0210	*C10	1.87	1.50	1.35	1.05	1.01
977-0112	†B10N	3.07	2.46	2.22	1.73	1.65

SHIELD BASE. For miniature sockets above. Fastens above chassis on socket mtg. centers. Use with standard bayonet shield. 2 oz.

Stock No.	Mfr's Type	For Use With	EACH 1-499	500-999	1000-Up
977-0805	S9	9-pin sockets	.06	.05	.05

LOW-COST OCTAL PLUG

Similar to above, but with phenolic octal plug crimped into base. Base has two .136″ holes spaced diagonally 1.6″ apart. Can size: 2″ square, 3″ high. Av. wt., 5 oz.

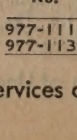
Stock No.	Mfr's Type	EACH 1-9	10-49	50-199	200-499	500-Up
977-0218	C-12-K1.02	1.37	1.10	.99	.77	.74
977-1282	511 Wall	.86	.69	.62	.47	.46

ROUND PLUG-IN CANS

For packaging hand-wired, printed, and miniature transistorized modules. Complete with case, plugs, and vertical terminal-wall secured to base. Easily removable aluminum case provides excellent shielding. Side-screws at bottom of can screw into threaded bushings in plug to hold components securely. 2″ long. Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Socket	Dia.	EACH 1-9	10-49	50-199	200-499	500-Up
977-0459	G2.1-8-4	9-Pin Min.	¾″	2.61	2.09	1.88	1.46	1.40
977-0463	G2.2-8-4	7-Pin Min.	⅝″	2.58	2.07	1.86	1.45	1.39

TERMINAL TURRETS



Simplify design and construction of electronic equipment and conserve chassis space. Two rings with 12 terminals, top and bottom ground lugs on ½″ dia. phenolic form. Mounts 6 or more resistors and capacitors. Turrets bolt to chassis through 0.150″ dia. mount hole by means of 6-32 screw, extends through turret length. Wt., 3 oz.

Stock No.	Mfr's Type	Length	Space Between Rings	EACH 1-9	10-49	50-199	200-499	500-Up
977-1116	8-12	2″	1″	.82	.66	.59	.46	.44
977-1135	10-12	2½″	1⅜″	.87	.70	.63	.49	.47

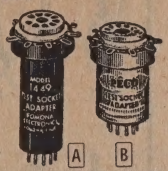
Use the Services of the Allied Electronics Facility Nearest You

Pomona Adapters, Keystone Terminal Boards

POMONA TUBE ADAPTERS, TRANSISTOR TEST AND BREADBOARD SOCKETS

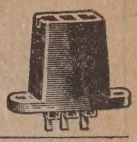
TEST-SOCKET TUBE ADAPTERS

For measurement of voltage, resistance, audio and video signals from tube-side of chassis. Long test-tabs for easy connection. Types TVS are low-loss mica-filled molded phenolic to 10 MHz. Types 1447, 1449, 2610 are used with captive or telescoping tube shields; 2½" (2610, 2.42") high. Insul. res. 500,000 megs; breakdown exceeds 1700 VAC or DC. Av. shpg. wt., 5 oz.



Stock No.	Mfr's Type	Fig.	Pins	Description	1-9	10-Up
885-0195	TVS-7	B	7	Miniature	2.31	1.85
885-0196	TVS-8	B	8	Octal	2.43	1.95
885-0197	TVS-9	B	9	Miniature	2.43	1.95
885-0198	TVS-12	B	12	Compactron	3.18	2.55
885-0368	1447	A	7	Miniature	2.43	1.95
885-0369	1449	A	9	Miniature	2.70	2.15
885-0450	1779	.....	9	Novar	2.81	2.25
885-0620	2610	A	10	Decal	3.18	2.55

MODEL TS-187 TRANSISTOR TEST SOCKET



Heavy-duty molded phenolic construction. 100°-200°C. test temperature. Accepts .017" diameter leads. I.R.: 10^5 megohms at 40% R.H. at 24° C. Beryllium copper contacts. Shpg. wt., 3 oz.

885-0189. 1-24..Ea. 1.75 25-49.....Ea. 1.58
50-99.....Ea. 1.50 100-Up.....Ea. 1.23

BREADBOARD SOCKETS

XS-8

Surface-mount breadboard sockets for experimental design, use in enclosed units to eliminate double chassis construction. Insulated base with numbered connections. Phosphor bronze spring contacts. Standard center-to-center mtg. holes. 7- and 9-pin mount in center or on side, 8-pin mounts on side. 2 oz.

Stock No.	Mfr's Type	Description	EACH			
			1-9	10-49	50-99	100-Up
885-0201	XS-7	7-pin miniature	.81	.65	.59	.55
885-0202	XS-8	8-pin octal	1.06	.85	.77	.72
885-0203	XS-9	9-pin miniature	.93	.75	.68	.64

KEYSTONE PLUG-IN HOUSINGS, TERMINAL BOARDS AND TOOLS

PLUG-IN MOLDED HOUSINGS

For packaging relays, logic packages, networks and miniature circuits. Lightweight, attractive. Withstand vibration and rough use. Good chemical resistance, low water absorption. G.P. phenolic octal headers fit std. sockets. Nickel plated brass pins. Guide hole tapped 8-32 for terminal board mtg. stud. Polystyrene housings for use up to 170°F. Butyrate to 210°F. Nylon to 300°F. Type 669 has electro tin plated steel housing, 1¼" dia. x 1⅝" high. Mini size: 1⅜" sq. x 1⅝" high. Small: 1⅜" sq. x $1\frac{15}{16}$" high. Large: $1\frac{15}{16}$" sq. x $2\frac{31}{32}$" high. Extra large: $1\frac{3}{4}$x$2\frac{3}{8}$x$2\frac{9}{16}$" high. With octal header, screws. Wt.: Mini, small, 1 oz.; others, 2½ oz.

Stock No.	Mfr's Type	Size	Housing		EACH		
			Material	Color	1-19	20-99	100-Up
839-3360	660	Mini	Butyrate	Clear	.85	.80	.75
839-3361	661	Mini	Nylon	White	.75	.70	.65
839-3362	662	Mini	Polystyrene	Clear	.75	.70	.65
839-3341	641	Mini	Polystyrene	Black	.65	.60	.55
839-3363	663	Small	Butyrate	Clear	.70	.67	.64
839-3364	664	Small	Nylon	White	.75	.70	.67
839-3365	665	Small	Polystyrene	Clear	.70	.67	.64
839-3343	643	Small	Polystyrene	Black	.65	.60	.55
839-3350	650	Large	Butyrate	Clear	1.35	1.20	1.10
839-3368	668	Large	Polystyrene	Clear	.80	.75	.70
839-3377	677	Large	Polystyrene	Black	.80	.75	.70
839-3339	639	X-Lge	Polystyrene	Clear	1.20	1.10	.93
839-3369	669	Small	Steel	Tin pl.	.75	.70	.67

TERMINAL BOARDS FOR PLUG-IN HOUSINGS

Glass epoxy terminal boards for use with plug-in housings described above. Holes are .062" diameter, spaced in .100" and .200" alternates. An 8-32 threaded stud is firmly eyeletted to the board, for simplified assembly into the tapped hole of the plug-in headers. G-10 glass epoxy boards are 1/16" thick; per GEE MIL-P-18177. Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type	Board Size with stud	For Housing Size	EACH		
				1-19	20-99	100-Up
839-3396	696	1x1⅝"	Mini	¢23	.18	.16
839-3397	697	1⅛x1¾"	Small	.23	.18	.16
839-3398	698	1½x2¾"	Large	.25	.21	.19
839-3399	699	1⅛x1⅞"	Steel	.23	.18	.16
839-3338	638	$1\frac{5}{16}$x$2\frac{3}{8}$"	X-Lge	.26	.24	.22

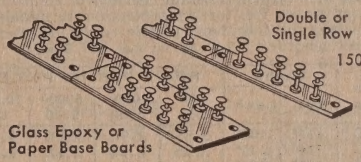
ALL-PURPOSE HAND PUNCH

MODEL 1330. With adjustable gauge, for use as a nibbler. Also shears eyelets, punches holes for sheet material or tubing. 1¼" throat depth. Penetrates 1/16" untempered metal, 3/32" phenolic, ¼" masonite. Punches tubing as small as ¾" dia.
839-3405. Shpg. wt., 1 lb.....13.00

INTERCHANGEABLE DIE SETS FOR HAND PUNCH

Stock No.	Mfr's Type	For Hole	EACH	Stock No.	Mfr's Type	For Hole	EACH
839-3406	1331	1/16"	2.20	47 E 1235	1335	5/32"	2.20
839-3407	1332	.072"	2.20	47 E 1236	1336	3/16"	2.20
839-3408	1333	3/32"	2.20	47 E 1237	1337	7/32"	2.20
839-3409	1334	⅛"	2.20	47 E 1238	1338	¼"	2.20

SCORED TURRET TERMINAL BOARDS



Standardized terminal boards with turret terminals on one or both sides. Terminals are securely staked and hot tinned for easy soldering. Brass terminals per QQ-B626, comp. 22, ½ hard; hot dip solder finish per MIL-F-14072, Type 221. Boards are scored for easy separation into five sections, each 2⅝" long, with .120" dia. mounting holes in each section. Boards can be marked. PBE indicates paper base electrical board, MIL-P-3115C, for temperatures up to 250°F. GEE indicates G-10 Glass Epoxy boards per MIL-P-18177, for 300° F maximum. All are 3/32" thick with double row of terminals (50 total) on ⅜" centers except Type 15031, with a single row of 25 terminals. All boards are 13⅛" long. Av. shpg. wt. 3 oz.

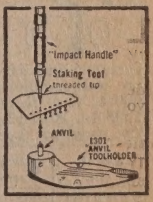
C DOUBLE TURRET TERMINALS ON ONE SIDE

Stock No.	Mfr's Type	Width	Spacing Between Rows	Material	EACH		
					1-19	20-99	100-Up
839-3450	15031	½"	.....	PBE	1.03	.90	.79
839-3455	15036	1½"	1⅜16"	PBE	2.05	1.94	1.84
839-3468	15236	1½"	1⅜16"	GEE	2.78	2.63	2.52
839-3452	15033	2"	1½"	PBE	2.15	2.05	1.89
839-3465	15233	2"	1½"	GEE	3.26	3.05	2.94
839-3453	15034	2½"	2"	PBE	2.31	2.08	1.94
839-3466	15234	2½"	2"	GEE	3.47	3.31	3.15
839-3454	15035	3"	2½"	PBE	2.36	2.21	2.05

D FEED-THRU DOUBLE TURRET TERMINALS—BOTH SIDES

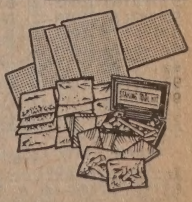
839-3462	15046	1½"	1⅜16"	PBE	4.10	3.78	3.68
839-3459	15043	2"	1½"	PBE	4.20	3.99	3.89
839-3460	15044	2½"	2"	PBE	4.36	4.15	3.99
839-3461	15045	3"	2½"	PBE	4.52	4.31	4.15

"IMPACT" STAKING KIT



MODEL 1707. Produces light or heavy blow, adjustable by turning the spring tension cap. Uniform striking action is attained by pressing down handle. Interchangeable tools supplied permit assembly of terminal boards, printed circuits and small components. Simple construction, automatic single hand operation. Stakes all diameters up to 3/32" maximum. Kit includes: anvil holder; impact handle; plus 11 interchangeable tools. With complete instructions. Shpg. wt., 1 lb.
839-3433.....23.50

TERMINAL BOARD PROTOTYPE KIT

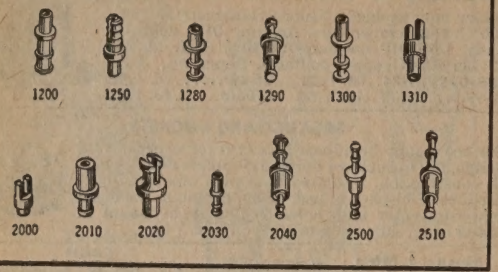


MODEL 1723. Complete assortment of basic materials and staking tools for construction of 1/16" and 3/32" thick terminal boards. Consists of 1/16" and 3/32" bakelite, blank and prepunched boards; assortment of hardware including eyelets, terminals, brackets, bushings and push-in terminals; complete terminal staking tool kit. Full instructions. Shpg. wt. 3 lbs.
839-3437.....17.00

SEE PAGE 355 FOR KEYSTONE SPACERS

Terminals, Swaging Tools and Handles

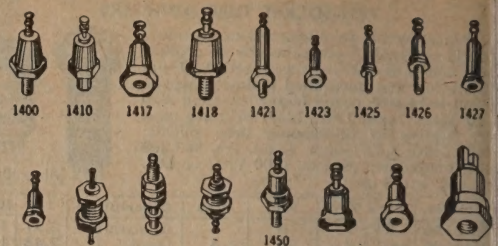
STANDARD TERMINALS



A large selection of standard terminals in miniature and subminiature sizes. Offer a wide choice of terminal configurations—includes hollow lug, bifurcated, turret and feed-through types. Satisfy requirements of all types of electronic assemblies. Simplify design and construction. All terminals are constructed of selected brass stock, in accordance with the requirements of MIL specification QQ-B-626, composition 22, ½ hard. All units are silver-plated according to the requirements of MIL specification QQ-S-365 Type III. In addition, terminals are treated with tarnish-resistant coatings of dichromate, water-dip lacquer and waxes. For further protection, terminals are packaged in vapor-resistant cellothene plastic to ensure user receives units in perfect condition. Av. shpg. wt. per 100, 2 oz.

Stock No.	Mfr's Type	Shank Dia.	Shank Lgth.	PRICE PER 100 PIECES 100-900	1000-4900	5000-9900	10,000-Up
971-0306	1200B	.114″	.105″	3.35	2.94	2.68	2.33
971-0307	1200C	.114″	.135″	3.35	2.94	2.68	2.33
971-0311	1250B	.114″	.105″	3.44	3.03	2.75	2.40
971-0312	1250C	.114″	.135″	3.44	3.03	2.75	2.40
971-0315	1280A	.091″	.075″	1.77	1.55	1.42	1.23
971-0316	1280B	.091″	.105″	1.77	1.55	1.42	1.23
971-0317	1280C	.091″	.135″	1.77	1.55	1.42	1.23
971-0318	1280D	.091″	.165″	1.77	1.55	1.42	1.23
971-0328	1290B	.114″	.105″	3.44	3.03	2.75	2.40
971-0336	1300B	.114″	.105″	2.49	2.19	1.99	1.73
971-0337	1300C	.114″	.135″	2.49	2.19	1.99	1.73
971-0338	1300D	.114″	.165″	2.49	2.19	1.99	1.73
971-0356	1310B	.114″	.105″	3.34	2.93	2.67	2.32
971-0357	1310C	.114″	.135″	3.34	2.93	2.67	2.32
971-0358	1310D	.114″	.165″	3.34	2.93	2.67	2.32
971-0488	2000B	.063″	.084″	2.11	1.78	1.62	1.43
971-0489	2000C	.063″	.115″	2.11	1.78	1.62	1.43
971-0491	2010B	.063″	.084″	1.80	1.53	1.39	1.22
971-0492	2010C	.063″	.115″	1.80	1.53	1.39	1.22
971-0494	2020B	.063″	.084″	2.39	2.05	1.83	1.62
971-0496	2030B	.062″	.084″	2.02	1.74	1.55	1.37
971-0498	2040B	.126″	.105″	2.39	2.05	1.83	1.62
971-0499	2040D	.126″	.165″	2.39	2.05	1.83	1.62
971-0505	2500C	.091″	.115″	2.85	2.50	2.27	1.98
971-0506	2500D	.091″	.147″	2.85	2.50	2.27	1.98
971-0509	2510B	.073″	.084″	2.50	2.20	2.00	1.75
971-0510	2510D	.073″	.147″	2.50	2.20	2.00	1.75

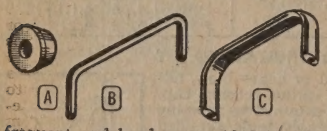
INSULATED TERMINALS



All are stand-off types, except Mfr's Types 1430 through 143 which are feed-through types. Include standard, miniature a subminiature types, with turret and bifurcated terminal conne tions. Base connections are of stud, female, and swage types. Brea down voltages from 1500 to 10,000 volts, AC. Made of brass, wi .000015″ gold plate over .0003″ silver plate. Bases of cadmiu plated brass. Brass used meets MIL specification QQ-B-626, co position 22, ½ hard. "S" in table below is thread, or shank diar eter; "X" is shank length, except * overall length. "Ins." indicat dielectric material: P, Phenolic (MIL-P-14020 Cl. 2); A, Alk (MIL-M-14E Ty, Mag.); T, Teflon (AMS-3651 B); H, Hi-Alumi (JAN I-10, I-5A), D; Diallyl Phthalate (MIL-M-19833, GD1-30). A shpg. wt. per package, 2 oz. Sold in multiples of 25 only.

Stock No.	Mfr's Type	S	X	Ins.	EACH 25-75	100-250	275-475	500-Up
971-0403	1400B	6-32	.250″	P	.26	.20	.18	.16
971-0406	1410D	.188″	.156″	P	.26	.20	.18	.16
971-0409	1417	6-32	....	A	.29	.22	.20	.17
971-0410	1418B	6-32	.250″	A	.29	.22	.20	.17
971-0411	1421	6-32	.250″	A	.35	.27	.24	.21
971-0413	1423	6-32	....	A	.35	.27	.24	.21
971-0414	1425	2-56	.218″	A	.35	.27	.24	.21
971-0415	1426B	.256″	.218″	A	.34	.25	.22	.20
971-0417	1427	2-56	....	A	.35	.27	.24	.21
971-0418	1428	.256″	....	A	.34	.25	.22	.20
971-0419	1430	10-32	.687″*	D	.49	.39	.36	.31
971-0420	1431	10-32	....	T	.54	.46	.42	.37
971-0421	1432	5-40	.796″*	T	.43	.36	.33	.29
971-0422	1433	¼-28	.875″*	D	.54	.46	.42	.37
971-0425	1450B	6-32	.250″	T	.34	.25	.22	.20
971-0426	1450H	4-40	.375″	T	.34	.25	.22	.20
971-0427	1451	6-32	....	T	.34	.25	.22	.20
971-0429	1456	6-32	....	T	.35	.27	.24	.21
971-0430	1456A	4-40	....	T	.35	.27	.24	.21
971-0431	1460B	6-32	.250″	H	.34	.25	.22	.20
971-0432	1460H	4-40	.375″	H	.34	.25	.22	.20
971-0433	1461	6-32	....	H	.34	.25	.22	.20
971-0434	1466	6-32	....	H	.35	.27	.24	.21
971-0438	1480B	.256″	.218″	H	.38	.30	.27	.24
971-0439	1480D	4-40	.218″	H	.38	.30	.27	.24
971-0446	1491A	2-56	....	T	.38	.30	.27	.24

NICKEL-PLATED BRASS HANDLES



Sturdy handles for instrument panels, rack panels, portable equipment, etc. Each handle is made of brass, and is heavily nickel-plated. Rugged construction makes them stand up to even the most frequent and hard usage. 1015-12, 1017-12, 1033-12, and 1034-12 are oval handles that have 10-32 threaded mounting holes. Type 900-12 is a nickel-plated, brass mounting ferrule that fits Types 1005-12, 1010-12, 1012-12, 1013-12, 1015-12, and 1017-12 handles. Av. shpg. wt. 6 oz.

Stock No.	Mfr's Type	Fig.	Mtg. Ctrs.	Hand Clearance	EACH 1-10	11-25	26-75	76-199
971-0161	1005-12	B	6.44″	1¾″	1.13	.95	.86	.77
971-0170	1010-12	B	4.25″	1½″	1.03	.87	.79	.70
971-0173	1012-12	B	4.00″	1½″	1.03	.87	.79	.70
971-0176	1013-12	B	4.56″	1½″	1.06	.88	.80	.72
971-0179	1015-12	B	3″	1½″	1.01	.85	.77	.69
971-0185	1017-12	B	2″	1½″	1.07	.90	.83	.73
971-0218	1033-12	C	3″	1 9/32″	1.97	1.65	1.51	1.34
971-0221	1034-12	C	4.56″	1½″	2.22	1.86	1.69	1.51

Stock No.	Mfr's Type	Fig.	Description	EACH (Buy in Pairs) 2-10	12-24	26-76	78-Up
971-0139	900-12	A	1.50″ Brass Ferrule	.21	.18	.16	.13

SWAGING MACHINE

Model B. Hand-operated swaging machine of rugged rack and pinion construction. Precision machined to ensure smooth and rapid work. Designed for simplicity and ease of operation—means little or no man-hours devoted to training. Throat depth, 5⅛″; stroke depth, 6¾″. Adjustable platten may be rotated to accept ½″, 9/16″, and ¾″ diameter bottom tools. Adjustable stop controls depth of the stroke. Shpg. wt. 20 lbs.

971-0002 ..... 85.00

SWAGING INSTALLATION TOOLS

Accurately machined from chromium steel alloy, flame-hardened, and highly polished. All tools are ½″ dia. and mount in the Model B swaging machine above, or A version. Tool numbers (Mfr's Type) are the same as the numbers of the corresponding terminals (tool 1200 fits terminal 1200B, for example). Av. shpg. wt. 7 oz.

Stock No.	Mfr's Type	For Use With Terminal Type	Stock No.	Mfr's Type	For Use With Terminal Type
971-0305	1200	1200B, C	971-0490	2010	2010B, C, D
971-0309	1250	1250B, C	971-0493	2020	2020B
971-0314	1280	1280A, B, C, D	971-0495	2030	2030B, C
971-0334	1300	1300B, C, D	971-0497	2040	2040B, C, D
971-0354	1310	1310B, C, D	971-0504	2500	2500C, D
971-0487	2000	2000B, C	971-0507	2510	2510B, C

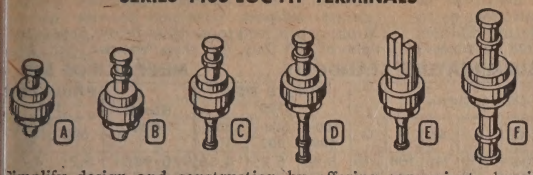
EACH 8.80

Write Allied Electronics for Prices on Larger Quantities

Terminals, Boards, Hardware, Knobs

USECO

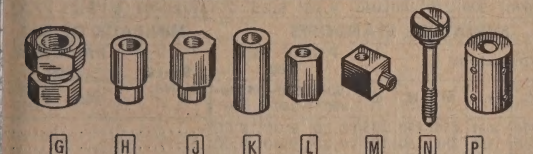
SERIES 4400 LOC-FIT TERMINALS



Simplify design and construction by offering convenient chassis mounting—simply push Teflon® grommet (supplied) into mounting hole and snap-fit terminal into grommet. Nominal chassis thickness 1/16". Types 4441, 4442, 4444 and 4449 are feed-thru types. Types 4435 and 4449 are taper-pin receptacles. 4435 is insulated terminal. Mounting hole: Fig. A-E, 9/64"; F, 3/16". Brass terminals and receptacles, ½ hard, composition 22 per QQ-B-626. Finished standard-9 (0.000015 gold over 0.0003 silver). Insulator material, Teflon per MIL-M-14077. Average shpg. wt. per 25, 4 oz.

Stock No.	Mfr's Type	Fig.	Lgth.	EACH (Sold in Multiples of 25)			
				25-75	100-475	500-975	1000-Up
971-0536	4435B	A	.372"	.11	.09	.08	.07
971-0537	4440B	B	.455"	.12	.10	.09	.08
971-0538	4441B	C	.580"	.14	.12	.11	.10
971-0539	4442B	D	.693"	.14	.12	.11	.10
971-0541	4444B	E	.580"	.15	.13	.11	.10
971-0546	4449B	F	.830"	.19	.16	.15	.13

INSTRUMENT PANEL HARDWARE



Shaft lock is illustrated in Figure G; swage-type standoffs in Figures H and J; threaded standoffs in Figures K and L; chassis fastener in Figure M; captive panel screw in Figure N, shaft coupling in Figure P. In the heading of the table below, "T" indicates either the type of thread or the recommended board thickness. "X" in the table head indicates the hardware shank length, except *maximum shaft diameter, and †overall length. Stand-off types illustrated by Figure H have ¼" standoff, except Type 1530B which has a ⅜" standoff. All are brass with cadmium plating, except Type 1510, Type 3200-6 and Series 3316 which are brass with nickel plating. Av. shpg. wt. per 10, 6 oz.

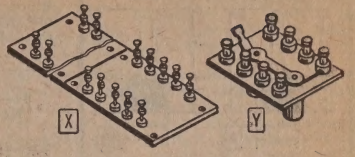
Stock No.	Mfr's Type	Fig.	T	X	EACH (Sold in Multiples of 10)			
					10-50	60-90	100-490	500-Up
971-0451	1510	G	3/8-32	.250"*	.20	.17	.16	.14
971-0458	1530C	H	.094"	.135"	.10	.09	.08	.06
971-0459	1530D	H	.125"	.165"	.10	.09	.08	.06
971-0462	1531B	J	.062"	.105"	.10	.09	.08	.06
971-0457	1530B	H	.062"	.105"	.10	.09	.08	.06
971-0470	1550D	K	6-32	.375"†	.16	.15	.14	.12
971-0471	1550F	K	6-32	.625"†	.16	.15	.14	.12
971-0472	1550G	K	6-32	.750"†	.16	.15	.14	.12
971-0475	1551C	L	6-32	.250"†	.16	.15	.14	.12
971-0476	1551E	L	6-32	.500"†	.16	.15	.14	.12
971-0477	1551G	L	6-32	.750"†	.16	.15	.14	.12
971-0480	1590B	M	.062"	.105"	.29	.27	.15	.21
971-0481	1590C	M	.094"	.135"	.29	.27	.25	.21
971-0517	3200-6	N	6-32	.800"†	.20	.17	.16	.14
971-0521	3316A	P	.250"*	.750"†	.51	.47	.44	.41
971-0522	3316B	P	.125"*	.750"†	.51	.47	.44	.41

ALUMINUM KNOBS

Round aluminum knobs. For use on receivers, test equipment, hi-fi systems—electronic equipment of any type. All have straight knurl except Type 310-20 which has a diamond knurl. All fit ¼" shaft. Have anodized aluminum finish. With 6-32 set screws, except Type 310-20 which has 8-32 set screw. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Knob Dia.	Skirt Dia.	EACH			
					1-9	10-24	25-49	50-Up
971-0153	1000-20	R	5/8"	1"	1.21	1.01	.90	.82
971-0101	500-20	S	1/2"	5/8"	1.07	.88	.79	.72
971-0100	310-20	T	57/64"	1¼"	1.32	1.09	.98	.88
971-0104	625-20	W	5/8"	.....	1.09	.90	.80	.73

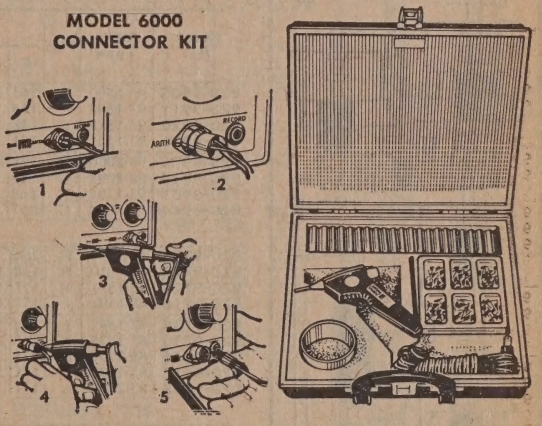
TERMINAL BOARDS



For use where highest quality construction and wiring standards are observed. All boards with 50 terminals are scored .02" deep after every group of 10 terminals so that five identical sections may be snapped off. Each section has four mtg. holes. Boards with 8 terminals have grounding strap in center and mount on ¼" brass stand-offs with 3-48 tapped hole. Types 1180, 1181 and 1182 are designed to mount ½, 1, and 2-watt resistors, respectively, and are .062" thick. Series 1100 is .094" thick with .116" mtg. holes. Series 2200 is .062" thick with .062" mtg. holes. Distance between rows of terminals: Type 1100B, C and D—1½, 2 and 2½", respectively; Types 2200B and C—½ and ¾"; Types 1180, 1181 and 1182—½, ¾ and 7/8". Series 1100 and 2200 are made of phenolic; Types 1180, 1181 and 1182 are glass melamine. All terminals are brass. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	No. of Term.	Size	EACH			
					1-5	6-24	25-49	50-Up
971-0292	1100B	X	50	2x13.12"	3.40	2.87	2.61	2.30
971-0293	1100C	X	50	2½x13.12"	3.56	3.01	2.73	2.41
971-0294	1100D	X	50	3x13.12"	3.75	3.17	2.88	2.55
971-0500	2200B	X	50	.75x7.81"	2.99	2.53	2.30	2.03
971-0501	2200C	X	50	1x7.81"	2.97	2.51	2.28	2.02
971-0301	1180	Y	8	.719x.88"	.78	.66	.60	.53
971-0302	1181	Y	8	1.03x1.22"	.87	.73	.67	.59
971-0303	1182	Y	8	1.16x1.5"	.88	.74	.67	.60

MODEL 6000 CONNECTOR KIT



Construct custom connectors to fit your configuration pattern easily and simply right on the job. Reduce research and development costs and cut expended time on high priority projects. Complete kit is easily transported—can be carried right to the job and operated on standard line voltage. Thermal gun injects polyethylene plastic into mold to make a permanent male or female connector. Encases socket pins and wire in a firm, stable polyethylene block to form a solid, dependable connector of your own connection pattern. Ideal for potting connector shells, for tube sockets, or for use in any potting operation or stress relief application. Easy steps illustrated above: (1) Insert contacts with cable attached into existing connector. (2) Cut off length of plastic strip and form a reservoir to accept plastic material. (3) Insert plastic cartridge into heat gun and (4) extrude material into reservoir. Allow to cool. Remove plastic strip. (5) Complete connector. Kit comes in fitted-foam attache case complete with thermal gun, polyethylene cartridges, #16 and #20 pins and sockets and 6' of mylar stripping.

971-0560. Shpg. wt. 7 lbs.....1-9 Ea. 72.00 10-Up Ea. 65.00

Stock No.	Mfr's Type	Descrip.	PRICE PER 100 (Sold in 100's)			
			100-900	1000-2400	2500-4900	5000-Up
971-0566	6016P	#16 Pin	4.68	4.34	3.86	3.05
971-0567	6016S	#16 Socket	10.08	9.66	8.40	6.70
971-0568	6020P	#20 Pin	9.96	9.03	8.10	6.60
971-0569	6020S	#20 Socket	18.12	16.40	14.73	12.10

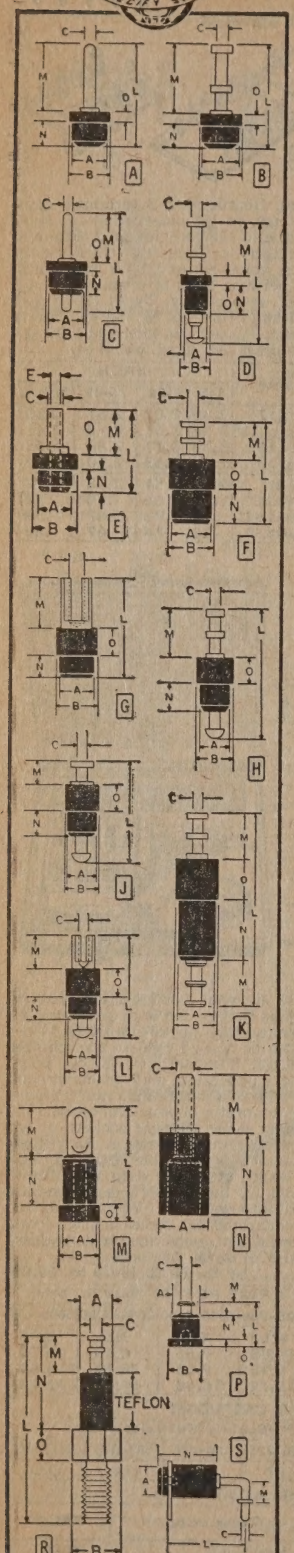
POLYETHYLENE CARTRIDGES

Stock No.	Type No.	EACH (Sold in Multiples of 25)				
		25-75	100-225	250-475	500-975	1000-Up
971-0565	6015	.20	.17	.15	.14	.13

HEAT GUN AND MYLAR STRIPS

Stock No.	Type No.	Description	EACH
971-0562	6002	Heat Gun	8.95
971-0570	6025	Mylar Strips (6 ft.)	.75

H. H. Smith Teflon® Terminals, Inserting Tools



Body of virgin Teflon. Meets MIL-P-19468, Spec QQ-626. Terminals are precision machined of brass. Very easy to install—no restrictions as to chassis material. All standard plating finishes available. Terminals can be supplied in reverse on request. *After Fig. symbol indicates reverse positioning on insulator. †Indicates floating contact. Mihipack terminals are for use on Minisert belt feed tools listed below. Sold In Multiples of 500 Only. Av. shpg. wt. per item, 4 oz.

SUBMINIATURE STANDOFFS — MINIPACK OF 500

Stock No.	Mfr's Type	Fig.	Dimensions A	B	C	L	M	N	O	PRICE PER 100: 100-400	500-900	1000-Up	Stock No.	PRICE PER 100: 500	1000-Up
920-9800	92-1000	A	.148	.172	.040	.350	.210	.100	.040	5.95	5.25	4.66	920-9801	5.25	4.66
920-9833	92-1034	A	.093	.125	.040	.350	.210	.100	.040	8.50	7.50	6.66	920-9834	7.50	6.66
920-9837	92-1500	B	.148	.172	.040	.350	.210	.100	.040	9.35	8.25	7.33	920-9838	8.25	7.33
920-9839	92-1501	B	.148	.172	.040	.375	.210	.125	.040	8.50	7.50	6.66	920-9840	7.50	6.66
920-9843	92-1504	B	.148	.172	.046	.334	.154	.140	.040	9.35	8.25	7.33	920-9844	8.25	7.33
920-9846	92-1506	B	.148	.172	.040	.455	.250	.165	.040	9.35	8.25	7.33	920-9847	8.25	7.33
920-9850	92-1512	B	.148	.172	.040	.540	.250	.250	.040	9.35	8.25	7.33	.....	.....	.....
920-9854	92-1528	B	.093	.125	.040	.350	.210	.100	.040	9.35	8.25	7.33	920-9855	8.25	7.33
920-9860	92-1542	B	.148	.172	.040	.359	.210	.109	.040	6.00	5.25	4.66	920-9861	5.25	4.66
920-9206	29-1500	B*	.148	.172	.040	.350	.210	.100	.040	6.80	6.00	5.33	920-9207	6.00	5.33
920-9212	29-1513	B*	.171	.188	.040	.405	.210	.155	.040	9.35	8.25	7.33	920-9213	8.25	7.33

SUBMINIATURE FEED THRU — MINIPACK

920-9600	82-1000	C	.148	.172	.040	.443	.210	.100	.040	6.80	6.00	5.33	920-9601	6.00	5.33
920-9604	82-1003	C	.148	.172	.040	.515	.210	.100	.040	6.37	5.62	5.00	920-9605	5.62	5.00
920-9616	82-1022	C	.093	.125	.040	.515	.210	.100	.040	8.50	7.50	6.66	920-9617	7.50	6.66
920-9630	82-1500	D	.148	.172	.040	.500	.210	.100	.040	6.37	5.62	5.00	920-9631	5.62	5.00
920-9640	82-1516	D	.093	.125	.040	.500	.210	.100	.040	8.50	7.50	6.66	920-9641	7.50	6.66
920-9634	82-1504	D	.148	.172	.040	.531	.210	.100	.040	9.35	8.25	7.33	920-9635	8.25	7.33
920-9624	82-1040	E	.093	.125	.040	.225	.125	.060	.040	10.20	9.00	8.00	.....	.....	.....
920-9104	28-1003	C*	.148	.172	.040	.515	.210	.100	.040	6.80	6.00	5.33	.....	.....	.....
920-9115	28-1500	D*	.148	.172	.040	.500	.210	.100	.040	9.35	8.25	7.33	920-9116	8.25	7.33

MINIATURE STANDOFFS — MINIPACK OF 500

Stock No.	Mfr's Type	Fig.	Dimensions A	B	C	L	M	N	O	PRICE PER 100: 100-400	500-900	1000-Up	Stock No.	PRICE PER 100: 500	1000-Up
920-9905	93-1500	F	.165	.187	.046	.431	.156	.150	.125	10.20	9.00	8.00	.....	.....	.....
920-9911	93-1503	F	.165	.187	.046	.556	.281	.150	.125	10.20	9.00	8.00	.....	.....	.....
920-9920	93-1518	F	.148	.172	.040	.482	.250	.110	.125	10.20	9.00	8.00	.....	.....	.....
920-9926	93-1531	F	.171	.187	.046	.681	.281	.150	.250	11.90	10.50	9.33	.....	.....	.....
920-9936	93-2000	G	.171	.187	.148	.478	.203	.150	.125	10.20	9.00	8.00	.....	.....	.....
920-9938	93-2001	G	.171	.187	.148	.540	.203	.150	.187	11.00	9.75	8.66	.....	.....	.....
920-9907	93-1501	F	.165	.187	.046	.493	.156	.150	.187	11.00	9.75	8.66	.....	.....	.....
920-9944	93-2004	G	.217	.250	.148	.890	.203	.187	.500	18.70	16.50	14.66	.....	.....	.....

MINIATURE FEED THRU — MINIPACK OF 500

920-9708	83-1500	H	.264	.312	.040	.531	.210	.100	.040	11.90	10.50	9.33	.....	.....	.....
920-9722	83-1510	H	.148	.171	.046	.836	.250	.230	.125	12.75	11.25	10.00	.....	.....	.....
920-9724	83-1511	H	.171	.187	.040	.836	.250	.212	.187	12.75	11.25	10.00	.....	.....	.....
920-9716	83-1504	J	.171	.187	.050	.740	.125	.212	.187	11.90	10.50	9.33	.....	.....	.....
920-9738	82-1581	J	.148	.171	.040	.520	.190	.100	.040	3.00	2.50	1.50	920-9739	2.50	1.50
920-9730	83-1525	K	.218	.250	.062	.187	.281	.375	.250	17.00	15.00	13.33	.....	.....	.....
920-9746	83-2000	L	.171	.187	.148	.821	.203	.212	.187	13.60	12.00	10.66	.....	.....	.....
920-9712	83-1502	J	.171	.187	.046	.540	.133	.171	.063	9.35	8.25	7.33	.....	.....	.....
920-9748	83-2002	L	.171	.187	.148	.947	.203	.275	.250	16.15	14.25	12.66	.....	.....	.....

PROBES AND PLUGS

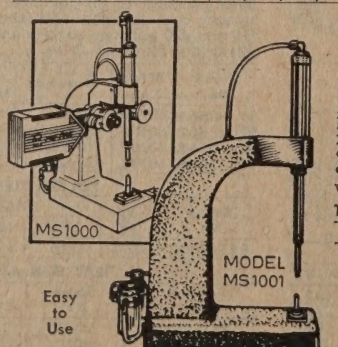
920-9520	73-3001	M	.218	—	.080	.645	.270	.375	—	10.20	9.00	8.00	.....	.....	.....

TEST JACKS — MINIPACK OF 500

975-9400	63-1000	N	.185	.218	.105	.687	.354	.287	.046	10.20	9.00	8.00	920-9401	9.00	8.00
975-9404	63-1003	P	.185	.218	.054	.437	.120	.271	.046	15.30	13.50	12.00	920-9405	13.50	12.00
975-9408	63-1005	P	.185	.218	.054	.640	.187	.400	.050	15.30	13.50	12.00	.....	.....	.....
975-9410	63-1006	P	.204	.250	.054	.437	.120	.271	.046	17.00	15.00	13.33	.....	.....	.....
975-9420	63-1500	P†	.148	.171	.040	.450	.110	.315	.060	15.00	13.50	12.00	920-9421	13.50	12.00
975-9414	63-1010	P	.148	.172	.040	.345	.120	.179	.046	15.30	13.50	12.00	920-9415	13.50	12.00
975-9434	63-3003	S	.187	.218	.050	.400	.140	.378	—	29.75	26.25	23.33	.....	.....	.....
975-9438	63-3005	S	.187	.218	.035	.400	.140	.378	—	30.60	27.00	24.00	.....	.....	.....

DOUBLE TURRET TERMINAL-THREAD STUD BASE

920-9314	53-1500	R	.125	.156	.045	.750	.148	.372	.128	21.25	18.75	16.66	.....	.....	.....
920-9318	53-1506	R	.125	.156	.045	.750	.148	.372	.128	21.42	18.90	16.79	.....	.....	.....



"MINISERT" TERMINAL INSERTER

MS-1001. Air-operated, semi-automatic tool installs Teflon® terminals quickly and easily. Simply drop terminal into wide-mouth receptacle, position the terminal board, press switch. For lab or production use. Supplied with hand switch, filter lubricator and regulator. Less tool (listed below). Overall size, 21½x6½x12".

920 X 0021. Shpg. wt., 25 lbs. 189.95

920 X 0020. MS-1000. Belt-Drive "Minisert." As above, but with automatic terminal feed. Wt., 35 lbs. 529.80

Tools for "Minisert." *Major dia. of terminal (maximum).

Stock No.	Type	Description	Size*	EACH
920-0025	MST 1250	Terminal tool set	.125"	39.95
920-0027	MST 1720	Terminal tool set	.172"	39.95
920-0029	MST 1880	Terminal tool set	.188"	39.95
920-0031	MST 2180	Terminal tool set	.218"	39.95
920-0033	MST 2500	Terminal tool set	.250"	39.95
920-0040	SU-1005	Tool storage unit	....	7.95
920-0010	FS-1007	Foot switch	....	39.95

Solderless Terminals and Crimping Tools

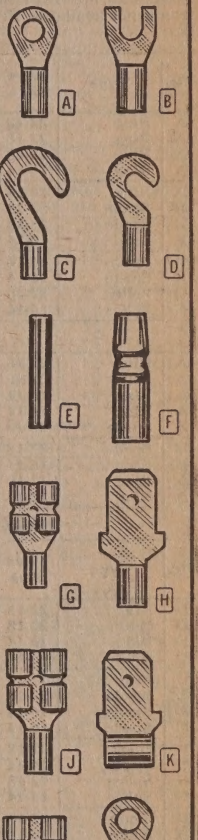
VACO

Form excellent electrical connections. Constructed of copper alloy for maximum conductivity.

Explanation of symbols in table: †1¼" male tab. §Female tab socket. ‡1¼" angle male tab. #Angle female tab socket. **Butt connector. ††Snap term.

NON-INSULATED TERMINALS SOLD IN MULTIPLES OF 100 **INSULATED TERMINALS**

Wire Size	Stud Size	Lth.	Fig.	Stock No.	Mfr's Type	PRICE PER 100 100-900	1000-4900	5000-9900	10,000 Up	Stock No.	Mfr's Type	PRICE PER 100 100-900	1000-4900	5000-9900	10,000 Up
22-18	4	19/32"	A	975-5404	11204	3.02	2.72	2.45	1.89	975-6704	51204	5.26	4.73	4.26	3.29
22-18	5-6	17/32"	A	975-5405	11205	3.02	2.72	2.45	1.89	975-6705	51205	5.26	4.73	4.26	3.29
22-18	5-6	3/4"	A	975-5406	11206	3.02	2.72	2.45	1.89	975-6706	51206	5.26	4.73	4.26	3.29
22-18	8	43/64"	A	975-5408	11208	3.02	2.72	2.45	1.89	975-6708	51208	5.26	4.73	4.26	3.29
22-18	10	3/4"	A	975-5410	11210	3.02	2.72	2.45	1.89	975-6710	51210	5.26	4.73	4.26	3.29
16-14	5-6	17/32"	A	975-5425	11305	3.02	2.72	2.45	1.89	975-6735	51305	5.26	4.73	4.26	3.29
16-14	5-6	23/32"	A	975-5426	11306	3.02	2.72	2.45	1.89	975-6736	51306	5.26	4.73	4.26	3.29
16-14	8	23/32"	A	975-5428	11308	3.02	2.72	2.45	1.89	975-6738	51308	5.26	4.73	4.26	3.29
16-14	10	23/32"	A	975-5430	11310	3.02	2.72	2.45	1.89	975-6740	51310	5.26	4.73	4.26	3.29
12-10	10	3/4"	A	975-5440	11410	3.73	3.36	3.02	2.34	.....	.....	.....	.....	.....	.....
12-10	12-¼	29/32"	A	975-5444	11414	5.00	4.50	4.05	3.13	.....	.....	.....	.....	.....	.....
8	10	17/64"	A	975-6551	31510	1.62	1.47	1.32	1.02	.....	.....	.....	.....	.....	.....
8	¼	17/64"	A	975-6554	31514	1.62	1.47	1.32	1.02	.....	.....	.....	.....	.....	.....
8	3/8	17/64"	A	975-6568	31538	1.62	1.47	1.32	1.02	.....	.....	.....	.....	.....	.....
8	5/16	17/64"	A	975-6576	31556	1.62	1.47	1.32	1.02	.....	.....	.....	.....	.....	.....
22-18	4	17/32"	B	975-5604	13204	2.68	2.41	2.17	1.69	975-7104	53204	5.26	4.73	4.26	3.29
22-18	5-6	17/32"	B	975-5606	13206	2.68	2.41	2.17	1.69	975-7106	53206	5.26	4.73	4.26	3.29
22-18	8	41/64"	B	975-5608	13208	3.02	2.72	2.45	1.89	975-9108	53208	5.26	4.73	4.26	3.29
22-18	10	11/16"	B	975-5610	13210	3.02	2.72	2.45	1.89	975-7110	53210	5.26	4.73	4.26	3.29
16-14	4-6	49/64"	B	975-5636	13306	3.02	2.72	2.45	1.89	975-9136	53306	5.26	4.73	4.26	3.29
16-14	8	21/32"	B	975-5638	13308	3.02	2.72	2.45	1.89	975-9138	53308	5.26	4.73	4.26	3.29
16-14	10	49/64"	B	975-5640	13310	3.02	2.72	2.45	1.89	975-9140	53310	5.26	4.73	4.26	3.29
22-18	4-6	9/16"	B	975-5706	14206	2.68	2.41	2.17	1.69	975-7206	54206	5.26	4.73	4.26	3.29
22-18	8	5/8"	C	975-5808	15208	3.02	2.72	2.45	1.89	.....	.....	.....	.....	.....	.....
16-14	4-6	19/32"	D	975-5830	15306	3.02	2.72	2.45	1.89	975-7306	55306	5.26	4.73	4.26	3.29
16-14	8	21/32"	C	975-5833	15308	3.02	2.72	2.45	1.89	975-7308	55308	5.26	4.73	4.26	3.29
22-18	.....	9/16"	E	975-6002	17202**	3.02	2.72	2.45	1.89	975-7502	57202	5.26	4.73	4.26	3.29
16-14	.....	9/16"	E	975-6032	17302**	3.02	2.72	2.45	1.89	975-7532	57302	5.26	4.73	4.26	3.29
12-10	.....	11/16"	E	975-6042	17402**	3.02	2.72	2.45	1.89	.....	.....	.....	.....	.....	.....
16-14	.....	5/8"	F	975-6201	19301††	2.32	2.09	1.88	1.45	.....	.....	.....	.....	.....	.....
22-18	.....	17/32"	G	975-6104	18204§	3.02	2.72	2.45	1.89	.....	.....	.....	.....	.....	.....
16-14	.....	23/32"	H	975-6131	18301†	3.02	2.72	2.45	1.89	975-7601	58301	5.26	4.73	4.26	3.29
16-14	.....	23/32"	J	975-6132	18302§	3.02	2.72	2.45	1.89	975-7602	58302	6.15	5.54	4.98	3.85
16-14	.....	9/16"	K	975-6133	18303‡	3.02	2.72	2.45	1.89	.....	.....	.....	.....	.....	.....
16-14	.....	15/32"	L	975-6134	18304#	3.02	2.72	2.45	1.89	.....	.....	.....	.....	.....	.....

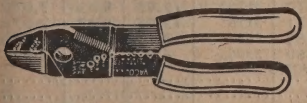


MODEL 1900 CRIMPING TOOL

For fast crimping of solderless terminals. Has 3 dies for use with non-insulated terminals on 18-22, 14-16, and 10-12 wires. Also strips insulation from No. 22 to 10 wire; cuts wire and bolts. Rugged steel; comfortable plastic handles. Wt., 1 lb.

975-3580 ..... **4.50**

MODEL 1963 ALL-PURPOSE CRIMPING TOOL



Provides everything needed for electrical connections without soldering. Has crimping dies for insulated and non-insulated terminals. Cuts and strips wire; shears bolts. Wire cutter located at tip of tool for close work. Stripping notches for Nos. 10, 12, 14, 16, 18, 20 and 22 wire. Shears bolts 10-32, 6-32, 5-40, 10-24, 8-32 and 4-40. Steel tool, comfort grip plastic handles. Shpg. wt., 1 lb.

975-3590 ..... **5.25**

MODEL T-1710 CRIMPING TOOL

Crimps all terminals in wire range of 22 to 10 gauge. Built-in ratchet, safety release for uniform crimps. Compound lever action. Wt., 1 lb.

975-2470 ..... **40.00**

DOUBLE-GRIP INSULATED TERMINALS (Multiples/100)

Wire Size	Stud Size	Lgth.	Fig.	Stock No.	Mfr's Type	PRICE PER 100 100-900	1000-4900	5000-9900	10,000 Up
22-18	5-6	47/64"	M	975-8005	91205	9.20	8.28	7.45	5.07
16-14	5-6	23/32"	M	975-8035	91305	9.20	8.28	7.45	5.07
16-14	10	55/64"	M	975-8040	91310	9.20	8.28	7.45	5.07
22-18	4	23/32"	N	975-8104	93204	9.20	8.28	7.45	5.07
22-18	8	51/64"	N	975-8108	93208	9.20	8.28	7.45	5.07
22-18	10	27/32"	N	975-8110	93210	9.20	8.28	7.45	5.07
16-14	8	51/64"	N	975-8138	93308	9.20	8.28	7.45	5.07
16-14	10	27/32"	N	975-8140	93310	9.20	8.28	7.45	5.07

VACO TERMINAL KITS

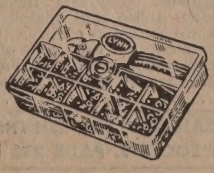
Model 4900-63. Popular assortment contains 500 insulated single-grip solderless terminals, plus a rugged combination crimper-cutter tool for correct installation. Package includes: 20 different types and sizes of terminals; Vaco Model 1963 high-grade steel service tool that cuts and strips wire 22 to 10 gauge and crimps insulated solderless terminals (two crimping dies, marked stripping notches); steel storage case with individual compartments for terminals and tool. Handy reference card in the cover of the box contains all pertinent information about the terminals. Complete instructions for proper crimping procedure. Case, 13¼" wide, 9¼" deep, and 2" high. Shpg. wt., 10 lbs.

975-4063 ..... **34.00**

Model 5000. Contains 1000 single-grip non-insulated type solderless terminals. Also consists of a combination crimping-cutter installing tool in a compact steel storage box. Includes 50 each of 20 different types and sizes of solderless terminals to meet almost all applications and needs. Shpg. wt., 10 lbs.

975-4100 ..... **34.00**

ASSORTED TERMINALS SERVICING KIT

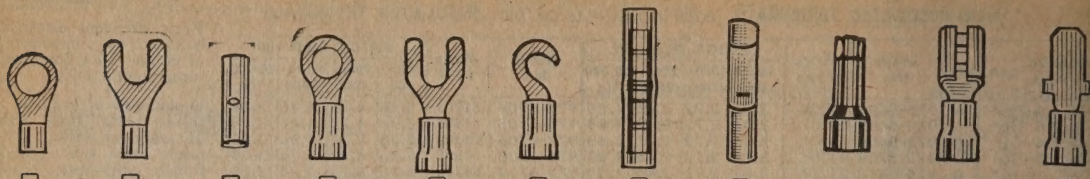


Model 2195. Handy kit contains approximately 170 solderless terminals in most popular sizes, in addition to a Type 1900 crimper/cutter tool described on opposite page. Terminal assortment and tool are supplied in handy clear plastic case with slotted compartment dividers for index tabs. Case size, 8¾x6x1¾". Wt., 2 lbs.

975-3670 ..... **9.50**

See Manufacturers' Index for more Vaco crimping tools, accessories. Allied maintains complete stocks of Vaco equipment and can supply any component in larger quantities. Contact Allied's facility nearest you for prompt price and delivery quotations.

American Pamcor Solderless Terminals, Tools



Terminals for general wiring. Excellent for radio-TV, electronic assemblies, electrical repairs. Use them where power for a soldering iron is not available. Require crimping tools below—Type 47100-1 for insulated terminals, Type 49835-1 for noninsulated terminals. Insulated terminals have plastic sleeves. ■U.L. Recog. Sold in Pkgs of 100. Wt. per pkg., 8 oz.

NON-INSULATED BRAISED BARREL

Fig.	Type	Wire Size	Stud Size	Lgth. (In.)	Stock No.	Mfr's Type	PRICE PER 100 100-900	1000-4900	5000-Up	Stock No.	Mfr's Type	PRICE PER 100 100-900	1000-4900	5000-Up
A	Ring	22-18	4	.531	729-1386	32989	4.52	3.19	2.39					
A	Ring	22-18	4-6	.546	729-1446	34194	4.52	3.19	2.39					
A	Ring	22-18	8-10	.703	729-1396	33214	5.16	3.69	2.77					
A	Ring	16-14	4-6	.562	729-1448	34197	5.16	3.69	2.77					
A	Ring	16-14	8-10	.734	729-1398	33217	4.52	3.19	2.39					
B	Spade	22-18	6	.625	729-1382	32897	4.52	3.19	2.39					
B	Spade	22-18	8-10	.625	729-1383	32899	4.52	3.19	2.39					
B	Spade	16-14	6	.765	729-1400	33477	5.76	4.18	3.13					
B	Spade	16-14	6	.530	729-1380	322996	4.53	3.20	2.40					
B	Spade	16-14	8-10	.765	729-1399	33219	5.76	4.18	3.13					
C	Splice	22-16		.568	729-1379	31818	5.39	3.87	2.91					
C	Splice	16-14		.567	729-1378	31819	5.39	3.87	2.91					

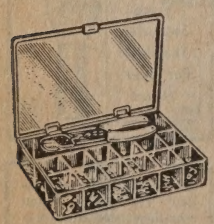
NON-INSULATED

A	Ring	22-18	5-6	.453	729-1332	31091	3.29	2.07	1.55					
A	Ring	22-18	8-10	.5625	729-1342	31266	3.29	2.07	1.55					
A	Ring	16-14	5-6	.484	729-1388	32186	3.29	2.07	1.55					
A	Ring	16-14	8-10	.640	729-1327	30697	3.29	2.07	1.55					
B	Spade	22-18	5-6	.547	729-1361	31655	3.29	2.07	1.55					
B	Spade	22-18	8-10	.547	729-1357	31636	3.29	2.07	1.55					
B	Spade	16-14	8-10	.672	729-1366	31706	3.29	2.07	1.55					
A	Ring	12-10	8-10	.808	729-1375	31805	6.37	4.66	3.50					
A	Ring	12-10	¼"	.996	729-1392	33458	6.92	5.10	3.83					

INSULATED EXPANDED — NON-EXPANDED

Fig.	Type	Wire Size	Stud Size	Lgth. (In.)	Stock No.	Mfr's Type	PRICE PER 100 100-900	1000-4900	5000-Up	Stock No.	Mfr's Type	PRICE PER 100 100-900	1000-4900	5000-Up
D	Ring	22-18	8-10	.829	729-1433	34149	7.64	5.38	4.04	729-1344	32952	6.69	4.66	3.49
D	Ring	22-18	4-6	.652	729-1430	34142	7.64	5.38	4.04	729-1343	32945	6.69	4.66	3.49
D	Ring	16-14	4-6	.683	729-1439	34158	7.64	5.38	4.04	729-1345	32957	6.69	4.66	3.49
D	Ring	16-14	8-10	.683	729-1441	34161	7.64	5.38	4.04	729-1346	32960	6.69	4.66	3.49
D	Ring	16-14	12	1.059	729-1442	34162	8.87	6.32	4.74	729-1347	32961	7.99	5.64	4.23
E	Spade	22-18	4-6	.888	729-1436	34154	7.64	5.38	4.04	729-1350	32980	6.69	4.66	3.49
E	Spade	16-14	4-6	.888	729-1443	34165	7.64	5.38	4.04	729-1348	32964	6.69	4.66	3.49
E	Spade	16-14	8-10	.888	729-1445	34167	7.64	5.38	4.04	729-1349	32966	6.69	4.66	3.49
F	Hook	22-18	8	.871						729-1353	321699	7.64	5.38	4.04
F	Hook	16-14	10	.839						729-1354	324134	10.77	7.77	5.28
G	Splice	22-18		1.065	729-1420	34070	9.18	6.55	4.92	729-1355	324138	7.99	5.64	4.23
G	Splice	16-14		1.065	729-1421	34071	9.18	6.55	4.92	729-1381	328427	7.99	5.64	4.23
H	Knife	22-18		.6406						729-1370	31762	12.95	9.43	7.07
H	Knife	16-14		.6406						729-1371	31763	12.95	9.43	7.07
J	Pigtail	22-14			729-1451	35115	4.70	3.16	2.37	729-1459	36964	4.11	2.72	2.04
J	Pigtail	18-10			729-1454	35653	7.60	5.37	4.03	729-1460	36965	6.82	4.78	3.59
K	Receptacle	22-18	Fits .250 Tab		729-1462	42599-2	11.36	8.63	6.47					
K	Receptacle	16-14	Fits .250 Tab		729-1474	42332-2	11.36	8.63	6.47					
L	PG Tab	22-16	.250 Tab		729-1479	66034-1	8.84	6.42	4.82					
L	PG Tab	16-14	.250 Tab		729-1480	66035-1	8.84	6.42	4.82					

29033 SOLDERLESS TERMINAL KIT



Kit contains a wide assortment of most popular types of insulated solderless terminals for a wide variety of general-purpose wiring applications. It's ideal for radio and TV servicemen and technicians, automobile mechanics and repairmen, hobbyists and experimenters. Permits a wide range of fast and easy component connections without using a soldering iron. Includes heavy-duty "Super-Champ" crimping and wiring tool (Type 47100-1) described below. Insulated terminals including ring, spade, splice and pigtail types (see illustrations at left). All items are housed in compact, transparent plastic case which has compartments for each type of terminals, plus section for "Super-Champ" crimping tool. Terminals are for use with wire sizes from 10 to 22. Case, 9¾x6½x2". Shpg. wt., 2 lbs.

729-1323 ..... 26.32

"SUPER-CHAMP" CRIMPING TOOLS

47100-1

Type 47100-1. Crimps insulated solderless terminals; shears machine screws, measures stud sizes, cuts and strips wire. Constructed of tool steel. Has insulated plastic handles with a comfortable "feel," permits long use without tiring. 1 lb.

729-1464 ..... 5.95

49835-1

Type 49835-1. For crimping non-insulated terminals. Otherwise same as above tool—shears machine screws, measures stud sizes, cuts and strips wire. 1 lb.

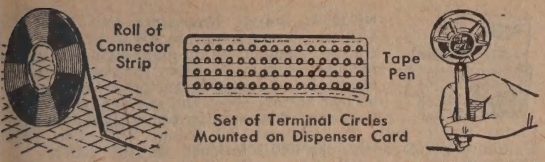
729-1470 ..... 5.95

ALLIED ELECTRONICS CAN NOW FURNISH THE FULL LINE OF AMERICAN PAMCOR PRODUCTS—SEE PAGE 104 FOR INTEGRATED CIRCUIT SOCKETS, PAGE 286 FOR PC CONNECTORS—CONTACT ALLIED FOR ITEMS NOT LISTED

■Recognized Under the Component Program of Underwriter's Laboratories, Inc.

Self-Sticking Numbers, Drafting Aids, Etch Kits

BRADY PRECISION-MADE PC DRAFTING AIDS



Black self-sticking circles and connector strips for use in printed circuit drafting. Save drafting time and costs. Precision cut to size, dimensionally stable. Photograph an opaque jet black without highlights. Meet Military Standard MS16912 (NORD).

TERMINAL CIRCLES (Av. shpg. wt., 1 oz.)

Stock No.	Type No.	O.D.	I.D.	Circles Per Card	MIL-S-MS 16912 (NORD)
739-3881	TC125-031	.125″	.031″	112	1E
739-3884	TC187-062	.187″	.062″	112	2E
739-3889	TC250-062	.250″	.062″	96	....
739-3892	TC312-062	.312″	.062″	80	....
739-3896	TC375-062	.375″	.062″	54	8E
739-3902	TC375-094	.375″	.094″	54	....
739-3907	TC400-095	.400″	.095″	48	....
739-3910	TC500-062	.500″	.062″	42	12E
739-3913	TC500-125	.500″	.125″	42	13E

1-24 Cards.....Each .52 25-99 Cards.....Each .30
100-499 Cards.....Each .27 500-999 Cards.....Each .24

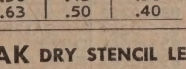
CONNECTOR STRIPS IN ROLLS (18 Yds. Per Roll)

Stock No.	Type No.	Size	Rolls Per Pkg.	PER PKG. 1-24	25-99	100-499
739-3810	CSR015	.015″	5	3.75	3.37	3.00
739-3813	CSR031	.031″	5	3.75	3.37	3.00
739-3815	CSR040	.040	5	3.75	3.37	3.00
739-3817	CSR062	.062″	5	4.00	3.60	3.20
739-3820	CSR080	.080″	5	4.00	3.60	3.20
739-3823	CSR093	.093″	5	4.00	3.60	3.20
739-3826	CSR100	.100″	5	4.00	3.60	3.20
739-3830	CSR125	.125″	5	4.00	3.60	3.20
739-3836	CSR156	.156″	3	2.70	2.43	2.19
739-3842	CSR187	.187″	3	2.70	2.43	2.19
739-3846	CSR200	.200″	2	1.80	1.62	1.44
739-3852	CSR250	.250″	2	1.80	1.62	1.44

MODEL TP-4 TAPE PEN

Precision drafting instrument provides fast, accurate method of drawing with self-sticking tape. Applies straight, curved or irregular lines. Can be used freehand, with straight edge or French curve. Handles 18-yd. roll of tape; built-in blade cuts off tape at end of line. 7¼″ long. Shpg. wt. 13 oz.
739-3919.....9.95

GRAYHILL INSULATED STANDOFF TERMINALS


Type 18-2

Terminals are molded from natural, mica-filled phenolic. Feature exceptionally low loss at higher frequencies, extremely low moisture absorption, and very high dielectric strength. Terminals are silver-plated brass. Type 18-1 has a 4-40 threaded hole in the base for mounting. Type 18-2 has a 7/32″ mounting stud with a 4-40 thread. .59″ long x .31″ diameter. Wt., 3 oz.

Stock No.	Mfr's Type	Mounting	EACH 1-49	50-499	500-Up
801-0401	18-1	Female	.56	.45	.36
801-0402	18-2	Male	.63	.50	.40

BRADY SELF-STICKING NUMBERS AND LETTERS

Ⓐ 3/8x1½″ Markers Ⓑ 5/16x¾″ Markers Ⓒ 3/8x½″ Markers

Self-sticking markers come on handy dispenser card for easy application. Low cost way to mark parts, drawers and shelves, control boards, panels, terminals. Brady numbers and letters are bold and black, in three sizes, printed on durable, bright-yellow vinyl cloth. Just strip the marker from card and apply to any clean, dry surfaces. Markers stick without water or adhesives. Identical Marker Cards carry multiples of same letter or number. Comb. Cards carry a consecutive series of letters or numbers. Comb. Pacs have alphabet or numerical sequences. *15 cards, 1-5; 10 cards, 6-0. 2 oz.

IDENTICAL MARKER CARDS (Specify Letters or Numbers Wanted)

Stock No.	Mfr's Type	Fig.	Markers Per Card	Type	EACH CARD 1-24	25-99	100-499	500-999	1000-2499	2500-4999
739C3946	Y15	A	10	A-Z, 0-9	.27	.22	.20	.18	.16	.149
739C3961	Y75	B	32	A-Z, 0-9	.27	.22	.20	.18	.16	.149
739C3932	Y05	C	78	A-Z, 0-9	.27	.22	.20	.18	.16	.149

COMBINATION CARDS (Consecutive Series of Letters or Numbers)

Stock No.	Mfr's Type	Fig.	Markers Per Card	Type	EACH CARD 1-24	25-99	100-499	500-999	1000-2499	2500-4999
739-3941	Y15	A	10	A-J	.27	.22	.20	.18	.16	.149
739-3943	Y15	A	10	K-T	.27	.22	.20	.18	.16	.149
739-3948	Y15	A	10	0-9	.27	.22	.20	.18	.16	.149
739-3900	Y75	B	32	0-9	.27	.22	.20	.18	.16	.149
739-3930	Y05	C	78	A-Z	.27	.22	.20	.18	.16	.149
739-3934	Y05	C	78	0-9	.27	.22	.20	.18	.16	.149

COMBINATION PACS (Multi-Card Assortments)

Stock No.	Mfr's Type	Fig.	No. of Cards	Type	EACH MULTI-CARD PAC 1-3	4-19	20-39	40-99	100-199	200-299
739-3952	Y15-NC	A	25	Numer.*	5.50	5.06	4.53	4.12	3.85	3.57
739-3970	Y75-LC	B	26	A-Z	5.50	5.06	4.53	4.12	3.85	3.57
739-3936	Y05-LC	C	26	A-Z	5.50	5.06	4.53	4.12	3.85	3.57
739-3938	Y05-NC	C	25	Numer.*	5.50	5.06	4.53	4.12	3.85	3.57

BRADY HANDY PORTA-PACK™ COMPLETE NUMBER AND LETTER KIT

Full set of self-sticking numbers and letters comes in one pocket-size booklet for on-the spot use. Pop-up feature of each row of markers helps you speedily select and apply permanent identification. Black printing on a choice of bright background colors. Size (WxH): P-05, ½x3⅜″; P-75, ½x3¼″. Wt. 4 oz.

Stock No.	Mfr's Type	Description	Color	EACH 1-9	10-49	50-99
739-3860	PW05-PK-1	375 letters, 330 numbers, 700 numbers, 20 dashes, 192 lets., 159 nos., 9 dashes	White	2.75	2.53	2.27
739-3863	PY05-PK-1		Yellow	2.75	2.53	2.27
739-3857	PF05-PK-1		Silver	2.75	2.53	2.27
739-3861	PW05-PK-2		White	2.75	2.53	2.27
739-3864	PY05-PK-2		Yellow	2.75	2.53	2.27
739-3869	PW75-PK-1		White	2.75	2.53	2.27
739-3872	PY75-PK-1		Yellow	2.75	2.53	2.27

DATAK DRY STENCIL LETTERING AND SYMBOL SETS

Electronic Equipment Title Set. Complete set of pre-printed titles for 95% of electronic markings. Instant dry-transfer process; 24 easy-to-handle sheets, 3x5″, in black or white letters. Shpg. wt., 4 oz.

Stock No.	Type	Description	Color	EA.
769-0830	958	Title Set	Black	5.95
769-0834	959	Title Set	White	5.95
769-0838	960	Refill Alphabet	Black	3.00
769-0842	961	Refill Alphabet	White	3.00
769-0846	962	Refill Numerals	Black	3.00
769-0850	963	Refill Numerals	White	3.00

Terminal and Chassis Set. 24 sheets, letters and numerals, in black or white. 3 oz.

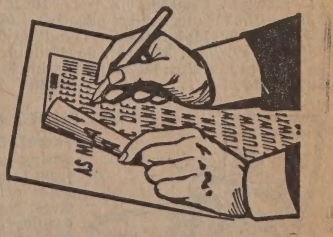
Stock No.	Type	Description	Color	EA.
769-0811	966	Term./Chas.Set	Black	5.95
769-0812	967	Term./Chas.Set	White	5.95

968 Meter and Dial Marking Set. 12 sheets in black, white and red, with designs, letters, numerals for dials, panels. 4 oz.
769-0813.....5.95

971 Logic Diagram Symbols Kit. Size same as full scale MIL STD 806 B Spec and ASA STD Y 32 and 14. Line width, .020″, blends with #2 Rapidograph pen or 2H pencil. Black. Eight 4¾x7¼″ sheets. 3 oz.
769-0819.....4.20

Protective Coatings. Colorless coatings protect Instant Lettering transfers. †Aerosol spray cans. Datakoat is for metal and other non-porous surfaces. 4 oz.

Stock No.	Type	Oz.	EA.
769-0882	Protect. spray-matte†	16	2.95
769-0870	Protect. spray-gloss†	16	2.95
769-0881	Datakoat spray-gloss†	16	2.95
769-0869	Datakoat spray-matte†	16	2.95
769-0880	Datakoat brush-on	3	1.00



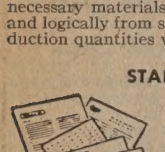
970 Electronic Symbol Set. Dry-transfer symbols produce neater, clearer schematics. Just rub and it's transferred—permanent—looks like printing. All you draw are connecting leads. Opaque black, repro. quality.
769-0816. Contains 40 Sheets. 8 oz... 19.15

Printed Circuit, Layout and Nameplate Kits

KEPRO KITS

Kepro kits offer an introduction to the processing techniques of etched circuit board production. They provide the engineer and experimenter with materials and knowledge to produce accurate, professional circuit boards by tested and proven methods. No prior experience needed. Each kit includes comprehensive instructions that fully describe processing in a simple step-by-step form. All necessary materials and equipment are included. Progress quickly and logically from simple experimental PC boards to short-run production quantities with full assurance of professional results.

STANDARD ETCHED CIRCUIT KIT



S-101A. Etching kit produces basic circuit patterns quickly, accurately. Liquid or pressure-sensitive tape resists are applied directly to copper-clad boards in the desired pattern, then etched. Perforated copper-clad panel, supplied with kit, speeds component mounting. Includes materials for completely processing three single-clad panels. 3x6". Wt. 2 lbs.
835-0689. 1-9.....4.93 10-Up.....3.95

S-101A-G. Standard Etched Circuit Kit. As above, but with G-10 glass epoxy boards instead of XXXP paper-base phenolic boards.
835-0692. Shpg. wt. 2 lbs. 1-9.....6.56 10-Up.....5.25

PROFESSIONAL ETCHED CIRCUIT KIT

P-101A. Etched circuit kit utilizes photo engraving process to produce professional-quality etched circuits. Negative of layout can be produced photographically or mechanically with materials supplied. A sensitized sheet of XXXP phenolic copper-clad is exposed through your prepared negative, then developed and etched. Includes materials for completely processing three single-clad panels, one 3x3" and two 3x6".
835-0475. Shpg. wt. 3 lbs. 1-9.....7.31 10-Up.....5.85

P-101A-G. Professional Etched Circuit Kit. As above, but G-10 glass epoxy boards instead of XXXP paper-base phenolic boards.
835-0480. Shpg. wt. 3 lbs. 1-9.....9.25 10-Up.....7.40

ETCHED CIRCUIT KIT LAB

L-505A. Spans range from single experimental breadboards to high-quality, photo-processed, short-run production boards. Boards up to 70 sq. in. may be processed. Includes PL-2A Photo Layout Kit; 15 photo-sensitized copper-clad phenolic XXXP boards; 4 unsensitized boards; developing and etching trays; printing frame, mechanical negative; solutions; accessories. Shpg. wt. 20 lbs.
835U0201. 1-9...43.43 10-Up...34.75

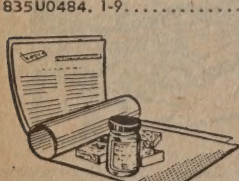
L-505A-G. Etched Circuit Kit Lab. Same as above, but with G-10 glass epoxy boards instead of XXXP paper-base phenolic boards.
835U0205. Shpg. wt. 21 lbs. 1-9.....53.68 10-Up.....42.95

PHOTO LAYOUT KIT

PL-2A. Eliminates necessity of inking and lettering through use of mechanical negative and pressure-sensitive characters. Layout time is reduced; errors easily corrected. May be used directly as negative when made to 1:1 scale or photographed and reduced to desired scale when produced at 2:1 or 4:1. Materials supplied will produce two sheets of artwork each 8x10".
835-0483. Shpg. wt. 14 oz. 1-9.....4.93 10-Up.....3.95

PL-200A Master Layout Kit. (Not illus.) Includes materials to make 18x 24" artwork. Contents: 2 pcs.—18x24" matte surface "Mylar"; 2 pcs.—18x24" mechanical negative, "Mylar" base; 4 pcs.—17x21" graph paper; Mylar-Master layout grid sheet. 112/1⅛", 224/3/16", 288/¼", 192/7/16", 252/½", 36/1" dots. 18 yds. ea. 1/16", 3/32", ⅛", 3/16", ¼" tape strips; letters; opaquing fluid; tools; data. Wt., 4 lbs.
835U0484. 1-9.....48.38 10-Up.....38.70

PHOTO REVERSING KIT



FK-701. Easy 2-step process for preparing line negatives and positives from taped or ink artwork or to reverse existing negatives and positives. No darkroom, tanks or trays required. Includes 2 pieces of reversing film 10x24", plus all necessary processing chemicals.
835-0154. Shpg. wt., 1½ lbs. .7.20

RF-1024 Extra Photo Reversing Film. Size: 10x24".
835-0488. Shpg. wt. 8 oz. 1-9.....3.75 10-Up.....3.00

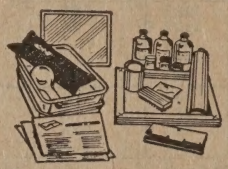
RFD-1PT, Extra Photo Reversing Film Developer.
835-0492. Shpg. wt. 1 lb. 1-9.....2.81 10-Up.....2.25

NAMEPLATE KITS

NP-303A. Enamel Nameplate and Panel Kit. Utilizes photographic process to produce high contrast nameplates on aluminum panels. Kit includes pressure sensitive opaque letters and numerals in 3 fonts. Characters are arranged on a clear acetate sheet and used as positive film to expose photosensitized blue aluminum plate. Plates require only development—no fixing. With two 8x10" aluminum plates, accessories and solutions.
835-0240. Shpg. wt. 1 lb. 1-9.....9.06 10-Up.....7.25

NP-404. Anodized Aluminum Nameplate and Panel Kit. All materials needed to produce detailed aluminum lettering on a black anodized panel. Includes pressure-sensitive opaque letters and numerals; three 3x6" plates; accessories; etching solutions.
835-0241. Shpg. wt. 1½ lbs. 1-9.....8.19 10-Up.....6.55

SILK SCREEN KIT



SC601A. Photo silk screen kit includes materials to produce one silk screen with print area up to 7x9" plus silk and film emulsion for two additional patterns. Produces lacquer resistant film type photo stencil. No dark room required. With squeegee, mounting hinges, black and white printing and etch resist inks. Designed for screen-printing production quantities of etched circuit boards, nameplates, instrument panels, decorative screen printing.
835U0715. Shpg. wt., 25 lbs. 1-9.....38.50 10-Up.....35.00

ETCHED CIRCUIT PROCESSING CHEMICALS

Stock No.	Type	Description	Size	EACH
835-0497	RMP-700	Resist Marking Pen	.....	.75
835-0487	R-1PT	Paint Resist (for unsensitized sheet)	16 oz.	2.25
835-0730	R-1PT	Resist Thinner	16 oz.	1.95
835-0067	D-1PT	Develop'g Sol'n (for sensitized sheet)	pint	1.15
835-0060	D-1G	Develop'g Sol'n (for sensitized sheet)	gal.	5.50
835U0078	D-5G	Developing Solution. Wt. 75 lbs.	5 gal.	25.00
835-0108	E-1PT	Etching Solution—Ferric chloride	pint	.85
835-0105	E-1G	Etching Solution—Ferric chloride	gal.	3.50
835U0116	E-5G	Etch'g Sol'n—Ferric chloride base	5 gal.	15.25
835-0128	EP-1G	Etch'g Powder—ammonium p'sulfate	1 gal.	3.25
835-0139	EP-4G	Etch'g Powder—ammonium p'sulfate	4 gal.	7.50
835-0486	PRS-1PT	Photo Resist Stripper	pint	1.95
835-0485	PRS-1G	Photo Resist Stripper	gal.	7.50

EXTRA PHOTO LAYOUT SUPPLIES

Stock No.	Mfr's Type	Description	EA.
835-0216	MN-1212	12x12" Mechanical Negative. Wt., 4 oz.	1.25
835-0238	MS-3	Stable Base Drafting Film. Wt. 8 oz.	1.95
835-0014	AT-810	Pressure Sensitive Letters and Numerals on transparent base (3 sizes, 4 fonts). 4 oz.	2.50
835-0184	GS1824	1/10" Layout Grid Sheet (18x24"). 1 lb.	7.95

NP-303A MATERIALS

Stock No.	Type	Description	Size	EACH
835-0244	NP-EP1220	Sensitized Enamel Plate	12x20"	4.13
835-0246	NPD-1PT	Developer	16 oz.	2.50
835-0242	NP-AS1722	Pressure Sens. Adhesive Sheet	17x22"	2.75

NP-404 MATERIALS

Stock No.	Type	Description	Size	EACH
835-0252	NP-SA1212	Anodized Aluminum Plate	12x12"	4.90
835-0254	NP-SA1220	Anodized Aluminum Plate	12x20"	7.75
835-0067	D-1PT	Developer	pint	1.15
835-0243	NP-E	Etching Powder	pkg.	.95

FLEXIBLE ETCHED CIRCUIT KIT

- Make Etched Circuit Patterns up to 3x6" in Size
- Prepared High Contrast Negative—No Darkroom Needed
- Can be Handled in Subdued Incandescent Room Light

FP-101A. All materials and equipment needed to produce three flexible etched circuit patterns up to 3x6" in size. The .004" thick Westinghouse type 5K02 material, clad on one side with photosensitized 2-oz. copper, is ideal for use where it is desirable to bend, twist or form wiring circuit in a tubular shape. Widely used to etch multiconductor wiring harnesses. Lightweight, it offers excellent circuitry in RC model airplanes. Can be used to make experimental multilayer boards. The three pieces of material are ready for exposure through a prepared high contrast negative. No darkroom needed. Material can be handled in subdued incandescent room light and exposed in sunlight or with a #2 photoflood lamp. Kit includes materials for producing artwork and "cut and peel" mechanical negatives, exposure frame components, developing solution, ferric chloride etchant, two trays and instructions.
835-0160. Shpg. wt. 2⅝ lbs. 1-9.....7.43 10-Up.....5.95

Call Your Nearest Allied Electronics Office for All Your Electronic Supplies

Kepro Printed Circuit Boards and Shears

ETCHED CIRCUIT COPPER-CLAD MATERIALS

aminated 1-oz. (.00135) copper-clad materials. Available in 1/16" XXXP paper base phenolic, glass mat polyester, and 1/16" G-10 lass epoxy with foil on two sides, except types marked with *, oating on one side only. Fully meet standard NEMA grade toler- nces; Cimclad equals or exceeds. Supplied unsensitized for screen rocessed parts and photo-sensitized for photo processed boards. hotosensitized materials are ready for exposure with no further ensitizing required. M at end of Type No. indicates polyester.

XXXP PAPER BASE PHENOLIC TYPE (.00135)

UNSENSITIZED

Stock No.	Mfr's Type	Wt. per package	Size	PER PKG. OF 5 1-4	5-9	10-19	20-Up
835-0306	P1-365*	1 lb.	3x6"	2.05	1.80	1.65	1.50
835-0312	P1-465	1 lb. 3 oz.	4x6"	2.30	2.00	1.85	1.70
835-0318	P1-12125*	3 lbs. 6 oz.	12x12"	11.15	9.45	7.35	7.00
835-0310	P1-365PB*	1 lb.	3x6"	2.45	2.20	2.05	1.90
835-0335	P2-335	11 oz.	3x3"	1.65	1.45	1.30	1.20
835-0341	P2-365	1 lb.	3x6"	2.55	2.25	2.05	1.85
835-0351	P2-465	1 lb. 3 oz.	4x6"	2.80	2.45	2.25	2.05
835-0358	P2-12125	3 lbs. 6 oz.	12x12"	14.85	12.60	9.80	9.35

PHOTOSENSITIZED

835-0502	S1-335*	9 oz.	3x3"	2.35	2.00	1.85	1.70
835-0509	S1-365	11 oz.	3x6"	3.85	3.30	3.00	2.80
835-0517	S1-465	1 lb. 6 oz.	4x6"	4.60	3.95	3.60	3.30
835-0525	S1-665	1 lb. 2 oz.	6x6"	6.80	5.85	5.30	4.90
835-0533	S1-7105	1 lb. 14 oz.	7x10"	12.55	10.80	9.80	9.05
835-0543	S1-12125	3 lbs.	12x12"	25.55	21.20	16.85	16.10
835-0552	S2-335	9 oz.	3x3"	3.15	2.70	2.45	2.25
835-0558	S2-365	11 oz.	3x6"	5.45	4.70	4.25	3.95
835-0565	S2-465	14 oz.	4x6"	6.60	5.70	5.15	4.72
835-0573	S2-665	1 lb. 2 oz.	6x6"	10.10	8.70	7.90	7.30
835-0585	S2-7105	1 lb. 13 oz.	7x10"	18.25	15.70	14.25	13.15
835-0594	S2-12125	3 lbs. 5 oz.	12x12"	36.85	30.60	24.30	23.20

GLASS MAT POLYESTER (.00135)

UNSENSITIZED

835-0356	P2-465M	1 lb. 1 oz.	4x6"	3.30	2.90	2.65	2.40
835-0324	P1-12125M	1 lb. 6 oz.	12x12"	12.95	11.00	8.55	8.15
835-0364	P2-12125M	3 lbs. 6 oz.	12x12"	17.85	15.15	11.75	11.25

PHOTOSENSITIZED

835-0548	S1-12125M	3 lbs. 6 oz.	12x12"	27.35	22.70	18.05	17.20
835-0599	S2-12125M	3 lbs. 10 oz.	12x12"	40.85	33.90	29.95	25.75
835-0563	S2-365M	1 lb.	3x6"	5.75	4.95	4.50	4.15

G-10 GLASS EPOXY 1 OZ. (.00135)

UNSENSITIZED

Stock No.	Mfr's Type	Wt. per package	Size	PER PKG. OF 5 1-4	5-9	10-19	20-Up
835-0303	P1-335G*	11 oz.	3x3"	2.75	2.40	2.20	2.00
835-0309	P1-365G*	1 lb.	3x6"	4.75	4.20	3.80	3.45
835-0315	P1-465G*	1 lb. 2 oz.	4x6"	5.30	4.65	4.25	3.85
835-0321	P1-12125G	3 lbs. 6 oz.	12x12"	32.55	27.65	21.50	20.50
835-0338	P2-335G	11 oz.	3x3"	2.85	2.50	2.25	2.05
835-0344	P2-365G	1 lb.	3x6"	4.95	4.35	3.95	3.60
835-0354	P2-465G	1 lb. 3 oz.	4x6"	5.60	4.90	4.50	4.10
835-0361	P2-12125G	3 lbs. 10 oz.	12x12"	34.05	28.95	22.45	21.45

PHOTOSENSITIZED

835-0505	S1-335G*	11 oz.	3x3"	3.65	3.20	2.90	2.65
835-0513	S1-365G*	1 lb.	3x6"	6.65	5.75	5.25	4.80
835-0520	S1-465G*	1 lb. 2 oz.	4x6"	7.60	6.90	6.10	5.55
835-0528	S1-665G*	1 lb. 6 oz.	6x6"	12.10	10.65	9.70	8.85
835-0537	S1-7105G*	2 lbs. 2 oz.	7x10"	22.95	19.75	17.90	16.65
835-0546	S1-12125G*	3 lbs. 6 oz.	12x12"	46.95	38.95	31.00	29.55
835-0555	S2-335G	11 oz.	3x3"	4.35	3.80	3.45	3.15
835-0561	S2-365G	1 lb.	3x6"	7.85	6.80	5.75	5.50
835-0569	S2-465G	1 lb. 3 oz.	4x6"	9.40	8.25	7.50	6.85
835-0577	S2-665G	1 lb. 6 oz.	6x6"	15.00	13.20	12.00	10.95
835-0590	S2-7105G	2 lbs. 2 oz.	7x10"	28.45	24.50	22.20	20.50
835-0597	S2-12125G	3 lbs. 10 oz.	12x12"	57.35	47.60	37.85	36.10

G-10 GLASS EPOXY 2 OZ. (.0127)

UNSENSITIZED

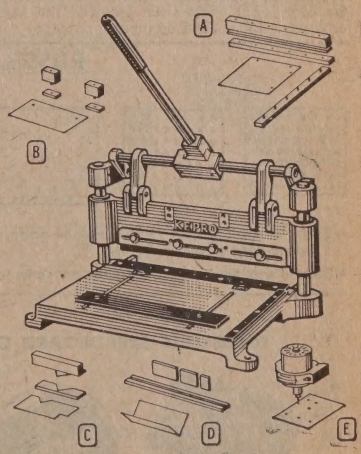
835-0385	P12-365G*	1 lb. 2 oz.	3x6"	4.85	4.30	3.90	3.55
835-0388	P12-465G*	1 lb. 6 oz.	4x6"	5.50	4.85	4.55	4.00
835-0391	P12-12125G*	3 lbs. 11 oz.	12x12"	33.85	28.75	22.35	21.30
835-0394	P22-335G	14 oz.	3x3"	2.95	2.60	2.35	2.15
835-0394	P22-365G	1 lb. 4 oz.	3x6"	5.05	4.45	4.05	3.70
835-0402	P22-465G	1 lb. 8 oz.	4x6"	5.70	5.00	4.55	4.15
835-0406	P22-12125G	3 lbs. 13 oz.	12x12"	35.55	30.20	23.45	22.40

PHOTOSENSITIZED

835-0610	S12-335G*	14 oz.	3x3"	3.75	3.30	3.00	2.75
835-0613	S12-365G*	1 lb. 2 oz.	3x6"	6.65	5.85	5.35	4.85
835-0617	S12-465G*	1 lb. 8 oz.	4x6"	7.80	6.85	6.25	5.70
835-0620	S12-7105G*	1 lb. 9 oz.	7x10"	22.55	19.40	17.60	16.25
835-0623	S12-12125G*	3 lbs. 11 oz.	12x12"	48.25	44.00	31.85	30.40
835-0628	S22-465G	1 lb. 8 oz.	4x6"	9.50	8.35	7.60	6.95
835-0632	S22-665G	1 lb. 1 oz.	6x6"	11.40	10.05	9.15	8.35

MULTI-6 PRINTED CIRCUIT BOARD SHEAR

Type M-6. A bench-top hand tool that will perform a variety of circuit board and sheet metal fabricating functions in the prototype lab or shop. The basic tool is a shear for cutting clad or unclad plastic materials such as G-10 glass epoxy, XXXP phenolic, FR-3 paper-base epoxy and mat polyesters up to 1/16" thick or sheet metals up to .040" thick. Only 15" wide and 13" deep but will shear panels up to 12" wide. With precision squaring gauge and adjustable back length gauge.
835X0216. Shpg. wt. 24 lbs.....119.00



SHEAR ACCESSORIES

A Model PH-6. Pilot Hole Punch Set. Punch bar attachment provides six locations for .125" dia. perforating punches spaced 2" apart with 1st punch located 1" from right side. Punch centers are located accurately to ±.003" from 1st hole up to 10" maximum spacing. Can be used to punch pilot pin holes in copper-clad laminates up to 1/16" thick. Complete with six punches.
835-0285. Shpg. wt. 4 lbs.....142.00

B Model PS-2. "Floating" 2-Hole Punch Set. Two .125" dia. punches fixtured to permit two randomly located holes along a single axis. Holes may be spaced from 1¾" to 10" apart. For laminates up to 1/16".
835-0290. Shpg. wt. 2 lbs.....44.00

C Model NA-1 Notching Attachment. Mounts on pressure rail of shear for use in cutting corner notches of up to 1"x1" in laminate materials up to 1/16" thick.
835-0239. Shpg. wt. 3 lbs.....48.00

D Model DA-1. PC Board Drill Attachment. 115 VAC motor with Type O chuck attaches to shear to drill .020" to .125" holes in glass epoxy, phenolics, and polyesters.
835-0085. Shpg. wt. 4 lbs.....62.00

E Model PB-1. Press Brake Attachment. Forms 90° bends in soft aluminum up to 18 gauge or sheet steel up to 22 gauge. Set includes one 12" brake die section and three brake rails for sections up to 6" long.
835-0280. Shpg. wt. 3 lbs.....42.00

PRE-PILOTED COPPER-CLAD PANELS

1 oz. copper-clad boards with .125" pilot holes at 1" intervals .125" from edge. *XXXP paper base phenolic. †G-10 glass epoxy. Photosensitized and clad on both sides except ‡clad 1 side only and §unsensitized.

Stock No.	Mfr's Type	Size	Wt. Per Package	PKG. OF 5 1-4	5-9	10-19	20-Up
835-0317	P1-7105P*‡§	7x10"	2 lbs.	6.30	5.56	5.03	4.55
835-0323	P1-12125P*‡§	12x12"	3 lbs. 8 oz.	11.40	9.66	7.53	7.15
835-0357	P2-7105P*§	7x10"	2 lbs.	8.30	7.31	6.63	6.05
835-0363	P2-12125P*§	12x12"	3 lbs. 8 oz.	15.10	12.81	9.98	9.50
835-0535	S1-7105P*‡	7x10"	2 lbs.	12.80	11.01	9.98	9.20
835-0549	S1-12125P*‡	12x12"	3 lbs. 8 oz.	25.80	21.41	17.03	16.25
835-0592	S2-7105P*	7x10"	2 lbs.	18.50	15.91	14.43	13.20
835-0600	S2-12125P*	12x12"	3 lbs. 8 oz.	37.10	30.81	24.48	23.35

Stock No.	Mfr's Type	Size	Wt. Per Package	PKG. OF 5 1-4	5-9	10-19	20-Up
835-0316	P1-7105GP†‡§	7x10"	2 lbs. 6 oz.	16.70	14.71	13.33	12.15
835-0322	P1-12125GP†‡§	12x12"	3 lbs. 10 oz.	32.80	27.86	21.68	20.35
835-0355	P2-7105GP†§	7x10"	2 lbs. 6 oz.	17.50	15.41	13.98	12.75
835-0362	P2-12125GP†§	12x12"	3 lbs. 10 oz.	34.30	29.16	22.63	21.60
835-0534	S1-7105GP†‡	7x10"	2 lbs. 6 oz.	23.20	19.96	18.08	16.70
835-0547	S1-12125GP†‡	12x12"	3 lbs. 10 oz.	47.20	39.16	31.18	29.70
835-0591	S2-7105GP†	7x10"	2 lbs. 6 oz.	28.70	24.71	22.38	20.65
835-0598	S2-12125GP†	12x12"	3 lbs. 10 oz.	57.60	47.81	38.03	36.25

Kits and Materials for Engineering

TECHNIQUES PRINTED CIRCUIT KITS AND SUPPLIES

5002 EXPERIMENTERS KIT

Beginners etched circuitry kit with six copper-clad boards from 3x 2¼" to 4½x6"; etchant; tape resist; resist circles; eyelet assortment; drill. Convenient plastic case. 7⅛x 5x1⅛".

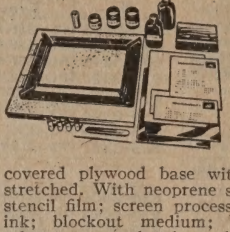
959-1615. Shpg. wt. 1 lb.....**4.75**

5003 TECHNICIANS KIT

Advanced kit for real "pros." Contains 10 single and double faced copper-clad boards from 3x2¼" to 4½x6"; etching solution; tape resist; liquid resist; resist circles; eyelets; drill; circuit diagrams. Plastic case. 7½x5x2".

959-1616. Shpg. wt.. 1½ lbs.....**9.75**

5006 SILK SCREEN PRINTING KIT



Accurate, rapid method for making larger sample quantities or short production runs of printed circuits. 8x 12" frame is hinge-mounted on formica covered plywood base with silk already stretched. With neoprene squeegee; photo stencil film; screen process etch resistant ink; blockout medium; tape masking; solvent; spare bottle and all chemicals necessary for making stencils.

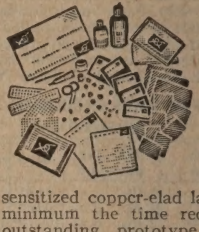
959-1620. Shpg. wt. 6 lbs.....**29.95**

BALL POINT RESIST TUBES

Make resist patterns directly on copper clad boards as easily as using a ball point pen. Deposits line 1/16" wide. Lets you color code circuit easily—liquid resist ball point tubes are available in various colors: **yellow, green, blue, red, brown, black and orange.** Wt. 3 oz. **Type PRLT.**

959 C 1605. Specify Color.....**1.25**

5100 PRINTED CIRCUIT KIT



Laboratory-qual ty printed circu kit lets you et your own circuit on copper-cla insulating board All materials pr vided.

Efficient meth incorporate ready-to-use pr sensitized copper-clad laminate. Cuts to minimum the time required for maki outstanding prototype printed circuit Ideal for experimental uses.

Kit includes: twenty pieces of single a double-clad XXXP and epoxy fibergla laminates in assorted sizes, presensitiz and uncoated; 2 rolls of tape resist, ⅛ and ⅛" wide; 200 die-cut tape circles; bottle of resist and brush; ball point resi pen; eyelets and terminals; No. 51 dri layout paper; exposure clamp; developi and etching solution and trays. With co plete easy-to-follow instructions.

959 X 1640. Shpg. wt. 9½ lbs.....**29.9**

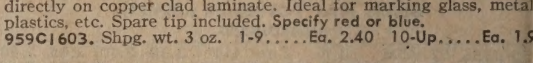
VECTOR ETCHED CIRCUIT KIT

Type 27XA. "Vectoresist" rub-on transfer resist sheet with lines, dots and connector pattern. Replaces conventional tapes and liquid resists. Includes: two 4½x6½" 1-side copper-clad XXXP phenolic; 10x15" Vectoresist sheet; 2 bags of dry etchant; activator in etching bag; layout paper; instructions. 1¼ lbs.

977-1162. 1-49....Each 6.50
50-199.....Each 5.85
200-499.....Each 4.55
500-Up.....Each 4.36

977-0772. Type R322 Vectoresist Sheet. Replacement 10x15" rub-on transfer resist sheet with assorted line width, dots, circles and 44 contact .156" spaced connector pattern. 2 oz.....**Each 2.00**

TECHNIQUES FIBER TIP RESIST PEN



TYPE PRFP. Draws variable, fine to thick width circuit patter directly on copper clad laminate. Ideal for marking glass, metal plastics, etc. Spare tip included. **Specify red or blue.**

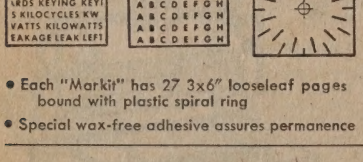
959C1603. Shpg. wt. 3 oz. 1-9.....Ea. 2.40 10-Up.....Ea. 1.9

ALCO CB-1 CIRCUIT BOARI

Circuit board modules provide an excelle base for various types of breadboardin Designed especially to accept the MEP-N and MEH-NB series of Alcostrips whi may be inserted or removed as desired (s page 313). Units may be fastened toget to form larger board. High strength. 5x6".

700-1020. Shpg. wt., 4½ oz.....

RUSSELL INDUSTRIES DRY TRANSFER LETTERING



- Each "Markit" has 27 3x6" looseleaf pages bound with plastic spiral ring
- Special wax-free adhesive assures permanence

ELECTRONICS WORDS

EM-1. Over 1000 words arranged in alphabetical order. **Specify black or white.**

900 C 8626. Shpg. wt., 4 oz.....**Each 4.95**

ALPHABET (Specify black or white)

Stock No.	Mfr's Type	Size	EACH
900C8600	AM-1	⅛"	4.95
900C8601	AM-2	¼"	4.95
900C8602	AM-3	⅜"	4.95
900C8603	AM-4	½"	4.95

DIAL MARKING KIT

DM-1. 14 pages of black markings, 13 pag of white. Has arcs, dots, lines, etc.

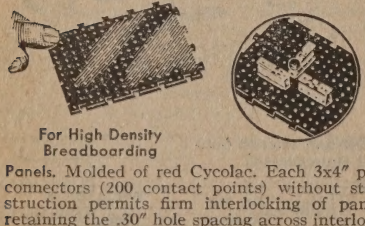
900-8624. Shpg. wt., 4 oz.....**Each 4.9**

NUMERALS (Specify black or white)

Stock No.	Mfr's Type	Size	EACH
900C8696	NM-1	⅛"	4.95
900C8697	NM-2	¼"	4.95
900C8698	NM-3	⅜"	4.95
900C8699	NM-4	½"	4.95

DeVRY CIRCUIT COMPONENTS

SOLDERLESS BREADBOARD COMPONENTS



For High Density Breadboarding

For high-density solderless breadboarding in circuit development. Permit a maximum number of circuit combinations to be wired in a minimum of time —no soldering, no clips or plugs, no damaged parts.

Panels. Molded of red Cycolac. Each 3x4" panel accepts up to 40 connectors (200 contact points) without stacking. Dovetail construction permits firm interlocking of panels in any direction, retaining the .30" hole spacing across interlocks.

Connectors. Molded of white Celcon, have phosphor-bronze spring contacts that permit secure contact between as many as five wires of different size. Molded feet plug into panels or into sides and ends of other connectors without affecting insulation. Capacity, 1pF or less between connectors. Compact, only 1 1/16x1 1/8x5/16".

Stock No.	Type	Description	EACH
769-2237	2500-2	Cycolac Panel	.93
769-2238	2500-3	Celcon Connector	.37

No Soldering

15000 BUILDING PANE

Provides a fast, simp means of breadboarding circuit. No clips, jacks, co nectors or soldering. Simp plug in any size wire, or com ponent lead, from #30 t #17 gauge for instant co tact. Connections are easil changed. Spring-tempere phosphor bronze contact strips. Insulation resistance betwee strips is 1000 megohms. Dielectric strength, 5000 V rms. Has 15 contact strips, 750 contact points. Molded acrylic, push vinyl pla tic. Type 15500 same except of high-temperature plastic for −200° to +250° F. 9½x14½x½".

769-2207. 15000. Shpg. wt., 2¼ lbs.....**Each 47.5**
769-2230. 15500 High-Temp. Wt., 2¼ lbs.....**Each 72.0**
769-2208. Model 15006 Base for Above. Wt., 2 lbs.....**Each 18.0**

PLUG-IN TUBE AND TRANSISTOR SOCKETS FOR ABOVE

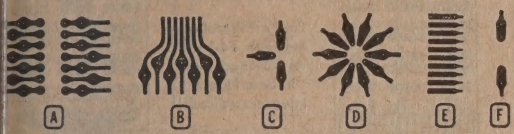
Stock No.	Type	Socket Type	EACH
769-2220	15070	Octal	2.25
769-2215	15060	9-Pin	2.25
769-2210	15050	7-Pin	2.25
769-2226	15080	Transistor	2.06

Call Your Nearest Allied Electronics Office for All Your Supplie

Bishop Graphics and Vero Circuit Boards

BISHOP GRAPHICS PRESSURE-SENSITIVE COMPONENT PATTERNS

RE-ETCHED CIRCUIT ZAPS® FOR INSTANT PC BOARDS



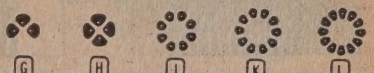
mponent patterns, pads and conductor paths for prototype and t development in the lab, in minutes. Precision 1-oz. copper on mil glass epoxy film, backed by pressure-sensitive adhesive. scale conforms to MIL-STD-275 and IPC. *40 fingers. †in kit at ht. ‡Specify: Black, Red, Blue, Green, Orange. ½ oz.

Stock No.	Mfr's Type	Description	Fig.	Centers	Qty./Pkg.	PER PKG.
39-2312	9012†	14-pin dual in-line	A	.....	12	7.55
39-2313	9013	16-pin dual in-line	A	.....	12	7.55
39-2314	9014	24-pin dual in-line	A	.....	6	7.55
39-2315	9015	36-pin dual in-line	A	.....	4	7.55
39-2321	9021	14-lead flat pack	B	.250″	8	7.55
39-2330	9030†	"TO-5" can 3-lead	C	.....	25	7.55
39-2331	9031	"TO" can 4-lead	D	.....	16	7.55
39-2332	9032	"TO" can 6-lead	D	.....	16	7.55
39-2333	9033	"TO" can 8-lead	D	.....	16	7.55
39-2334	9034†	"TO" can 10-lead	D	.....	16	7.55
39-2335	9035	"TO" can 12-lead	D	.....	16	7.55
39-2336	9036	"TO" can 16-lead	D	.....	6	7.55
39-2340	9040	Connector strip*	E	.100″	2	7.55
39-2341	9041	Connector strip*	E	.125″	2	7.55
39-2342	9042	Connector strip*	E	.150″	2	7.55
39-2343	9043†	Connector strip*	E	.156″	2	7.55
39-2345	9045	9-finger term. strip	....	.100″	30	7.55
39-2350	9050†	Resistor/diode pad	F	.500″	40	7.55
39-2351	9051†	Resistor/diode pad	F	.700″	30	7.55
39-2352	9052	Resistor/diode pad	F	1.000″	24	7.55
39-2360	9060†	Conductor (.031x6″)	....	.078″	24	7.55
39-2370	9070†	Cond. "T" (.031″ wide)	....	.....	64	7.55
39C2395	9080†	4″ Zap cord jumper‡	Specify color		10	6.85
39C2396	9085†	6″ Zap cord jumper‡	Specify color		10	6.85
39-2397	9090†	4″ cord (asstd.)	2 of each color		10	6.85
39-2398	9091†	6″ cord (asstd.)	2 of each color		10	6.85
39-2301	9001†	Stake tool with anvil	....	.....	1	12.50
39-2305	9005†	Terminals	....	.....	100	5.85

CIRCUIT ZAP SPEED KIT

Includes all patterns and tools marked † in table at left: four 14-lead dual in-line patterns; four TO-5 3-lead patterns; two 10-finger connector patterns; 19 resistor/diode patterns (0.5″ centers); four resistor/diode patterns (0.7″); 26 connector strips (.031x6″); nine-conductor "T" pattern, 25 single hole pads, 15 double hole pads; ten 4″ and ten 6″ jumpers (asstd. colors); 100 terminals; staking tool with anvil; two 4x6″ unclad epoxy glass boards.
739-2300. Model 9000. Shpg. wt. 1 lb.....59.50

PRESSURE SENSITIVE DRAFTING AIDS



Component symbols for preparing artwork on printed wiring boards. Symbols represent entire component, eliminating individual do-nut pads. Guaranteed accurate within ±.002″; comform to MIL-STD-275 and IPC guidelines. Available in 1X or 2X scale (4X on special order). For 2X, multiply dimensions by two. Roll of 250. 1 oz.

"TO" CAN PATTERNS

Stock No.	Mfr's Type	Fig.	Scale	Leads	Actual Size O.D.	Actual Size I.D.	Actual Size Clearance	ROLL of 250
739-2270	6003	G	1X	3	.087″	.015″	.025″	6.85
739-2280	6048	G	2X	3	.087″	.015″	.025″	6.85
739-2273	6018	H	1X	4	.093″	.018″	.025″	6.85
739-2284	6146	H	2X	4	.093″	.018″	.025″	6.85
739-2275	6021	J	1X	8	.062″	.015″	.025″	6.85
739-2285	6197	J	2X	8	.062″	.015″	.025″	6.85
739-2276	6022	K	1X	10	.062″	.015″	.025″	6.85
739-2286	6198	K	2X	10	.062″	.015″	.025″	6.85
739-2277	6023	L	1X	12	.062″	.018″	.018″	6.85
739-2287	6203	L	2X	12	.062″	.018″	.018″	6.85

DUAL IN-LINE PATTERNS

739-2272	6014	....	1X	14		.015″	.030″	7.55
739-2279	6038	....	2X	14	.070″	.015″	.030″	7.55
739-2271	6004	....	1X	16	wide	.015″	.030″	7.55
739-2282	6109	....	2X	16		.015″	.030″	7.55

TYPE F4 PRECISION BLACK OPAQUE CREPE TAPE

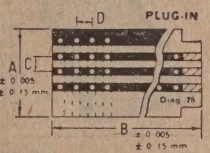
Only .005″ thick, accurate within .0005″. 20-yard length. 1 oz.

Stock No.	Width	Stock No.	Width	Specify Color	EACH
739C2216	.031″	739C2218	.125″	Red, Blue	.75
739C2217	.080″	.....	.....	or Black	.75

VERO INTEGRATED CIRCUIT BOARDS AND ACCESSORIES

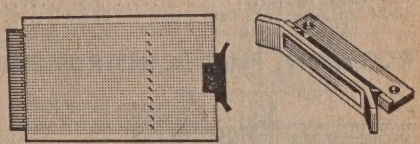
DOUBLE-SIDED X-Y 0.1″ PLUG-IN BOARDS

or dual in-line and TO-5 I/C's and ockets. Copper connecting strips on ach side at right angles, spaced 0.1″. old-plated contacts at 1 end. Made of XXP paper base phenolic, 1/16″ thick. oles, 0.04″ dia. spaced 0.1x0.1″. Type 142 terminal pins make X-Y connec-ions. Use spot face cutter tool (2022 elow) to break strips. Av. wt., 4 oz.



Stock No.	Mfr's Type	Size Wide	Size Length	Contacts	EACH 1-5	EACH 6-25	EACH 26-100
976-0041	1911	5.0″	7.85″	32	8.05	7.00	5.83
976-0042	1912	4.5″	6.5″	32	7.35	6.45	5.40
976-0043	1913	5.0″	7.85″	40	9.50	8.40	7.00
976-0044	1915	2.495″	4.75″	24	4.10	3.75	3.40
976-0053	2142	Pkg. of 500 Pins.....Each 3.00					
976-0058	2151	Insertion Tool.....Each 2.00					
976-0051	2022	Spot Face Cutter.....Each 1.50					

EPOXY-GLASS FINGER BOARDS



Have high-density 0.1x0.1″ hole pattern, .052″ dia. holes. Easy plug-in of dual in-line sockets. Flame retardant, 1/16″ thick. Gold-plated connector fingers on one edge spaced 0.1″, 0.156″, or 0.125″. *22 connector fingers on each end of board. Av. wt., 4 oz.

Stock No.	Mfr's Type	Size	Contacts	Spacing	EACH 1-5	EACH 6-25	EACH 26-100	EACH 101-499
976-0074	10239/1	5x8″	32	0.1″	6.95	6.20	5.60	5.05
976-0070	10236	4.5x6.5″	22	0.156″	6.65	6.00	5.45	4.80
976-0079	10290/1	4.5x8.5″	44*	0.156″	7.00	6.35	5.75	5.15
976-0072	10238/1	5x8″	22	0.156″	7.15	6.50	5.90	5.30
976-0077	10250	2.438x5″	18	0.125″	4.50	4.15	3.75	3.20

FINGER BOARD ACCESSORIES

Stock No.	Mfr's Type	Description	Pkg. of	EACH 1-4	EACH 5-9	EACH 10-Up
976-0063	10035	Lug Clip Handles	10	1.50	1.20	1.00
976-0064	10036	River/Screw Handles	10	2.80	2.30	1.90
976-0065	10037	Large Lug Handles	10	2.80	2.30	1.90
976-0054	2143	Brass Term. Pins	500	Each 5.75		
976-0057	2150	Insertion Tool	1	Each 2.00		

MODEL BK-6 BOARD KIT

Basic circuit board kit with 6 Vero-boards and spot-face cutter. A simplified, reliable method of circuit construction. Lay parts on board with leads in holes, break strips with cutter and solder. In minutes you have a finished, ready-to-use circuit. Shpg. wt., 1 lb.
976-0007.....Each 5.95

VBK-7 VEROBOARD LAB KIT

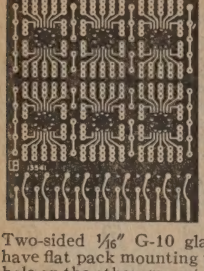
Perfect for constructing prototype circuit boards. Easy to use. Includes 8 assorted Veroboards, cutter, 500 pins, insertion tool, design sheet. Boards up to 18″ long.
976-0026. Shpg. wt., 2 lbs.....Each 29.95

MC-10 BREADBOARD KIT

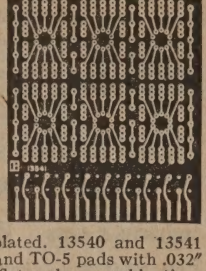
Veroboards for dual in-line IC's with 0.1x0.1″ matrix. Single-sided board with with copper strips; plug-in single-sided board; double-sided plug-in board; plain epoxy glass board; 500 pins, insertion tool; cutter; design sheet; connector.
976-0020. Wt., 3 lbs.....29.95

Printed Circuit Cards and Breadboard Kits

TRIAD INTEGRATED CIRCUIT CARDS



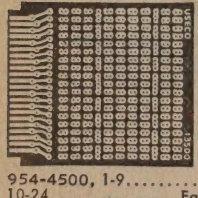
Use Both Sides, Build Circuit with Flat Pack or Dual In-Line on One Side or TO-5 Case on Other



Two-sided 1/16" G-10 glass epoxy, gold-plated. 13540 and 13541 have flat pack mounting tabs on one side and TO-5 pads with .032" hole on the other; mount up to 6 TO-5's or flat packs or combinations of both. Interconnection pads have .040" hole. 13540 mates with 25 contact double-side connector on .050" centers; molding material is flame resistant per MIL-M-14, Type SDG-F. 13541 is an 18 contact double-side readout connector with bifuricated contacts on .156 centers. Type 13544 is for up to 16 8-pin TO-5's. Types 13545 and 13546 have six 8-pin TO-5 pads on one side and six 14-pin flat pads on the other, but different connector patterns. Av. shpg. wt. 4 oz.

Stock No.	Mfr's Type	Dimensions (Inches)	EACH 1-9	10-24	25-49	50-Up
954-4541	13540	3.00x3.187"	6.60	5.95	5.35	4.95
954-4543	13541	2.97x3.273"	6.60	5.95	5.35	4.95
954-4546	13544	3.00x4.860"	12.25	11.03	9.93	9.23
954-4548	13545	3.00x3.187"	6.60	5.95	5.35	4.95
954-4550	13546	2.976x3.273"	6.60	5.95	5.35	4.95
954-4540	13540 With Connector		13.60	12.25	11.00	10.25
954-4542	13541 With Connector		9.00	8.10	7.30	6.80
954-4547	13544 With Connector		19.60	17.65	15.90	14.80
954-4549	13545 With Connector		13.60	12.25	11.00	10.25
954-4551	13546 With Connector		9.00	8.10	7.30	6.80

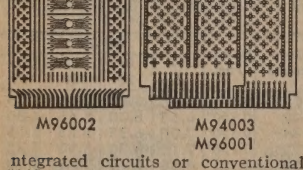
TRIAD TYPE 13500 UNIVERSAL CIRCUIT CARD



An invaluable aid in developing experimental or prototype circuits. Land pattern is compatible with standard .1 grid design. Circuit card has 233 mounting pads of one or more holes each, front and back for a total of 444 holes per card; 22 fingers fit any standard plug-in, right-angle or swage-type connector with .156" spacing. Standard hole size .052". Gold-plated finish for optimum performance. 4x4½". 1/16" thick. 6 oz.

954-4500, 1-9.....Each 6.60
10-24.....Each 5.95 25-Up.....Each 5.35

ROSEMONT PLUG-IN INSTRUMENTS PC BLANKS

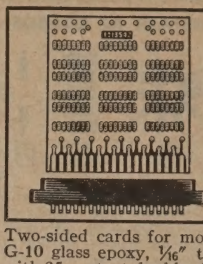


M96002 M94003 M96001

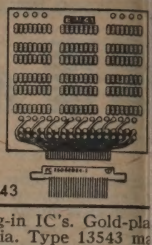
1/16" XXXP paper phenolic or epoxy-glass, with 1-oz. copper, Sealbrite or tin finish. Undrilled except as indicated (DH). Transistor pads, PG and PJ styles. †12 DH pad, I.C. blank. Suffix EG—epoxy-glass; TI—tin immersion plating; DH—No. 59 holes in pads; R-F—rhodium-plated contacts. Cards have convenient .156" finger connections. Types M96002 (flat pack), M94014 and M96003 (DIL) have a two-sided pattern for ntegrated circuits or conventional transistors. Hgt: PG, PE, 5½"; PJ, 4¾". Widths: 10-pin, 2¾"; 14-pin, 3 11/32"; 15-pin, 3 5/16". 22; 4". Shpg. wt. 4 oz. *DIL.

Stock No.	Mfr's Type	Pins	Pads	EACH 1-9	10-24	25-49	50-Up
906-1810	M94010A-PJ	15	282	2.65	2.55	2.45	2.30
906-1812	M94010A-PJ-EG-RF-DH	15	282	6.20	5.95	5.70	5.45
906-1800	M94003A-PG	15	764	2.40	2.30	2.20	2.10
906-1802	M94003A-PG-DH	15	764	3.70	3.55	3.40	3.25
906-1804	M94003A-PG-EG-RF-DH	15	764	5.25	5.05	4.85	4.60
906-1830	M96001A-PG	22	909	2.50	2.40	2.30	2.20
906-1832	M96001A-PG-DH	22	909	4.20	4.00	3.85	3.70
906-1834	M96001A-PG-EG-RF-DH	22	909	5.95	5.70	5.45	5.25
906-1840	M96002-PG-EG-TI	22/44	6-T05	4.75	4.55	4.35	4.20
906-1842	M96002-PG-EG-TI-DH	22/44	6-T05	8.30	8.00	7.65	7.30
906-1850	M96003-PG-EG-TI	†22	12*	4.75	4.55	4.35	4.20
906-1852	M96003-PG-EG-TI-DH	†22	12*	8.30	8.00	7.65	7.30
906-1820	M94014-PG-EG-TI	15/30	8*	3.50	3.35	3.20	3.10
906-1822	M94014-PG-EG-TI-DH	15/30	8*	7.25	6.95	6.65	6.40

TRIAD DUAL IN-LINE BOARDS



For Fast Prototyping with 14-Lead or 16-Lead Dual In-Line, Plug-In Integrated Circuits

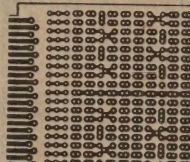


13542 13543

Two-sided cards for mounting up to 9 plug-in IC's. Gold-pla G-10 glass epoxy, 1/16" thick. Holes, .030" dia. Type 13543 m with 25 contact double-side connector on .050" centers. Type 13 with 18-contact double-side connector on .156" centers. Wt., 3

Stock No.	Mfr's Type	Dimensions (Inches)	Con-tacts	EACH 1-9	10-24	25-49	50-
954-4544	13542	2.976x3.273	18	6.60	5.95	5.35	4
954-4545	13543	3.000x3.187	25	6.60	5.95	5.35	4
954-0225	CO-13542 With Connector		18	9.00	8.10	7.30	6
954-0226	CO-13543 With Connector		25	13.60	12.25	11.00	10

TRIAD TYPE 13510 UNIVERSAL CIRCUIT CARD



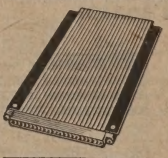
Has transistor locating holes, a grou bus down center of card, conveni location for pad rows. Takes Elco 6 or Amphenol 143 series connectors. mtg. pads of one or more holes ea front and back. 22 fingers for connect with .156" spacing, plus 22 pairs pads. Hole size, .052". Gold plated ish. 4x4½"; 1/16" paper-epoxy. 3 oz.

954-4510. 1-9.....Each 6
10-24...Each 5.95 25-Up..Each 5

TRIAD TYPE 13600 EXTENDER CARD

Used to extend the fingers of a cuit card to allow access to boa mounted in racks/panels. Fr both sides of electronic circuit maintenance. Has 43 extens strips on each side of board; sta ard .156" connector spacing. Go plated finish. 5x8", 1/16" thick pap epoxy base material. Wt., 6 oz.

954-4560. 1-9.....Each 9
10-24.....Each 8.25 25-Up.....Each 7

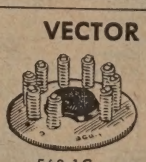


VECTOR TYPE 3690 CARD EXTEND

44 etched (total 2 sides) .156" spaced nic gold plated fingers. For 4.5x4 to 7½" pl bords with 22 (or 21) .156" spaced etched c tacts on either or both sides. Overall, 4 7½x1/16". Av. wt. 8 oz.

977-1409. 1-19.....Each 11
20-99....Each 10.17 100-Up....Each 9

B-20



568-1C

VECTOR BREADBOARD ACCESSORIES

Solderless Sockets. Reliable sold less "Springclips" are soldered socket contacts. Up to 6 leads c nect to each "Springclip" for fa reliable connection. Sockets mou on any "A" or "AA" pattern V torbord with furnished hardwa Shpg. wt., ¼ oz.

Stock No.	Mfr's Type	Description	EACH 1-49	50-199	200-
977-1289	567-1C	8-Pin Octal	1.50	1.35	1.0
977-1290	568-1C	9-Pin Noval	1.65	1.49	1.1
977-1291	569-1C	7-Pin Miniature	1.35	1.22	.9
977-1292	570B	4-Lead Transistor Type	1.20	1.08	.8

Type B-20 Pot and Switch Brackets. Handy brackets made of durab aluminum. Used for quick and easy mounting of pots and switch on any "A" or "AA" pattern Vectorbords. Wt. per pkg., 6 oz.
977-0120.....Pkg. of 4 for .4

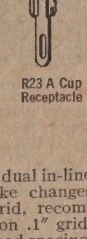
Bus Stripping. Precision punched fused-brass strip is tinned. wide with .093" holes on .265" centers. Mount with T9.4 zip t minals, solderless T30 springclips, or #4 self-tapping screws in "A" or "AA" pattern Vectorbord. Wt. per pkg. of 10, 5 oz.

Stock No.	Mfr's Type	Size	Width	Mtg. Ctrs.	PKG. / EACH
977-0976	T-58 Pkg. X	8"	.2"	.265"	1.10
977-0974	T-57 Pkg. X	16"	.2"	.265"	1.79

Use the Services of the Allied Electronics Facility Nearest Yo

Integrated Circuit Boards and Accessories

Ideal for "Flat Packs" and Dual In-Line Integrated Circuitry


R23 A Cup Receptacle

MICRO-VECTORBORDS™, TERMINALS RETAINERS AND TOOLS

nched boards, ideal for mounting "flat packs" and dual in-line ated circuits. Prepunching and accessories make changes Pattern-M boards, with .025" holes on .05" grid, recom- ed for "flat packs;" Pattern-P, with .042" holes on .1" grid, al in-line devices. Hole patterns correspond to IC lead spacing. ness is indicated by last three digits of Mfr's Type. Suffix C1 ates copper-clad (one-side) epoxy glass per MIL-P-13949 Type ; other boards are G-10 epoxy glass per MIL-P-18177 Type GEE, t suffix EP, epoxy paper per MIL-P-22324, "Inboard" pins are hor bronze, nickel-plated and gold-flashed. Pin pushed into gives semi-tight fit. Brass retainer provides tighter fit. Pin rs (tools) are used to install pins and retainers. Shpg. wt. of -Vectorbord, 2 oz. Wt. of terminals, pins and pin holders, z.

ock o.	Mfr's Type	Size LxW	Pat-tern	EACH 1-19	20-99	100-199	200-Up
196	59P19/032	6x2"	P	.89	.80	.75	.60
215	64P44/062EP	6½x4½"	P	1.69	1.52	1.42	1.13
263	169P59/032	17x6"	P	5.79	5.21	4.86	3.88
262	169P59/016	17x6"	P	5.69	5.12	4.78	3.81
264	169P59/032C1	17x6"	P	7.35	6.62	6.17	4.92
260	169P44/062EP	17x4½"	P	3.83	3.45	3.22	2.57
220	76M38/032	4x2"	M	.89	.80	.75	.60
244	126M76/032	6½x4"	M	2.29	2.06	1.92	1.53
249	166M76/032	8½x4"	M	2.89	2.60	2.43	1.94
277	1336M76/032C1	17x4"	M	6.80	6.12	5.71	4.56

TERMINAL PINS AND CUP RECEPTACLE

ide easy-to-wire terminals and test points on Micro-Vector- . Knurled shank of pin pushed into prepunched hole gives a -tight fit. For tightest fit, a tinned-brass retainer is placed over m of pin, pressed against board, soldered to pin. *For 1/16" bd.

's e	Pin Lgth.	Fits Holes	Stock No.	PKG. of 50	Stock No.	PKG. OF 1000 1-4	5-Up
A	5/8"	.040"	977-0575	1.44	977-0576	20.59	18.53
A	3/8"	.025"	977-0587	.86	977-0588	11.16	10.02
BA	9/8"	.140"	977-0758	4.89	977-0759	77.70	77.70

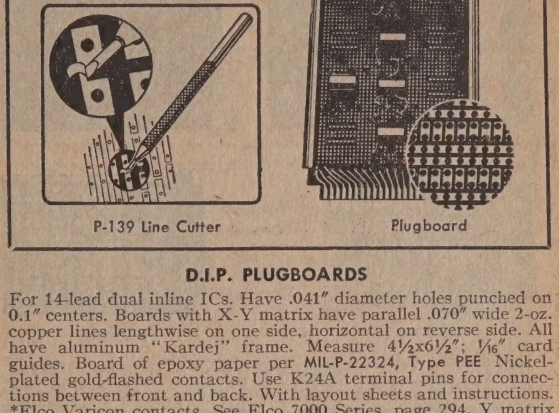
PIN RETAINERS AND TOOLS

ock o.	Mfr's Type	Desc.	Used For	EACH Pkg. of 100	Stock No.	Mfr's Type	Used For	EACH Pkg. of 1000
0980	T102	Ret.	K24A	.78	977-0981	T102	K24A	4.16
0982	T103	Ret.	K27A	1.30	977-0983	T103	K27A	10.45
0676	P134A	Holder	K24A	Ea. 1.75	977-0674	P132A	K27A	Ea. 1.75
0675	P133A	Holder	T102	Ea. 1.75	977-0673	P131A	T103	Ea. 1.75

AND DISCRETE COMPONENT MOUNTING PLUGBOARDS

TYPE 3662. "P" pattern, measures 4½" wide x 6½" long x 1/16" thick. Provides an overall grid of .042" diameter precision punched holes spaced on .100" centers. Especially useful for mounting DIP's, IC's or any component having leads spaced on multiples of .100". 44 (total 2 sides) independent etched .156"-spaced nickel and gold-plated contacts are provided with identified pad terminations on bottom edge of the board. Material is epoxy glass per MIL-P-13949. TYPE 3673. Similar to above, but measures 8" wide x 9.6" long x 1/16" thick with a total of 80 etched contacts (total 2 sides) spaced on .125" centers.

tock No.	Type	Description	EACH 1-19	20-99	100-Up
-1399	3662	44 contacts (receptacle, Elco 6007, p. 296; Vector R644, p. 346)	6.95	6.26	5.84
-1400	3673	80 contacts (matching receptacles, Amphenol Series 261, p. 285)	13.24	11.91	11.11



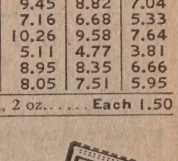
D.I.P. PLUGBOARDS

For 14-lead dual inline ICs. Have .041" diameter holes punched on 0.1" centers. Boards with X-Y matrix have parallel .070" wide 2-oz. copper lines lengthwise on one side, horizontal on reverse side. All have aluminum "Kardej" frame. Measure 4½x6½"; 1/16" card guides. Board of epoxy paper per MIL-P-22324, Type PEE Nickel-plated gold-flashed contacts. Use K24A terminal pins for connections between front and back. With layout sheets and instructions. *Elco Varicon contacts. See Elco 7000 Series, page 294. Y matrix only, one side. Line cutter tool interrupts etched copper lines. Push-in terminals below. Types 3477-7 and 3477-8 mate with Amphenol 261 Series, page 285. 3 oz.

Stock No.	Mfr's Type	X-Y Matrix	Con-tacts	Spa-cing	EACH 1-19	20-99	100-199	200-Up
977-1387	3474	Yes	44	.156"	10.50	9.45	8.82	7.04
977-1388	3474-2	No	44	.156"	7.95	7.16	6.68	5.33
977-1390	3476	Yes	35*	.1"	11.40	10.26	9.58	7.64
977-1391	3476-2	No	35*	.1"	5.68	5.11	4.77	3.81
977-1396	3477-7	Yes	72	.1"	9.94	8.95	8.35	6.66
977-1397	3477-8	Y†	36	.1"	8.94	8.05	7.51	5.95

977-0682 P-139 Line Cutter Tool. Shpg. wt., 2 oz. ..... **Each 1.50**

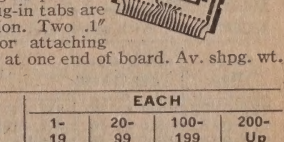
UNIVERSAL D.I.P. PLUGBOARDS



Provide universal mounting for D.I.P.'s, IC's, flat packs and transistors. 2 oz. copper clad, on 2 sides of flame retardant .062" thick epoxy glass laminate per MIL-P-13949. Pattern of .042" diameter holes on .1" centers. 32 oval pads (37 on 3677-2). Bus strips are interlaced between pads for easy access to ground and voltage connections. Contacts on .156" centers, 22 each side. Accept standard 44-contact connector. Con-plated with .00003" nickel per QQ-N-290, under .00002" min. gold per MIL-G-45204. All etched circuitry plug-in tabs are solder-coated for easy fabrication. Two .1" diameter holes are provided for attaching card ejectors or nylon pull cords at one end of board. Av. shpg. wt. 3 oz.

Stock No.	Mfr's Type	Size, L x W	EACH 1-19	20-99	100-199	200-Up
977-1402	3677	9⅜x4½"	9.89	8.90	8.31	6.63
977-1403	3677-2	6½x4½"	8.84	7.96	7.43	5.92

MICRO-KLIP PUSH-IN MINIATURE TERMINALS



T-42-1. Terminals for "P" or "Q" PC boards. Use as mounts for DIP or flat-pack IC leads. Main slot and .025" cross-thru hole, plug .018" hole in tab end. .042" thick. Insertion tool P149A with friction fit below. Wt. 4 oz. K-32 provides wire wrap tail extension for T-42-1. T-44, push-in wire-wrap, use tool A-13.

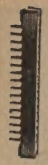
[A] **977-0970.** T-42-1 Micro-Klips. Wt. 2 oz. ..... Bag of 100/1.82
977-0971. T-42-1. Bag of 1000. Wt. 4 oz. 1-4 ..... Each 13.51
5-24 ..... Each 12.16 25-49 ..... Each 13.51

[B] **977-0595.** K-32 Terminals. Bag of 100. 4 oz. 1-19 ..... Each 1.49
20-99 ..... Each 1.34
977-0596. K-32 Terminals. Bag of 1000. 10 oz. 1-4 ..... Each 11.50
5-24 ..... Each 10.35 25-49 ..... Each 9.32
977-0689. P149 Insertion Tool. Straight type. 3 oz. ..... Each .50
977-0690. P149A Insertion Tool. Handle type. 3 oz. ..... Each 1.50

[C] **977-0972.** T-44 Terminals. Bag of 1000. 4 oz. ..... Each 2.96
977-0973. T-44 Terminals. Bag of 1000. 10 oz. ..... Each 21.48
977-0013. A-13 Insertion Tool. For T-44. 3 oz. ..... Each 1.69

Boards, Terminals and Accessories

"PLUGBORDS" AND RECEPTACLES


R616-1

812

838A

2536WE

For Test Circuits, PC Prototypes, Short Runs

838PWE

"PLUGBORDS." 1/16" thick epoxy paper, EXXXP per MIL-P-22324 except *1/16" epoxy glass. Grade G-10 per MIL-P-18177. Grid of .062" holes on .1" ctrs. except 2536WE has .093" holes on .2" grid, front and back printed alpha-numeric grid layout. Contacts on .156" centers, .072" wide except †.090" wide. New "—1" etched contact boards have "A" and "B" dim. of .453". Other etched boards have "A" .408", "B" .508". GN Type have nickel-plated gold flashed contacts. Av. shpg. wt., 3 oz.

PLUGBOARDS WITH INSTALLED ELCO VARICON CONTACTS

Stock No.	Mfr's Type	Size, Inches	No. of Contacts	EACH 1-19	20-99	100-199	200-Up
977-1305	812	4½x6½	16	2.98	2.68	2.50	2.00
977-1306	*812WE	4½x6½	16	3.53	3.18	2.97	2.37
977-1309	837	3±4½	12	2.33	2.10	1.96	1.56
977-1310	*837WE	3x4½	12	2.58	2.32	2.17	1.73
977-1328	*848WE	4½x6½	35	6.09	5.48	5.12	4.08
977-1356	2536WE	4½x6½	35	6.97	6.27	5.85	4.67

ETCHED CONTACT PLUGBOARDS 4½x6½"—.156" spaced contact

Stock No.	Mfr's Type	No. Contacts Front	Back	Dim. A	B	EACH 1-49	50-199	200-499	500-Up
977-1312	838	22	21	.408"	.508"	3.89	3.50	3.27	2.61
977-1324	838-1	22	21	.453"	.453"	3.89	3.50	3.27	2.61
977-1322	*838WE-1GN	22	21	.453"	.453"	5.81	5.23	4.88	3.89
977-1313	838A	22	—	.408"	.508"	2.81	2.53	2.36	1.88
977-1314	838A-1	22	—	.453"	.453"	2.81	2.53	2.36	1.88
977-1315	838AWE	22	—	.408"	.508"	3.17	2.85	2.66	2.12
977-1316	838AWE-1	22	—	.453"	.453"	3.17	2.85	2.66	2.12
977-1317	*838AWE-1GN	22	—	.408"	.508"	4.70	4.23	3.95	3.15
977-1320	*†838PWE	22	—	.408"	.508"	3.65	3.29	3.07	2.45
977-1321	838WE	22	21	.408"	.508"	3.86	3.47	3.24	2.59

RECEPTACLES. With solder and taper tab leads. Av. wt. 3 oz.

Stock No.	Mfr's Type	Contacts	For	EACH 1-99	100-249	250-Up
977-0777	R612-1	12	837, 837WE	1.89	1.47	1.26
977-0779	R616-1	16	812, 812WE	2.36	1.83	1.57
977-0781	R635	35	848WE, 2536WE	4.91	3.27	2.73
977-0783	R644	44	838, 838A, 838AWE, 838PWE, 838WE	2.62	2.10	2.10

T9.4 T32A T28

PUSH-IN TERMINALS

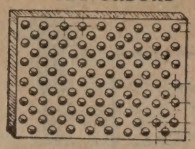
Solderless T32A springclip has less than .020 ohm resistance. Fits .093" "Vectorbord." T9.4 and T28 press-fit; teeth in slots hold lead till soldered. Shpg. wts.: Pkg./100, 2 oz.; Pkg./1000, 12 oz.

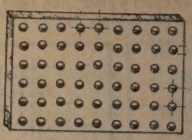
Mfr's Type	Fits Holes	Description	Stock No.	PER 100 100-1900	2000-Up	Stock No.	PER 1000 1000-4000	5000-Up
T9.4	.093"	Tinned brass	977-0923	1.44	1.30	977-0924	10.18	8.55
T28	.062"	Tinned copper	977-0950	1.61	1.45	977-0951	11.44	10.30
T28S1	.062"	Silvered copper	977-0954	1.72	1.55	977-0955	13.51	12.17
T32A	.093"	Nickeled brass	977-0965	10.30	10.30	977-0966	78.00	70.20
T32A1	.062"	Nickeled brass	977-0967	10.30	10.30	977-0968	78.00	70.20

INSERTION TOOLS. Simplify insertion of terminals. Wt. 2 oz.

Stock No.	Mfr's Type	Used For	EACH 1-49	50-199	200-499	500-Up
977-0650	P-91	T28	.50	.45	.35	.34
977-0678	P-136	T-32	1.20	1.20	1.20	1.20
977-0667	P-122B	T9.4	1.40	1.40	1.40	1.40

"VECTORBORD" PRE-PUNCHED TERMINAL BOARD


Pattern G


Pattern A, AA, B, F, H

No suffix l indicate b are phen XXXP pe P-3115B; EP indic epoxy pa EXXXP MIL-P-2232 fix WE ind epoxy glass, G-10 per MIL-P-18177. Patterns A, B, F, G, H ar thick; AA is 3/32" thick. Patterns A and AA have .093" holes on grid; B has .062" holes on .188" grid; F has .062" holes on .2" G has .062" holes on staggered .1" grid; H has .062" holes on .1" All 17" long except *8½", **35". Push-in T9.4 and T32A termi below left, fit pattern A and AA. T28, T28S1, T32A1 termin B, F, G and H or standard terminals, and eyelets fit pre-pu holes. User can make own etched circuits. May be sawed, d or punched. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Width	Pattern	No. Holes	EACH 1-19	20-99	100-199
977-1233	85G24EP	4 1/16"	G	(85x23)x2	2.28	2.05	1.92
977-1175	32AA18*	4 13/16"	AA	32x18	.87	.78	.73
977-1201	64A18	4 13/16"	A	64x18	1.30	1.17	1.09
977-1206	64AA18	4 13/16"	AA	64x18	1.66	1.49	1.39
977-1174	32AA9*	2 7/16"	AA	32x9	.62	.56	.52
977-1204	64A18WE	4 13/16"	A	64x18	3.87	3.48	3.25
977-1234	85G24WE	4 13/16"	G	(85x23)x2	3.96	3.56	3.33
977-1228	85F24EP	4 13/16"	F	85x23	2.28	2.05	1.92
977-1207	64AA18EP	4 13/16"	AA	64x18	3.05	2.75	2.56
977-1188	42G24WE*	4 13/16"	G	(42x24)x2	1.97	1.77	1.65
977-1194	45B30*	5 5/8"	B	45x30	.87	.78	.73
977-1238	90B30	5 5/8"	B	90x30	1.68	1.51	1.41
977-1208	64AA32	8½"	AA	64x32	2.86	2.57	2.40
977X1210	64AA132**	17"	AA	64x32	10.45	9.41	8.78
977X1236	85G42EP	8½"	G	(85x41)x2	3.95	3.56	3.32
977X1237	85G42WE	8½"	G	(85x41)x2	5.64	5.08	4.74
977X1271	170H48WE	4 13/16"	H	47x169	4.23	3.81	3.55

2-OUNCE COPPER CLAD TERMINAL BOARDS

Punched and unpunched boards for making printed circuits, sh ing, or RF construction. Suffix 1XXXP and C1 are phenolic g XXXP per MIL-P-3115, copper clad on one side; suffix C2 is same but both sides clad; WEC1 epoxy glass Grade G-10 per M 13949B, 1 side; WEC2 same but both sides clad. Patterns F ar have .062" holes. .2" and .1" grid respectively. For Type T28 pre terminals, below left. Dimensions, 1/16" thick, 4½" wide. Av. wt. 1

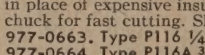
PUNCHED BOARDS

Stock No.	Mfr's Type	Lgth	W'th	Pattern	EACH 1-19	20-99	100-199
977-1375	3070-1XXXP	6½"	4½"	F	.87	.78	.73
977-1180	42F22C1	8½"	4½"	F	1.04	.94	.87
977-1181	42F22C2	8½"	4½"	F	1.37	1.23	1.15
977-1190	42G22WEC2	8½"	4½"	G	2.70	2.43	2.27
977-1230	85F42WEC1	17"	4½"	F	9.70	8.73	8.15

UNPUNCHED BOARDS

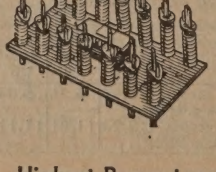
Stock No.	Mfr's Type	Size, Inches Lgth.	Width	EACH 1-19	20-99	100-199
977-0267	CU45/30-WE1	4½	3	.72	.65	.60
977-0271	CU65/45-WE1	6½	4½	1.39	1.25	1.17

PAD CUTTER TOOLS



For isolating terminals from gro plane. Tools cut off ring of co around hole to isolate it from rest of the copper cladding. Small isolated pad is left for solde if desired. Pad cutter permits use of inexpensive ZIP T28 termi in place of expensive insulated standoffs. Mounts easily in any chuck for fast cutting. Shpg. wt., 2 oz.

977-0663. Type P116 1/4" dia. Circle Cutter.....Each
977-0664. Type P116A 3/16" dia. Pad Cutter.....Each



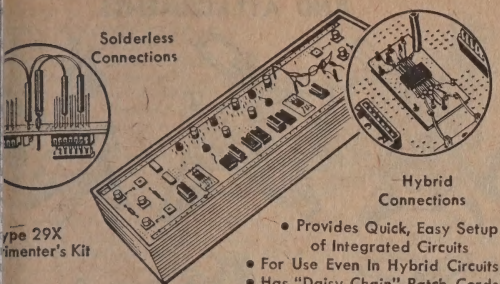
TYPE 570G SOLDERLESS IC BREADBOARD SOCKETS

Has 14 pin dual-in-line socket, mou on 2.63x1.33" epoxy glass wafer. soldered to Springclips. Can be e press fit mounted to 3/32" holes. S wt. 2 oz.

977-1295. 1-49.....Each
50-199..Each 3.60 200-Up....Each

Breadboard Kits, Accessories, and Cases *Vector*

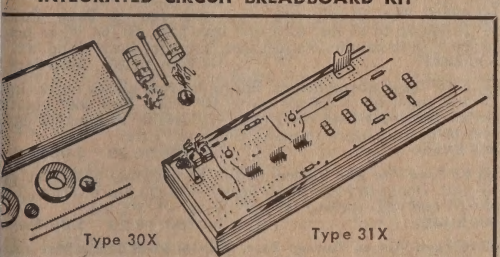
29X EXPERIMENTER'S IC BREADBOARD KIT



e integrated circuit breadboarding kit provides fast, con- nt means of interconnecting most configurations of IC pack- or experimental uses. Mounting surface is of pre-punched -Vectorboard with .042" dia. holes on .100" grid spacing; rted by 2" high aluminum Frame-Loc rails. Kit includes 14 6-pin dual-in-line IC sockets, plus circular lead pattern TO-5 kets with adapters for mounting to rectangular grid. Vector's push-in Micro-Klips and K24C push-in pins for fast, easy ctions. Wiring may be done with polyurethane coated wire, able thru insulation, or "Daisy Chain" solderless patch cords included). Flat bus strip supplied. 4½x14x2".

165. Shpg. wt., 2 lbs. **59.75**

INTEGRATED CIRCUIT BREADBOARD KIT



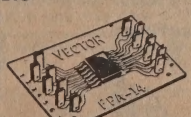
30X. Designed to provide a fast, convenient means of inter- cting most configurations of IC packages for experimental Board is 4½"x8½" and has .042" diameter holes spaced 0.1" Mounted in slots of 2" high Frame-Loc aluminum rails. les double-faced pressure sensitive rubber tape so that inte- l packages may be fastened to board with terminals either down. 100 T42-1 Micro-Klip terminals with special installa- ool to assure fast set-up time. 50 "J" terminals with square or wire wrapping. 50' of bare tinned #26 copper wire; 20' of #32 solder through insulation wire. Hole pattern allows leads I.P.'s or accessory D.I.P. socket leads for the same to pass ly through the matching holes. Connections may be soldered ly to the emergent tabs, or the supplied terminals may be to make changes conveniently. Two bus strips (7" long) pro- means for supplying power to various points on board. Layout , instructions, and corner brackets to assemble side rails. pg. wt. 2 lbs.

31X. A bigger version of the 30X, this integrated circuit kit 4½"x17" mounting surface. Includes all of the above, plus hardware components. Special L-type brackets are supplied mount nearly all sizes of pots and switches. 50 tin-plated rd pins. Three bus strips (14" long). Av. shpg. wt. 2¼ lbs.

Stock No.	Mfr's Type	EACH 1-49	50-199	200-499	500-Up
7-1167	30X	10.75	9.68	7.53	7.20
7X1169	31X	17.50	15.75	12.25	11.73

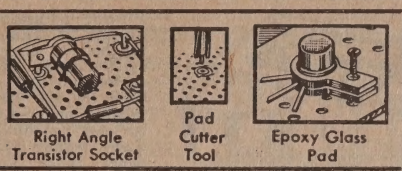
FLAT PACK IC SOCKETS

ty constructed for mounting 12 and d integrated circuits on circuit boards. poxy paper wafer with copper etched rn on .05" spacing. Leads fan out to ate .1" spacing at ends of wafer with diameter pads and .042" diameter 14 Micro-Klip terminals. Shpg. wt.



Stock No.	Mfr's Type	Description	PER PKG. OF 4 1-49	50-199	200-499	500-Up
7-0417	FPA-14-1	14-lead, 12 pads	3.36	3.02	2.35	2.25
7-0415	FPA-14	14-lead	2.10	1.89	1.47	1.41

PAK 28X HIGH-FREQUENCY CIRCUIT BREADBOARDING KIT



Vector-Pak 28X

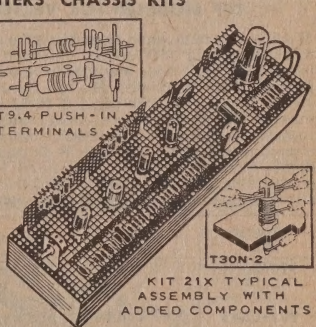
A simple method of constructing "RF tight" circuits for VHF and UHF. Virtually duplicates performance of more expensive techniques. Circuit may be slipped out and replaced. Kit includes: aluminum case with 2 slide-out sides, 8½x3x2"; pre-punched, copper-clad, epoxy glass Vectorboard, 8½x3x1/16"; 4 standoff term. strips, 8 terms.; 2 standoff term. strips with 12 terms.; 3 punched wall strips, 0.64x1.94" with "L" mtg. bkts., without terms.; 3 copper-clad punched strips for internal shielding, 0.90x2.85"; 50 "Miniklip" terms.; term. inserting tool; pad cutter tool; 3 transistor sockets, without saddle; 3 right-angle-mounting transistor sockets. Also, 2 power transistor sockets; 36 screws (#0-80x5/16"), nuts and nut wrench; 15 spacers; 10 transistor mtg. pads; 1 roll each #24 vinyl covered and tinned copper wire; 18 pieces plastic tubing 1/16" O.D.; 50 eyelets 1/16x7/32". Overall kit size, 8½x3x2". Shpg. wt., 2 lbs.

977-1164 ..... **27.50**

Case Alone. Type HF20-86/31. With slide-out sides. Shpg. wt., 8 oz.
977-0525. 1-49..Ea. 5.50 50-199..Ea. 4.95 200-Up..Ea. 3.85

EXPERIMENTERS' CHASSIS KITS

T-9.4 PUSH-IN TERMINALS



KIT 21X TYPICAL ASSEMBLY WITH ADDED COMPONENTS

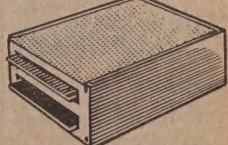
Designed for rapid setup of experimental circuits. Include push-in terminals, perforated XXXP phenolic decks, aluminum supports, T-30N-2 installation tool, spring pusher tool, hardware. Terminals: T-9.4 with insert tool (push-in type require soldering); T-30N-2 ("Springclip" holds up to 6 wires tightly without soldering); patchcords (supplied) slip in between spring coils of solderless terminals and speed wiring. Each pair of small decks is: 1⅜x1²⁹/₃₂x3/32" and 1²⁹/₃₂x8½x3/32". All kits except type 20X include layout paper, pot, and switch brackets, miscellaneous and Z-brackets, screws and nuts.

Stock No.	Mfr's Type	Main Deck	Small Deck	Wt., Lbs.	EACH 1-49	59-199	200-499	500-Up
977-1150	20X	4¾x8½"	0	1	6.75	6.08	4.73	4.52
977-1152	21X	4¾x17"	2	2¾	16.75	15.08	11.73	11.22
977-1154	22X	4¾x8½"	2	1¼	11.50	10.35	8.05	7.71
977-1155	22XA	8½x17"	2	3½	28.00	25.20	19.60	18.76
977-1159	25X	8½x17"	2	3½	21.45	19.31	15.05	14.38

KITS ABOVE INCLUDE THE FOLLOWING:

Mfr's Type	Terminals T-9.4	T-30N-2	T-32A	Patch-cords	Tube Skt. 7P	8P	9P	Trans. Skt. 3, 4P	Power
20X	75	20	0	0	2	3	3	0	0
21X	100	50	0	8	2	3	3	4	2
22X	75	20	0	6	0	0	0	6	2
22XA	100	100	18	14	0	0	0	6	2
25X	100	90	10	13	3	2	2	4	2

CASES FOR PRINTED CIRCUIT CARDS

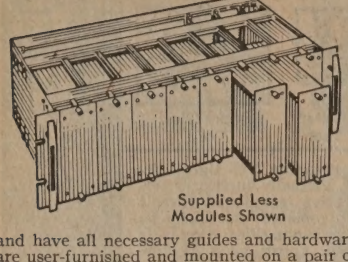


2" wide extruded aluminum cases, brushed satin finish. 2 slide-out sides allow access to internal cards yet provide shielding with interlocking design. 9 inside 1/16" grooves spaced .150" apart to allow choice of positions. 2 cover grooves. Cases have plain .040" bases for cutting Plugboard slots or mount plugs. Dimensions: *2.0x3.12x 4.21", and †2.0x4.62x6.21". Wt., 10 oz.

Stock No.	Type HF20-	Maximum Size Inside Board	EACH 1-49	50-199	200-Up
977-0515	31-42/1*	4.21 H x 3 W x 4" L	3.74	3.37	2.62
977-0518	46-62/1†	6.21 H x 4.5 W x 6" L	4.40	3.96	3.08

Vector Module Cages and Hunter PC Board Holde

VECTOR STRUT MODULE CAGES



Supplied Less Modules Shown

Provide adjustable aluminum frames for holding circuit card modules. Accommodate eight 2" wide by 6.6" long modules or ten 1.6" by 6.6" modules. Cages require 5¼" panel space and mount in standard 19" racks. Side wall lengths are 9". Cages are supplied assembled or unassembled and have all necessary guides and hardware. Required connectors are user-furnished and mounted on a pair of struts having captive nut grooves located at the back of the cage. These struts may be adjusted up or down, forward or backward to accommodate a wide variety of connectors. Aluminum parts natural anodized finish. Less modules, below. Handles not included. Shpg. wt. 4 lbs.

Stock No.	Mfr's Type	Description	EACH 1-9	EACH 10-Up
977-0235	CMA3-20	Assembled cage with guides for eight 2" wide EFP Modules	49.24	44.31
977-0242	CMK-3/CMG7	Above, unassembled	34.57	31.12
977-0233	CMA3-16	Assembled cage with guides for ten 1.6" wide EFP Modules	53.40	48.06
977-0240	CMK-3/CMG4	Above, unassembled	37.08	33.37

EFP MODULES FOR VECTOR STRUT CAGES

Modules accommodate 4½x6½x1/16" circuit cards completely inside which mount in .150" spaced extruded grooves running lengthwise in the cases. 1.6" wide modules have 6 circuit card grooves; 2" wide modules have 9 grooves. Module front panels are .080" thick and are furnished with two captive 10-32 thumb screws which engage nuts provided with cages above. Sides of the modules slide off toward the rear for easy access to circuit cards inside. Back panels of modules are solid and may be slotted for circuit card emergence, or may have BNC connector mounted. Modules provide about 80 dB of shielding. Natural anodized finish matches Vector Strut Cages above. Supplied unassembled. Shpg. wt. 1 lb.

Stock No.	Mfr's Type	Description	EACH 1-49	EACH 50-Up
977-0331	EFP 164 6.6	Module 1.6" wide x 4.6" high x 6.6" long.	5.90	5.31
977-0343	EFP 204-6.6	Module 2.0" wide x 4.6" high x 6.6" long.	6.07	5.46

"MULTI-MOD" ALUMINUM CASES

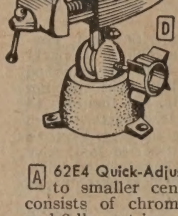
Typical Uses

Case with Panel

For packaging of small instruments, controls and printed circuits. Interior has parallel .075" grooves spaced at .150" intervals. Side panels slide out for easy access to interior, may be drilled or perforated for ventilation. Exterior of each box has smooth sides, except for one surface. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Size and Description	EACH 1-49	EACH 50-Up
977-1019	W20-46-31	2"Wx4.6"Lx3.1"H for 4½x3½" cards	3.93	3.54
977-1021	W20-66-46	2"Wx6.6"Lx4.6"H for 4½x8½" cards	5.15	4.64
977-1022	W30-66-46	3"Wx6.6"Lx4.6"H for 4½x6½" cards	5.95	5.36
977-1023	W30-86-46	3"Wx8.61"Lx4.61"H for 4½x8½" cards	6.50	5.85
977-1025	W30-100-46	3"Wx10.0"Lx4.6"H for 4½x10" cards	7.00	6.30
977-1029	W45-86-46	4½"Wx8.6"Lx4.61"H for 4½x8½" cards	6.95	6.26
977-1030	W45-100-46	4.5"Wx10.0"Lx4.6"H for 4½x10" cards	7.60	6.84
977-0425	FT-1	Rubber feet for above. Pkg. of 8 for .86		

HUNTER PC BOARD HOLDERS, VISES AND ATTACHMENTS



A **62E4 Quick-Adjust Vise.** Instantly adjusts from widest 9" op to smaller centered opening. Non-slip neoprene jaws consists of chrome plated steel vise, spring-loaded posit and 8-lb. cast iron base. Shpg. wt. 13 lbs.
809-4491 ..... 1-4 Each 37.80 5-Up Each

B **62E10 Vise.** Sturdy 6½" vise with famous Pana Posit Holds up to 15 lbs. with cast iron base, 50 lbs. when bolt bench. Crank handle. Rubber feet, neoprene jaws. Shpg. wt.
809-4497 ..... 1-4 Each 32.20 5-Up Each

C **62L5 Circuit Board Holder.** Spring loading allows quick ins and removal of boards up to 10" wide. Full 360° rotati circuit board for lead bend over. Adjustable tension for eas over or locking board in place. Shpg. wt. 7 lbs.
809 X4499 ..... 1-4 Each 34.20 5-Up Each

D **62 Pana-Vise with Vertical Head.** The original and most p unit. Opens to 2½". Holds heavy pieces in any position. C of 62A and 62D (below). 8x6x5". Shpg. wt. 3½ lbs.
809 X4451 ..... 1-4 Each 19.20 5-Up Each

62A6 Pana-Vise on Vacuum Base. Flip of lever holds base firm any smooth, non-porous surface. Has compound mechanism t heavy pieces rigid in any position. Consists of 62D and 624A.
809-4464 ..... 1-4 Each 25.40 5-Up Each

E **62A4 Vacuum Base with Pana Positioner.** Easily attaches a moves with flip of lever. Base of cast aluminum with ne holding pad on bottom. Mounted positioner holds fixtures wi shaft. Complete versatility in making work set-ups. Wt. 2
809-4461 ..... 1-4 Each 23.30 5-Up Each

62A Pana Positioner. Pivots 360° on any tangent to half a s achieves any compound angle. Single lock rigidly holds a fixture. Overall width: 5"; height: 4". Shpg. wt. 2 lbs.
809-4457 ..... 1-4 Each 11.70 5-Up Each

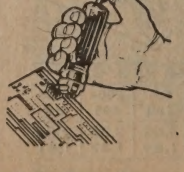
62D Vertical Vise Head. Opens to 2½". Replaceable jaws. S 5/8" for use with 62A and 62A4. Shpg. wt. 1 lb.
809-4476 ..... 1-4 Each 10.55 5-Up Each

62E Horizontal Vise Head. 5/8" shaft. Use with 62A and 62A4. to 2½". Replaceable jaws. Shpg. wt. 1 lb.
809-4486 ..... 1-4 Each 10.55 5-Up Each

62C Nylon Jaws. Special jaws to hold small circuits. Ideal with 62D and 62E. Shpg. wt. ¼ lb.
809-4470 ..... 1-4 Each 1.25 5-Up Eac

F **62H Deluxe 7" PC Board Holder.** Holds oval, square and boards. Turns work surface 360°; horizontal, vertical desired position. Spring tension arm allows board to be re turned, inserted without adjustment. Use with 62A, 62A4.
809-4498 ..... 1-4 Each 15.90 5-Up Each

62X 7" Circuit Holder. Spring loaded arm makes snugging u and simple. Change oval, square and oblong boards without ing knobs. Easy to set at desired height and angle. Fast fli Use with 62A and 62A4. Shpg. wt. 1 lb.
809-4505 ..... 1-4 Each 12.00 5-Up Each

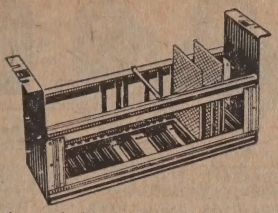


SPRING-LOADED HAND IC INSERTION TOOL

No. 52. Ideal for inserting D.I.P.'s into p circuit board. Picks D.I.P.'s out of pa automatically squeezes them to fit th pattern, then ejects them when firmly on the board. Lightweight and comforta permit long hours of use without fatigue
809-4425 ..... 1-4 Each 7.40 5-Up Eac

Printed Circuit Card Enclosures

ELCO VARIPAK II PC CARD ENCLOSURES



gned to be adapted to any aging technique utilizing ed or etched circuitry. Pro- maximum density. Alumi- racks hold boards and con- rs in alignment for efficient ring. Fits standard 19" or cabinet. Adjusts to hold oards to 8½" long, from o 4½" wide. Supplied with connector panel for your cut-out design, except 03-9016-06-02-00 has strap ace of panel mount. Dimensions: 1) depth of guide plate; 2) n of mtg. hanger. *Double tier. Av. wt., 2½ lbs. Allied stocks ntire Elco Varipak series. Contact Allied for Information.

tock No.	Mfr's Type	Dimensions 1	2	EACH 1-9	10-24	25-Up
·1955	03-9016-02-01-00	4"	5½"	19.68	17.49	15.31
X1970	03-9016-06-01-00	5½"	8½"	19.68	17.49	15.31
X1971	03-9016-06-02-00	5½"	8½"	19.78	17.58	15.39
·1990	03-9016-10-01-00	7"	8½"	20.67	18.37	16.08
·2010	03-9016-14-01-00	8"	11"	20.67	18.37	16.08
X2030	03-9016-21-01-00*	4"	5½"	37.22	33.09	28.95
X2050	03-9016-25-01-00*	5½"	8½"	37.22	33.09	28.95

COMPONENTS FOR VARIPAK II

33-9016-2201-Front Panel. Provides a mounting for gauges, etc. ctive clear aluminum. For 03-9016-06-01-00 only. 1 lb.
620. 1-9.....Each 11.68 10-24.....Each 10.38
.....Each 9.09 100-Up.....Each 7.79

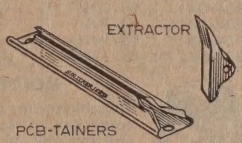
33-9016-2210-Front Panel. For Double-Tier Varipak only. 1½ lbs.
622. 1-9.....Each 25.74 10-24.....Each 22.88
.....Each 20.02 100-Up.....Each 17.16

33-9016-1301-02 Extra Guide Plates. For 4½" w. Varipaks. 1 oz.
617. 1-9....Ea. 4.46 10-49....Ea. 3.96 50-199..Ea. 3.47

63-9016-7504 Reinforcement Bar. For additional rigidity. 10 oz.
746. 1-9.....Each .99 10-24.....Each .88
.....Each .77 100-Up.....Each .66

63-9016-2402 Marker Strip. Flexible, white poly-vinyl chloride r for guides, PC cards. 16⅜" long. Wt., 2 oz.
734. 1-9.....Ea. .40 10-24....Ea. .35 25-Up..Ea. .31

IRTCHER PCB-TAINERS



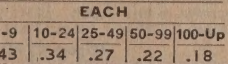
ture PC board retainers de- l for improved retention, elec- contact and heat dissipation. 6" boards. Beryllium copper con- ion, per QQ-C-533. Types 15- .109" dia. mtg. holes; Types 17- .098" dia. mtg. holes. Wt. 1 oz.

tock No.	Mfr's Type	Length Inches	EACH 1-9	10-24	25-49	50-Up
·1504	15B-4-1	2	.83	.67	.54	.43
·1505	15B-5-1	2½	.89	.71	.57	.46
·1506	15B-6-1	3	.96	.77	.62	.49
·1507	15B-7-1	3½	1.01	.81	.65	.52
·1508	15B-8-1	4	1.13	.90	.72	.58
·1510	15B-10-1	5	1.36	1.09	.87	.70
·1511	15B-11-1	5½	1.26	1.01	.81	.65
·1515	17B-4-1	2	.83	.67	.54	.43
·1516	17B-5-1	2½	.89	.71	.57	.46
·1517	17B-6-1	3	.96	.77	.62	.49
·1518	17B-7-1	3½	1.01	.81	.65	.52
·1519	17B-8-1	4	1.13	.90	.72	.58
·1521	17B-10-1	5	1.26	1.01	.81	.65
·1522	17B-11-1	5½	1.36	1.09	.87	.70

PC CARD EXTRACTOR (For 1/16" PC boards.)

ock o.	Mfr's Type	Material	EACH 1-9	10-24	25-49	50-99	100-Up
1557	61-1-2	A.B.S. Plastic	.43	.34	.27	.22	.18

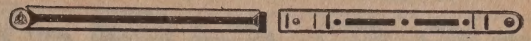
YTHEON CIRCUIT-BOARD MOUNTING BRACKETS



-duty "L" brackets, to be used rs to mount one or two terminal istor boards rigidly. Cadmium- .090" cold-rolled carbon steel. MIL-STD-202 and MIL-S-901 (Ships) specifications. *Distance en centers of holes in panel supports. Wt., 4 oz.

ck	Mfr's Type	Overall Height	Support Centers*	EACH 1-49	50-99	100-199	200-499
510	MB-125	2⅛"	1"	.33	.26	.22	.21
511	MB-126	2⅜"	1½"	.34	.27	.23	.22
512	MB-127	3⅛"	2"	.35	.28	.24	.22
513	MB-128	3⅜"	2½"	.36	.30	.26	.24

ELCO POLYCARBONATE GUIDES FOR VARIPAK II



Printed circuit boards slide into slots on guides. Guides snap into place in guide slots. Snap rivets sold separately. Available in three thicknesses to accommodate boards of different sizes. Styles: A, for 03-9016-02-01-00 Varipaks; B, for 03-9016-06-01-00 and 03-9016-06-02-00; C, for 03-9016-10-01-00; and D, for 03-9016-14-01-00. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Size	Style	EACH 1-99	100-249	250-999	1000-Up
778-2716	63-9016-1201-01	1/16"	A	.23	.17	.15	.13
778-2717	63-9016-1201-02	3/32"	A	.16	.12	.11	.09
778-2719	63-9016-1201-04	1/16"	B	.12	.09	.08	.07
778-2720	63-9016-1201-05	3/32"	B	.18	.13	.12	.10
778-2721	63-9016-1201-06	1/8"	B	.18	.13	.12	.10
778-2722	63-9016-1201-07	1/16"	C	.14	.10	.09	.08
778-2723	63-9016-1201-08	3/32"	C	.16	.12	.11	.09
778-2724	63-9016-1201-09	1/8"	C	.16	.12	.11	.09
778-2725	63-9016-1201-10	1/16"	D	.22	.15	.13	.11
778-2726	63-9016-1201-11	3/32"	D	.22	.15	.13	.11
778-2727	63-9016-1201-12	1/8"	D	.31	.22	.20	.17
778-2767	Snap rivets for above			.03	.02	.02	.015

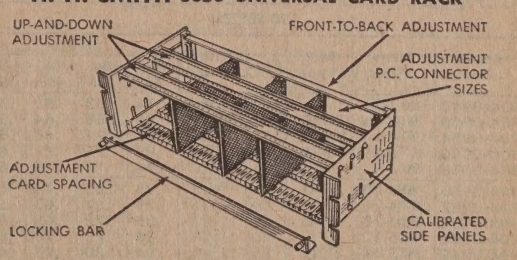
GUIDE STRIPS

63-9011.3011 63-9011.3021

Accurately guides printed circuit cards—strips made for 1/16" cards at .750" spacing. Constructed of molded glass-filled diallyl phthalate. Guide strips are assembled as "building-blocks"—permit designer to include as many strips as required—in increments of 7 guide locations. 9012 has no extended mtg. plate. *Height. 10 oz.

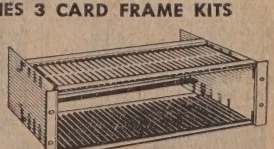
Stock No.	Type 63-	Description	*H	EACH 1-19	20-49	50-199	200-Up
778-2702	9011-3011	Right guide	2"	1.90	1.50	1.31	1.12
778-2703	9011-3021	Center guide	2"	1.90	1.50	1.31	1.12
778-2706	9012-3029	Right guide	3⅞"	4.60	3.78	3.22	2.76
778-2705	9012-3019	Left guide	3⅞"	4.32	3.47	3.05	2.62

H. H. SMITH 3050 UNIVERSAL CARD RACK



Fits 19" racks. Card guide and connector rails slide smoothly on nylon bushing for easy adjusting to keep cards centered. Front locking bar holds cards against rear connectors. Capacity, 39 cards; includes guides for 39. For card size: 1/16" thick; 2⅜-4¾" w.; 3½-7¼" long. Card spacing: .400 min. centers adj. in .400 increments. Aluminum. 19x5¼x8". Shpg. wt., 2½ lbs.
920-2850. 1-9.....Each 27.95
10-24.....Each 25.95 25-Up.....Each 23.95
920-2851. Extra 3051 Card Guides. 100 Per Pkg.....5.00

VERO VERORACK SERIES 3 CARD FRAME KITS



Verorack series 3 card frame kit has 16 pieces excluding screws. Features .5" card spacing with polycarbonate guide slabs that slide into precision anodized extrusions. Guide temperature range, —60 to +125°C. Guide lengths combine for extra length cards with special center extrusion. Slotted 5¼" anodized end plates accept card heights up to 4½". Kit includes connector mounting rails, hardware and identification strip. Shpg. wt., 4½ lbs.

Stock No.	Mfr's Type	Guide Length	EACH
976-0035	VR3/S	2⅝"	21.00
976-0032	VR3/M	5⅜"	22.00
976-0030	VR3/L	6⅜"	23.00

PAGE 357 FOR OTHER BIRTCHER PC-TAINERS..WRITE FOR QUANTITY PRICES

RAYTHEON

Knobs, Knob and Shaft Locks

STANDARD CONTROL KNOBS

A variety of round and pointer knob types and sizes combining strength with modern styling. Knobs are molded from top-quality, long-lasting polycarbonate resin. Each knob with anodized aluminum insert molded in for maximum strength. Two Allen-head set-screws with cup-point hold round or flatted control shafts securely. Knobs with Suffix "G" in Type No. are built to MIL-K-3926A specs, and have uniform non-reflecting MIL-MS-91528C matte finish. Others are commercial types with high-gloss mirror finish. All for use with ¼" shafts except 50 Series, ⅛" shaft size only. Types: A, Round; B, Skirted Round; C, Round Dial; D, Pointer; E, Skirted Pointer; F, Crank. *Knob diameter, excluding skirt. †Length. Av. shpg. wt., 3 oz.

50 SERIES

Stock No.	Mfr's Type	MIL Type	Fig.	Knob Dia.	EACH 1-99	100-199	200-499	500-Up
904-0900	50-1-1	.....	A	1⅞2"	.55	.47	.44	.39
904-0902	50-1-1G	ON1B	A	1⅞2"	.61	.52	.49	.43
904-0904	50-2-1	.....	B	1⅞2"	.64	.54	.51	.45
904-0906	50-2-1G	OD1B	B	1⅞2"	.70	.60	.56	.49
904-0908	50-3-1	.....	C	*1⅞2"	.72	.71	.58	.50
904-0910	50-3-1G	OF1B	C	*1⅞2"	.78	.66	.62	.55
904-0912	50-4-1	.....	D	†1 1⅛6"	.57	.48	.46	.40
904-0914	50-4-1G	OP1B	D	†1 1⅛6"	.61	.52	.49	.43
904-0916	50-5-1	.....	E	†1 1⅛6"	.64	.54	.51	.45
904-0918	50-5-1G	OK1B	E	†1 1⅛6"	.70	.60	.56	.49

70 SERIES

Stock No.	Mfr's Type	MIL Type	Fig.	Knob Dia.	EACH 1-99	100-199	200-499	500-Up
904-0924	70-1-2	.....	A	2 3⅔2"	.70	.60	.56	.49
904-0926	70-1-2G	1N2B	A	2 3⅔2"	.76	.65	.61	.53
904-0932	70-2-2	.....	B	2 3⅔2"	.79	.67	.63	.55
904-0934	70-2-2G	1D2B	B	2 3⅔2"	.85	.72	.68	.60
904-0936	70-3-2	.....	C	*2 3⅔2"	.88	.75	.70	.62
904-0938	70-3-2G	1F2B	C	*2 3⅔2"	.94	.80	.75	.66
904-0940	70-4-2	.....	D	†1 3⅓6"	.70	.60	.56	.49
904-0942	70-4-2G	1P2B	D	†1 3⅓6"	.76	.65	.61	.53
904-0944	70-5-2	.....	E	†1 3⅓6"	.79	.67	.63	.55
904-0946	70-5-2G	1K2B	E	†1 3⅓6"	.85	.72	.68	.60

90 SERIES

Stock No.	Mfr's Type	MIL Type	Fig.	Knob Dia.	EACH 1-99	100-199	200-499	500-Up
904-0948	90-1-2	.....	A	5 9⅔4"	.74	.63	.59	.52
904-0950	90-1-2G	2N2B	A	5 9⅔4"	.80	68	.64	.56
904-0954	90-2-2	.....	B	5 9⅔4"	.83	.71	.66	.58
904-0956	90-2-2G	2D2B	B	5 9⅔4"	.89	76	.71	.62
904-0958	90-3-2	.....	C	*5 9⅔4"	.92	.78	.74	.64
904-0960	90-3-2G	2F2B	C	*5 9⅔4"	.98	.83	.78	.69
904-0962	90-4-2	.....	D	†1 3⅜"	.79	.67	.63	.55
904-0964	90-4-2G	2P2G	D	†1 3⅜"	.85	.72	.68	.60
904-0966	90-5-2	.....	E	†1 3⅜"	.88	.75	.70	.62
904-0968	90 5-2-G	2K2B	E	†1 3⅜"	.94	.80	.75	.66

125 SERIES

Stock No.	Mfr's Type	MIL Type	Fig.	Knob Dia.	EACH 1-99	100-199	200-499	500-Up
904-0978	125-1-2G	3N2B	A	1 1⅞4"	.85	.72	.68	.60
904-0982	125-2-2	.....	B	1 1⅞4"	.88	.75	.70	.62
904-0984	125-2-2G	3D2B	B	1 1⅞4"	.94	.80	.75	.66
904-0986	125-3-2	.....	C	*1 1⅞4"	.96	.82	.77	.67
904-0988	125-3-2G	3F2B	C	*1 1⅞4"	1.02	.87	.82	.71
904-0990	125-6-2	.....	F	†2 2⅝4"	2.32	1.97	1.86	1.62
904-0992	125-6-2G	3S2B	F	†2 2⅝2"	2.35	2.00	1.88	1.65

175 SERIES

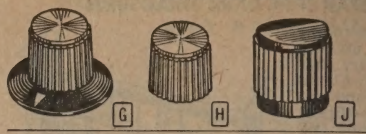
Stock No.	Mfr's Type	MIL Type	Fig.	Knob Dia.	EACH 1-99	100-199	200-499	500-Up
904-0998	175-1-2	.....	A	1 4⅝4"	1.12	.95	.90	.78
904-1002	175-3-2	.....	C	*1 4⅝4"	1.34	1.14	1.07	.94
904-1004	175-3-2G	4F2B	C	*1 4⅝4"	1.41	1.20	1.13	.99
904-1006	175-6-2	.....	F	†2 2⅝4"	2.51	2.13	2.01	1.76
904-1008	175-6-2G	4S2B	F	†2 2⅝4"	2.58	2.19	2.06	1.81

PLASTIC BAR KNOBS

Suffix "G" explained above. For heavy detent switches. Fitted with aluminum insert that accepts standard ¼" control shaft. Two set-screws hold shaft securely. 2½" long, ¾" wide, ⅞" deep. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	MIL Type	Finish	EACH 1-99	100-199	200-499	500-Up
904-0994	125-7-2G	3R2B	Matte	1.32	1.12	1.06	.92
904-0996	125-7-2	.....	Mirror	1.31	1.11	1.05	.92

DESIGNER SERIES KNOBS



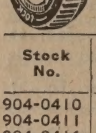
Molded black tic knobs with aluminum cap serts. "BD" in No. indicates has black dot i dicator. Meet specs. Wt., 3

Stock No.	Mfr's Type	Fig.	Shaft Size	O.D.	EACH 1-99	100-199	200-499
904-0110	DS70-1-2	H	.252"	.708"	.78	.72	.68
904-0113	DS70-1-3	H	.190"	.708"	.88	.81	.77
904-0108	DS70-1BD-2	H	.252"	.708"	.88	.81	.77
904-0119	DS70-2BD-2	J	.252"	.708"	1.08	.99	.94
904-0123	DS70-3-2	G	.252"	.708"	.96	.88	.84
904-0150	DS90-3-2	G	.252"	.911"	1.05	.97	.91
904-0170	DS125-3-2	G	.252"	1.225"	1.25	1.15	1.09

KNOB-LOCK POINTER KNOBS

Especially designed for easy legibility—fea pointer that curves over knob towards panel t crease accuracy in reading. Match standard s knobs at left. Constructed of sturdy, durable carbonate resin. In mirror finish, or non-refle "matte," conforming to military specs. (See Order knob lock below. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Fits Lock Type	Finish	EACH 1-99	100-199	200-499
904-0928	70-1LK-2	KL-701	Mirror	.93	.79	.74
904-0930	70-1LK-2G	KL-701G	Matte	.99	.84	.79
904-0952	90-1LK-2	KL-901	Mirror	1.03	.88	.82
904-0980	125-1LK-2G	KL-1251G	Matte	1.24	1.05	.99



STANDARD KNOB LOCKS

Fit standard ⅜"-32 threaded shanks. Outer skirt fabricated of tough, durable polycarbonate resin Series 70, 90 and 125, Fig. E and F knobs above and for pointer knobs listed above. Shpg. wt.,

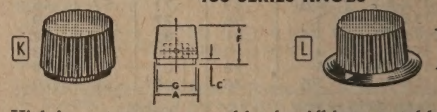
Stock No.	Mfr's Type	Fit Knob Series	Finish	EACH 1-99	100-199	200-499
904-0410	KL-701	70	Mirror	.87	.74	.70
904-0411	KL-701G	70	Matte	.93	.79	.74
904-0416	KL-901	90	Mirror	1.02	.87	.82
904-0417	KL-901G	90	Matte	1.07	.91	.86
904-0427	KL-1251G	125	Matte	1.09	.93	.87

MOLDED-NYLON SHAFT LOCKS

Reliable means of maintaining control settings u conditions of shock and/or vibration. Mount on trol bushing, in place of the usual nut and wa Molded nylon with nickel-plated brass insert. Thre for ¼" or ⅜" bushings. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Thread Size	For Shaft	Color	EACH 1-99	100-199	200-499
904-0802	SL-100B	⅜-32	¼"	Black	.33	.28	.26
904-0804	SL-101R	⅜-32	¼"	Red	.35	.30	.28
904-0812	SL-105B	¼-32	⅛"	Black	.25	.22	.20
904-0818	SL-110B	⅜-32	¼"	Black	.22	.19	.18

400 SERIES KNOBS



High-impact styrene control knobs. All have metal bushings, screws. Shaft depth, .625"; ¼" dia. shaft, except *⅛". Types ing in "K1" are Black; "K3," Gray. Av. shpg. wt., 2 oz.

(Figure K) ROUND DIAL—WITH SKIRT

Stock No.	Mfr's Type	Dimensions in Inches A	C	F	G	EACH 1-99	100-199	200-499
904-1028	*407R1K1	.720	.120	.813	.640	.42	.36	.34
904-1030	*407R1K3	.720	.120	.813	.640	.42	.36	.34
904-1032	407R2K1	.720	.120	.813	.640	.39	.33	.31
904-1034	407R2K3	.720	.120	.813	.640	.39	.33	.31
904-1038	*409R1K1	.875	.120	.813	.800	.44	.37	.35

(Figure L) ROUND, DIAL SKIRTED (†Dimension M)

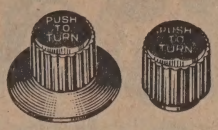
904-1020	*407D1K1	.720	.120	.813	†1.050	.52	.44	.42
904-1022	*407D1K3	.720	.120	.813	†1.050	.52	.44	.42
904-1024	407D2K1	.720	.120	.813	†1.050	.48	.41	.38
904-1026	407D2K3	.720	.120	.813	†1.050	.48	.41	.38
904-1036	409D2K1	.875	.120	.813	†1.270	.51	.43	.41

Allied Offers Best Percentage of Order-Handling in the Cou

Multi-Purpose Knobs

RAYTHEON SELF-LOCKING KNOBS

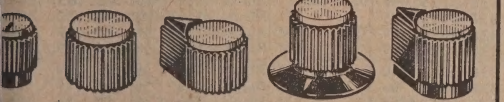
ice possibility of accidental setting
ge. Knob must be fully depressed
re movement is possible. Design
as Raytheon's military line. Meet
0528C, MIL-K-2936B. Infinite resolu-
Zero backlash. Polycarbonate plas-
Stainless-steel mechanism. "Push-
urn" on face. Sizes: ring-skirted
s, 1.030x1.050"; dial-skirted types,
)x1.080". "G" at end of Type No.,
e finish, others mirror finish. NP, arrow is omitted on knob
. *Ring-skirted knob. Av. shpg. wt., 5 oz.



Dial-Skirted Knob Ring-Skirted Knob

tock No.	Mfr's Type	Color	Shaft Hole Dia.	EACH 1-24	25-49	50-Up
-0703	PT70-2-2*	Black	¼"	12.20	11.00	9.75
-0770	PTG70-2-2*	Gray	¼"	12.30	11.10	9.85
-0704	PT70-2-2G*	Black	¼"	12.10	10.90	9.70
-0717	PT70-3NP-2G	Black	¼"	12.20	11.00	9.75
-0718	PT70-3NP-3	Black	3/16"	12.40	11.15	9.90
-0710	PT70-3-2	Black	¼"	12.35	11.10	9.90
-0711	PT70-3-2G	Black	¼"	12.25	11.00	9.80
-0712	PT70-3-3	Black	3/16"	12.45	11.20	9.95

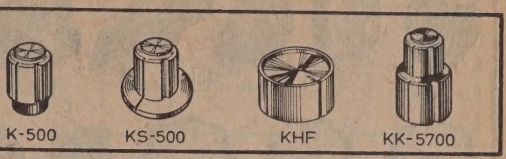
REGENCY SERIES
PLASTIC KNOBS WITH ALUMINUM TOPS


50-2BL1 RS70-1-2 RS70-4-2 RS70-3-2 RS70-5-2

c polycarbonate. Aluminum cupped caps with epoxy coating.
die-cast inserts have 2 setscrews. Conform to MIL-K-3926.
or finish. Matte on special order, add G to end of Type No.
n Type No., ½" black line; BD, black dot. ¼" shaft except
Style Code: 1, plain round; 2, skirted round; 3, dial skirted;
skirted pointer; 5, skirted pointer; CU, concentric unskirted;
concentric skirted; CDS, concentric dial skirt. 1 oz.

ock o.	Mfr's Type	Dia.	Style Code	EACH 1-49	50-99	100-199	200-Up
0800	RS 50-1-1*	½"	1	.69	.55	.47	.44
0801	RS 50-1-1 G*	½"	1	.72	.58	.49	.46
0802	RS 50-1BD-1*	½"	1	.71	.57	.48	.46
0804	RS 50-1BL-1*	½"	1	.71	.57	.48	.46
0806	RS 50-2-1*	½"	2	.75	.60	.51	.48
0808	RS 50-2BD-1*	½"	2	.77	.62	.53	.50
0810	RS 50-2BL-1*	½"	2	.77	.62	.53	.50
0832	RS 70-1-2	¾"	1	.71	.57	.48	.46
0834	RS 70-1BD-2	¾"	1	.73	.59	.50	.47
0836	RS 70-1BL-2	¾"	1	.73	.59	.50	.47
0838	RS 70-2-2	¾"	2	.77	.62	.53	.50
0840	RS 70-2BD-2	¾"	2	.80	.64	.54	.51
0842	RS 70-2BL-2	¾"	2	.80	.64	.54	.51
0868	RS 90-1-2	1"	1	.87	.70	.60	.56
0870	RS 90-1BD-2	1"	1	.90	.72	.61	.58
0872	RS 90-1BL-2	1"	1	.90	.72	.61	.58
0874	RS 90-2-2	1"	2	.93	.75	.64	.60
0876	RS 90-2BD-2	1"	2	.96	.77	.65	.62
0904	RS 125-1-2	1¼"	1	1.07	.86	.73	.69
0906	RS 125-1-BD-2	1¼"	1	1.10	.88	.75	.70
0908	RS 125-1BL-2	1¼"	1	1.10	.88	.75	.70
0910	RS 125-2-2	1¼"	2	1.13	.91	.77	.73
0912	RS 125-2BD-2	1¼"	2	1.16	.93	.79	.74
0914	RS 125-2BL-2	1¼"	2	1.16	.93	.79	.74
0812	RS 50-3-1*	½"	3	.81	.65	.55	.52
0844	RS 70-3-2	¾"	3	.83	.67	.57	.54
0880	RS 90-3-2	1"	3	1.00	.80	.68	.64
0916	RS 125-3-2	1¼"	3	1.28	1.03	.88	.82
0846	RS 70-4-2	¾"	4	.75	.60	.51	.48
0882	RS 90-4-2	1"	4	1.13	.91	.77	.73
0848	RS 70-5-2	¾"	5	.75	.60	.51	.48
0884	RS 90-5-2	1"	5	1.13	.91	.77	.73
0814	RS 50/70-1-2	.700	CU	1.56	1.25	1.06	1.00
0816	RS 50BD/70-1-2	.700	CU	1.58	1.27	1.08	1.02
0818	RS 50BL/70-1-2	.700	CU	1.70	1.36	1.16	1.09
0820	RS 50/70-2-2	.700	CS	1.75	1.40	1.19	1.12
0822	RS 50BD/70-2-2	.700	CS	1.77	1.42	1.21	1.14
0824	RS 50BL/70-2-2	.700	CS	1.77	1.42	1.21	1.14
0826	RS 50/70-3-2	.700	CDS	1.78	1.43	1.22	1.14
0828	RS 50BD/70-3-2	.700	CDS	1.81	1.45	1.23	1.16
0830	RS 50BL/70-3-2	.700	CDS	1.81	1.45	1.23	1.16

ALCO ANODIZED ALUMINUM KNOBS


K-500 KS-500 KHF KK-5700

K series knobs are of one-piece construction. KC-KCVS-500 types are adjustable-stop design. KC-500-10 has 0-9 numerals. KS types have aluminum skirts. KSP types have acrylic skirts. KHF types have notched pointers. K-5700 has dual-concentric design. Pointer color black on aluminum, white on black, red on gold. Available in aluminum, black or gold, except * aluminum or black; † aluminum or gold. **Specify color when ordering.** Shaft reducer reduces from ¼ to ⅛". Av. wt. 2 oz.

Stock No.	Mfr's Type	Diameter	Shaft Size	EACH 1-9	10-99	100-249	250-499	500-Up
700C3420	K-500	½"	¼"	.56	.45	.41	.39	.34
700C3422	K-700	¾"	¼"	.62	.50	.45	.43	.40
700C3424	K-900	15/16"	¼"	.68	.55	.50	.47	.44
700C3428	K-1250	1¼"	¼"	.81	.65	.59	.56	.52
700C3531	KS-500*	½"	¼"	.75	.60	.54	.51	.48
700C3533	KS-700*	¾"	¼"	.81	.65	.59	.56	.52
700C3535	KS-900*	15/16"	¼"	1.06	.85	.77	.73	.68
700C3540	KSP-700*	¾"	¼"	.75	.60	.54	.51	.48
700C3542	KSP-900*	15/16"	¼"	.81	.65	.59	.56	.52
700C3501	KHF-500†	½"	¼"	.56	.45	.41	.39	.36
700C3503	KHF-700†	¾"	¼"	.62	.50	.45	.43	.40
700C3505	KHF-900†	15/16"	½"	.68	.55	.50	.47	.44
700C3509	KHF-1250†	1¼"	¼"	.81	.65	.59	.56	.52
700C3442	K-5700*	½", ¾"	⅛", ¼"	1.37	1.10	.99	.94	.88
700C3465	KC-500*	½"	⅛"	.75	.55	.50	.47	.44
700-3469	KC-500B10	½"	⅛"	.81	.65	.59	.56	.52

700-3526 KR-1 Shaft Reducer.....1-99, Ea....06 100-Up....05

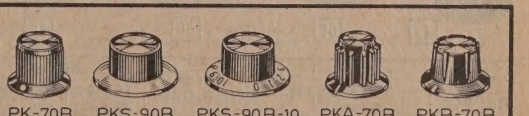
KNURLED MACHINED ALUMINUM KNOBS

KD-700 KN-700 KPN-700BA KN-701BA KNS-701BA

KD-series diamond knurled, conical tops, hairline indicators. KN, series, straight knurled, hairline indicators. KPN-, straight knurl-1-piece pointer; mates with KN-series. KN-501, 701 series, straight knurled, arrow pointer. KNS-501, 701, straight knurled, aluminum skirts. KD series in aluminum, black or gold. * aluminum or black; † aluminum body, black top, or black body, aluminum top; ‡ black body, aluminum top. **Specify color when ordering.** Av. wt. 1 oz.

700C3511	KD-500	½"	¼"	.68	.55	.50	.47	.44
700C3512	KD-700	¾"	¼"	.75	.60	.54	.51	.48
700C3513	KN-500*	½"	¼"	.68	.55	.50	.47	.44
700C3514	KN-700*	¾"	¼"	.75	.60	.54	.51	.48
700C3515	KN-500†	½"	¼"	.93	.75	.68	.64	.60
700C3516	KN-700†	¾"	¼"	1.00	.80	.72	.68	.64
700C3517	KPN-700*	¾"	¼"	1.75	1.40	1.26	1.20	1.12
700C3518	KPN-700†	¾"	¼"	2.00	1.60	1.44	1.36	1.28
700C3519	KN-501†	½"	¼"	1.00	.80	.72	.68	.64
700C3520	KN-701‡	¾"	¼"	1.06	.85	.77	.73	.68
700C3531	KNS-501‡	½"	¼"	1.25	1.00	.90	.86	.80
700C3532	KNS-701‡	¾"	¼"	1.43	1.15	1.04	.98	.92

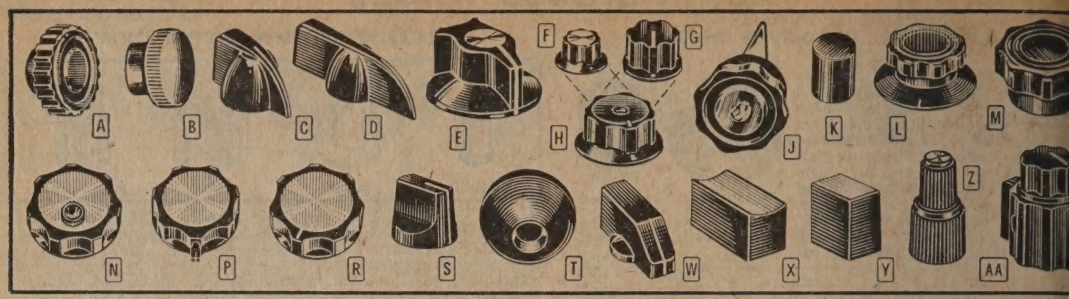
PLASTIC KNOBS WITH ALUMINUM TOPS


PK-70B PKS-90B PKS-90B-10 PKA-70B PKB-70B

PK-, white indicator dot. PKS-, aluminum dial skirt with numerals. PKA-, extended plastic skirt, white indicator line. PKB-, fluted.

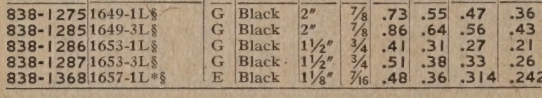
700C3600	PK-50B	½"	⅛"	.31	.25	.23	.22	.20
700C3601	PK-70B	¾"	¼"	.37	.30	.27	.26	.24
700C3602	PK-90B	15/16"	¼"	.43	.33	.33	.30	.28
700C3603	PKS-90B	15/16"	¼"	.62	.50	.45	.41	.40
700C3604	PKS-90B-10	15/16"	¼"	.68	.55	.50	.47	.44
700C3605	PKA-50B	½"	¼"	.37	.30	.27	.26	.24
700C3606	PKA-70B	¾"	¼"	.43	.35	.32	.30	.28
700C3607	PKB-70B	¾"	¼"	.43	.35	.32	.30	.28
700C3608	PKB-90B	¼"	¼"	.50	.40	.36	.34	.32

Kurz-Kasch Knobs for Every Application



Quality plastic knobs for a wide variety of applications. Key to suffixes—1: Molded hole for standard ¼" shaft.—2: Molded hole for standard 3/16" shaft.—3: Flush-type brass insert for standard ¼" shaft.—5: Flush-type brass insert for standard ⅛" shaft.—21: Molded hole for standard ⅛" shaft.—70: Heavy-duty brass insert for ¼" shaft. All knobs have one slotted setscrew except—BB with two.—L: Indicator line filled. PTR: Pointer. 310 has pointer. *Pointer, bar knobs. †Gear ball. ‡Finger spinner §Knobs with aluminum inlay. #Heavy-duty knob with **Flanged terminal nuts for 8-32 shaft. ††Black base, red to concentric shafts. ‡‡Available without line. §§Available with ##Figure AA except top knob is Figure S.

Stock No.	Mfr's Type S-	Fig.	Color	Size O.D.	Ht. In.	EACH 1-99	100-499	500-999	1000-Up
838-0010	68-3	A	Black	1¾"	7/8	.44	.33	.29	.22
838-0022	78-3	A	Black	1"	5/8	.21	.16	.15	.10
838-0020	76-18**	B	Black	¾"	9/16	.18	.14	.13	.091
838-0023	82-1**	B	Black	5/8"	17/32	.17	.13	.12	.08
838-0024	82-3**	B	Black	5/8"	17/32	.17	.13	.12	.08
838-0028	246-1L PTR	C	Black	1½"	7/8	.22	.17	.16	.11
838-0031	292-1L*	C	Black	1¼"	5/8	.12	.09	.081	.058
838-0032	292-1L*	C	Red	1¼"	5/8	.12	.09	.082	.059
838-0037	292-3L*	C	Black	1¼"	5/8	.18	.13	.123	.088
838-0054	293-1L*	D	Black	2¼"	5/8	.19	.15	.136	.097
838-0055	293-1L*	D	Red	2¼"	5/8	.31	.23	.218	.156
838-0061	293-3L*	D	Black	2¼"	5/8	.30	.22	.208	.149
838-0200	645-1L	G	Black	¾"	7/16	.18	.14	.126	.090
838-0205	645-3L	G	Black	¾"	7/16	.25	.19	.18	.13
838-0207	645-5L	G	Black	¾"	7/16	.25	.19	.18	.13
838-0212	645-21L	G	Black	¾"	7/16	.19	.14	.13	.09
838-0225	647-1L	G	Black	13/16"	19/32	.18	.14	.127	.091
838-0227	647-3L	G	Black	1"	19/32	.25	.19	.18	.13
838-0275	648-1L	G	Black	1¼"	21/32	.19	.14	.132	.094
838-0278	648-3L	G	Black	1¼"	21/32	.26	.19	.18	.13
838-0280	649-1L	G	Black	2"	7/8	.49	.37	.32	.25
838-0282	649-3L	G	Black	2"	7/8	.60	.45	.39	.30
838-0300	653-1L	G	Black	1½"	¾	.21	.15	.14	.10
838-0310	653-3L	G	Black	1½"	¾	.29	.22	.20	.14
838-0320	657-1L	E	Black	1⅛"	5/8	.25	.18	.17	.12
838-0325	657-3L	E	Black	1⅛"	5/8	.31	.24	.22	.16
838-1221	1645/648††	GH	Red/Bl.	1¼"	13/32	.58	.44	.372	.291
838-0220	645/648††	GH	Red/Bl.	1¼"	13/32	.38	.28	.194	.189
838-1210	1645-1L§	G	Black	5/8"	7/16	.38	.28	.263	.188
838-1214	1645-3L§	G	Black	¾"	7/16	.45	.34	.30	.23
838-1218	1645-5L§	G	Black	¾"	7/16	.46	.34	.30	.23
838-1240	1647-1L§	G	Black	1"	19/32	.37	.28	.26	.18
838-1250	1647-3L§	G	Black	1"	19/32	.45	.34	.29	.23
838-1265	1648-1L§	G	Black	1¼"	¾	.40	.30	.263	.202
838-1275	1649-1L§	G	Black	2"	7/8	.73	.55	.47	.36
838-1285	1649-3L§	G	Black	2"	7/8	.86	.64	.56	.43
838-1286	1653-1L§	G	Black	1½"	¾	.41	.31	.27	.21
838-1287	1653-3L§	G	Black	1½"	¾	.51	.38	.33	.26
838-1368	1657-1L*§	E	Black	1⅛"	7/16	.48	.36	.314	.242
838-1289	1657-3L*§	E	Black	1⅛"	5/8	.56	.42	.37	
838-0088	309 PTR	J	Black	1⅝"	¾	.52	.39	.338	
838-0093	310 PTR	J	Black	2⅜"	7/8	.71	.53	.463	
838-0099	330-30	K	Black	7/16"	15/32	.10	.074	.069	
838-0120	380-3L	L	Black	1⅛"	13/16	.68	.51	.445	
838-0125	381-70L	L	Black	1¾"	27/32	.83	.63	.54	
838-0135	385-3	M	Black	1⅜"	11/16	.40	.30	.28	
838-0096	311-3L	M	Black	1⅝"	7/8	.71	.57	.494	
838-0086	309-3	M	Black	1⅝"	¾	.34	.25	.237	
838-0091	310-3	M	Black	2⅜"	7/8	.52	.39	.336	
838-0080	308-3	M	Black	2⅜"	7/8	.25	.19	.178	
838-1010	1308-3#	M	Black	1⅛"	5/8	.48	.36	.309	
838-1020	1309-3	M	Black	1⅝"	¾	.60	.45	.39	
838-1030	1310-3	M	Black	2⅜"	7/8	.82	.61	.53	
838-1040	1319-3	M	Black	1"	5/8	.47	.35	.30	
838-0400	745-1L	F	Black	5/8"	7/16	.25	.19	.17	
838-0410	745-3L	F	Black	5/8"	7/16	.33	.25	.23	
838-0425	745-21L	F	Black	5/8"	7/16	.26	.20	.18	
838-0600	747-1L§	F	Black	13/16"	19/32	.26	.19	.181	
838-0610	747-3L	F	Black	13/16"	19/32	.18	.14	.13	
838-0625	748-1L	F	Black	1"	21/32	.27	.20	.19	
838-0645	748-3L	F	Black	1"	21/32	.35	.26	.24	
838-1290	1747-1L§	F	Black	13/16"	19/32	.44	.34	.287	
838-1385	SFS-1773-70‡	N	Black	2½"	1	3.00	2.25	1.95	
838-0650	772-1-BB-L	P	Black	2½"	15/16	.74	.56	.48	
838-1370	1772-1-BB-L	P	Black	2½"	15/16	.89	.67	.58	
838-0652	772-1-BB-M	R	Black	2½"	15/16	1.12	.84	.73	
838-1380	1772-1-BB-M	R	Black	2½"	15/16	1.26	.95	.82	
838-0140	400-1L	S	Black	15/16"	¾	.32	.24	.22	
838-0142	401-2L	S	Black	¾"	9/16	.25	.19	.18	
838-0145	401-21L	S	Black	¾"	9/16	.28	.21	.20	
838-0150	446-3†	T	Black	1¾"	1¾	.37	.28	.26	
838-0175	626-1LPTR	W	Black	1½"	5/8	.21	.16	.14	
838-0130	384-30	X	Black	1x1 7/32x3/8		.22	.17	.16	
838-1560	9205-30	Y	Black	¾x¾x5/8		.24	.18	.17	
838-0430	745/750BB3L	AA	Red/Bl.	1¼"	19/64	1.18	.89	.79	
838-1230	1645/751BB3L	AA	Red/Bl.	1½"	13/32	1.34	1.00	.87	
838-0150	401/751BB3L	AA	Red/Bl.	1½"	11/64	1.24	.93	.82	



Stock No.	Mfr's Type S-	Fig.	Color	Size O.D.	Ht. In.	EACH 1-99	100-499	500-999	1000-Up
838-1395	1902/903	Z	Black	¾"	1 15/16	.80	.61	.54	.42
838-1530	2904/905	BB	Black	1⅛"	1 15/16	1.12	.99	.85	.66
838-0900	1000-21L*	DD	Plain	7/16"	5/8	.98	.74	.64	.49
838-0920	1001-1L*	DD	Plain	¾"	9/16	1.08	.81	.70	.54
838-0940	1002-1L*	DD	Plain	1"	11/16	1.26	.95	.82	.63
838-0960	1004-1L*	DD	Plain	1½"	13/16	1.84	1.38	1.20	.92
838-0806	902-1L	CC	Black	½"	5/8	.23	.18	.16	.12
838-0808	902-21L	CC	Black	½"	5/8	.27	.20	.19	.13
838-0810	903-1L	CC	Black	¾"	5/8	.23	.17	.162	.116
838-0815	904-1L	CC	Black	7/8"	5/8	.29	.22	.21	.15
838-0820	905-1L	CC	Black	1⅛"	11/16	.27	.21	.192	.137
838-1390	1902-1L	DD	Black	½"	5/8	.43	.32	.28	.22

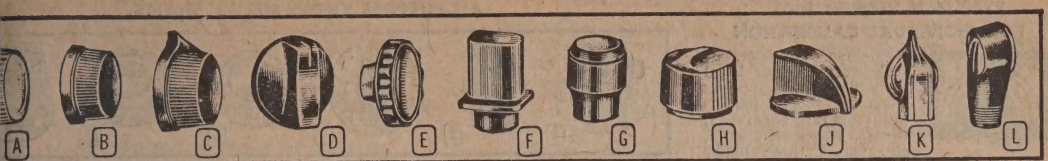
"SNOB" KNOBS FOR SMART APPEARANC

Specially-designed knobs add a professional appearance to all of equipment. Molded hole fits standard ¼" shaft (Type No. ing in —1L), or standard ⅛" shaft (Type No.'s ending in – 900 Series has plain top. 1900 Series, spun aluminum inlay c 2900 Series, spun aluminum cap on top. *Solid aluminum. A slotted setscrew and filled-in indicator line. Also available w indicator line. Specify. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type S-	Fig.	Color	Size O.D.	Ht. In.	EACH 1-99	100-499	500-999
838-1392	1902-21L	DD	Black	½"	5/8	.46	.35	.30
838-1410	1903-1L	DD	Black	¾"	5/8	.38	.29	.267
838-1420	1904-1L	DD	Black	7/8"	5/8	.49	.37	.32
838-1430	1905-1L	DD	Black	1⅛"	11/16	.42	.32	.276
838-1450	1906-1L	DD	Black	1⅜"	¾	.45	.34	.293
838-1510	2902-1L	EE	Black	½"	5/8	.36	.27	.252
838-1520	2902-21L	EE	Black	½"	5/8	.49	.37	.32
838-1522	2903-1L	EE	Black	¾"	5/8	.39	.29	.274
838-1525	2904-1L	EE	Black	7/8"	5/8	.52	.39	.34
838-1540	2905-1L	EE	Black	1⅛"	11/16	.45	.34	.295
838-1557	2906-1L	EE	Black	1⅜"	¾	.48	.36	.312

nobs, Shaft Fittings, Hardware, and Dial Plates

HARRY DAVIES CONTROL, POINTER AND UTILITY KNOBS



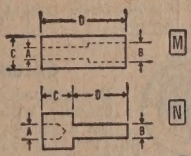
as tone and volume control knobs for radios, television s, high-fidelity systems and other electronic equipment. 770-F screws on 6-32 threaded shaft; all others have set screws for mounting round or flatted shafts. Type 5149-A has self-locating friction fit for flat wire shafts. *Indicates for use with knurled shafts. Figure W is for small radios. Wt., 3 oz.

	Mfr's Type	Fig.	Dia.	Color	EACH 1-24	25-99	100-499	500-999	1000-Up
29	1600	A	1½″	Black	.16	.14	.122	.113	.108
35	1610	A	29/32″	Black	.17	.13	.113	.104	.099
06	1450	B	11/16″	Black	.10	.08	.068	.062	.057
05	1450-D	B	11/16″	Black	.06	.05	.04	.035	.033
10	1475	B	1″	Black	.14	.11	.092	.085	.082
04	1400	C	11/16″	Black	.10	.08	.068	.060	.057
08	1470	C	1″	Black	.15	.13	.115	.105	.10
12	1500	D	1⅛″	Black	.13	.11	.095	.088	.084

Stock No.	Mfr's Type	Fig.	Dia.	Color	EACH 1-24	25-99	100-499	500-999	1000-Up
769-1513	1500	D	1⅛″	Red	.13	.12	.099	.092	.088
769-1576	2965	E	⅞″	Black	.14	.12	.104	.097	.092
769-1600	5149-A	F	½″	Black	.08	.06	.054	.048	.045
769-1552	1770-F	G	31/64″	Black	.07	.05	.046	.04	.039
769-1547	1700	H	¾″	Black	.13	.11	.095	.088	.084
769-1519	1550	J	13/16″	Black	.12	.11	.092	.085	.082
769-1569	2150	K	1¼″	Black	.13	.11	.096	.09	.087
769-1565	2110	L	1⅝″	Black	.22	.19	.165	.154	.147

H. H. SMITH

SHAFT FITTINGS



gs are designed for extending f volume controls, switches, tone s, etc., or for ganging units. Ex- are primarily for decreasing or ng shaft diameter and length. *In- insulated fiber; †Brass, nickel- Av. shpg. wt., 1 oz.

k	Mfr's Type	Fig.	Dimensions A	B	C	D	EACH 1-9	10-49	50-99	100-Up
80	180†	M	⅛″	⅛″	9/32″	⅜″	.50	.45	.40	.36
20	120†	M	¼″	¼″	7/16″	¾″	.38	.34	.30	.27
40	140*	M	¼″	¼″	7/16″	¾″	.38	.34	.30	.27
31	131†	M	⅜″	¼″	½″	¾″	.38	.34	.30	.27
41	141*	M	⅜″	¼″	½″	¾″	.38	.34	.30	.27
89	189†	N	⅛″	⅛″	¼″	⅜″	.44	.40	.35	.32
50	150†	N	¼″	¼″	½″	1¼″	.50	.45	.40	.36
30	130*	N	¼″	¼″	½″	1¼″	.50	.45	.40	.36
60	160†	N	¼″	¼″	½″	⅝″	.44	.40	.35	.32
61	161*	N	¼″	¼″	½″	⅝″	.44	.40	.35	.32
32	132†	N	⅜″	¼″	½″	1¼″	.50	.45	.40	.36
62	162†	N	⅜″	¼″	½″	⅝″	.44	.40	.35	.32

FLEXIBLE SHAFTS

flexible ⅛″ shafts with ¼″ hubs ½″ Non-rusting, non-magnetic, phosphor construction. Ideal for connecting out-of-line shafts. Permits 0° angular control with no backlash. Av. wt., 2 oz.

ock lo.	Mfr's Type	Lght.	EACH 1-24	25-49	50-99	100-Up
0151	151	3″	.94	.75	.68	.61
0152	152	6″	1.06	.85	.87	.69

CALIBRATED CONTROL PLATES

sive-looking control plates with black satin For all types of electronic equipment. Made ss. Easy-to-read numerals are etched in silver color. Calibrated clockwise from 0 to imensions: 13/32″ inside diameter; .020″ thick. of four outside diameters. Shpg. wt. 1 oz.

k No.	Mfr's Type	Degrees	O.D.	1-4, EA.	5-Up, EA.
2700	2900	180	2″	1.31	1.05
2702	2902	325	2″	1.31	1.05
2703	2903	180	3½″	1.88	1.50
2705	2905	325	3½″	1.88	1.50

BRATED DIAL AND KNOB ASSEMBLY

o-last brass dial features a "chrome silver" Thickness, .020″. Choice of four diameters. o-grip molded bakelite knob has ¼″ brass Excellent for test and lab equipment and unications gear. Calibrated from 0-100, ise. Shpg. wt. 4 oz.

2784	2984	180	2¾″	3.75	3.00
2787	2987	360	2¾″	3.75	3.00
2788	2988	180	4″	4.31	3.45
2791	2991	360	4″	4.31	3.45

WALDOM ACCESSORIES

SQUARE DIAL PLATES

Lithographed aluminum plates for amps, PA equipment. Black figures and letters dyed into the hard aluminum oxide surface. For 1¼″ bar knob. 2⅜x2⅝″. 13/32″ ctr. hole. Very attractive on all types of equipment. Shpg. wt. 2 oz.

Stock No.	Type	Description	EACH 1-99	100-Up
989-1014	426	Volume, 0-10	.41	.30
989-1010	410	No title, 0-10	.41	.30

ROUND DIAL PLATE

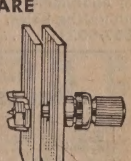
Attractive, easy-to-read etched aluminum scale with highly polished black bakcground. Overall diameter, 1¾″. For 1¼″ bar knobs. 13/32″ center hole. Perfect for applications on amateur, public address, hi-fi and experimental equipment or all kinds. Shpg. wt. 2 oz.

989-1001	25	Volume (Arrow)	.34	.35
989-1019	569	0-100 (180°)	.34	.25
989-1025	905	0-100 (270°)	.34	.25

"ON-OFF" SWITCH PLATE

Economy priced quality anodized aluminum toggle switch plate. Etched aluminum with black background. 11/16x111/16″. Wt. 2 oz.
989-1007. Type 278. 1-99.....Each .20
100-Up.....Each .15

RAYTHEON CAPTIVE HARDWARE



Stainless steel corrosion-free fastening hardware meets MIL-E-16400 (Ships) specs, and will meet the requirements of MIL-E-5400 and MIL-P-11268 (Sig C) when painted or dulled in accordance with these specifications. Available in a variety of sizes to handle almost any requirement, the complete captive assembly consists of a slotted-head thumb screw, an insert bushing for securing the thumb screw to the panel, a captivated floating nut assembly which is fastened to the chassis member or rack, and a gasket retainer and rubber gasket for use where a dustproof, splash proof seal is required. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Description	Screw Size	EACH 1-499	500-999	1000-Up
904-0011	CS 101	¾″ Thumbscrew	8-32 NC-2	.55	.47	.44
904-0010	CS 100	⅝″ Thumbscrew	8-32 NE-2	.55	.47	.44
904-0015	CS 111	⅛″ Thumbscrew	10-24 NC-2	.60	.52	.49
904-0022	CS 121	⅞″ Thumbscrew	10-32 NF-2	.60	.52	.49
904-0025	CS 122	1″ Thumbscrew	10-32 NF-2	.60	.52	.49
904-0608	PIN 101	.074-.109 Panel Insert	8-32 NC-2	.22	.19	.18
904-0611	PIN 102	.119-.156 Panel Insert	8-32 NC-2	.22	19	.18
904-0620	PIN-122	.119-.156 Panel Insert	10-32	.25	.21	.20
904-0576	NB 100	Nut Bracket	8-32 NC-2	.10	.09	.08
904-0403	GS 103	Gasket	10-32, 8-32	.02	.017	.016
904-0407	GSR 118	Gasket Retainer	8-32	.07	.06	.05

National, H. H. Smith Components, Wilton Vises

COMPONENTS BY NATIONAL

TYPE MCN VERNIER DIAL FOR INDIVIDUAL CALIBRATION

A deluxe, compact, 3-scale vernier dial. Ideal for limited space applications in mobile equipment, small receivers, tuners, test instruments, etc. Offers three blank calibrating scales and 0-100 logging scale. Utilizes "Velvet Vernier" drive for smooth, backlash-free tuning. Drive ratio is 5:1. Size: 2¾x3⅞". With extra scales, hardware, hub for ¼" shafts. Shpg. wt., 2 oz.

867-0098.....10.80

TYPE TX-9 SHAFT COUPLING

Compact coupling for joining two shafts together. Ruggedly constructed of rigid steatite, won't stretch or twist. Performance-proved in industrial, commercial and Amateur installations. Fully insulated. Has hubs and spiders of solid, nickel-plated brass. Includes two set-screws on each hub for firm, positive grip on shaft. Size, 1⅝" diameter. Fits all ¼" shafts. Shpg. wt., 1 oz.

867-1123. 1-49.....Each 2.38
50-99.....Each 2.10 100-199..Each 1.97
200-499....Each 1.87 500-Up...Each 1.80

RUGGED PLANETARY DIAL-DRIVE MECHANISMS

Type AN-250

Type AVD-250

Type AN-250. Planetary vernier tuning mechanism. The output shaft coupling is fully insulated. Drive ratio is 5:1—five turns of the knob for each revolution of the drive. Output torque is rated at 1-3 inch-pounds. Drive shaft is ¼". Output coupling fits a ¼" shaft, which is secured by means of two set-screws 90° apart on the coupling hub. Overall diameter, 2 15/32"; overall length, 1 19/32"; length, front of drive shaft to back of mounting plate, 1 1/16". Unit quickly and easily mounts front of panel—includes three ⅛" mounting holes. Shpg. wt., 2 oz.

867-0019.....Each 5.00

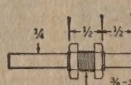
Type AVD-250. Same as above, but output shaft coupling is non-insulated. Overall diameter, 2 9/16"; overall length, 1 15/32"; length from front of drive shaft to back of mounting plate, 1". Mounts easily on front of equipment panel by means of four 5/32" mounting holes. Shpg. wt., 2 oz.

867-0021.....Each 3.10

H. H. SMITH

PANEL BEARING ASSEMBLY

No.184



No.148-149

For use on panels up to ⅜" thick. Nickel-plated brass bearing ½" long, ⅜"-32 threaded. The ¼" drive shaft extends through both ends of coupling. Overall shaft length: Type 148—3", Type 149—6". Panel bearing only: Type 119 for ¼" shafts, 184 for ⅛" shafts. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	EACH 1-99	100-499	500-Up
920-0148	148	.50	.40	.36
920-0149	149	.75	.60	.54
920-0119	119	.16	.128	.114
920-0184	184	.16	.128	.114

ALL-PURPOSE KNOBS FOR ¼" SHAFTS

Deeply knurled for sure grip, except Types HRP and R, smooth knobs. Made of Tenite, except Types HRP-P and R, bakelite; HRM, satin-chromed brass. HRS Types have 7/16" chrome dial. Type R ha aluminum dial. Type HRT-M is mi version of HRT, face-to-back size, *Black. †gray. Av. wt., 1 oz.

Stock No.	Mfr's Type	Fig.	Description	Knob Dia.	EACH 1-99	100-499	500-999	1
867-0082	HRS-3*	A	300° 0-10 scale	1 7/16"	1.00	.86	.80	.
867-0083	HRS-3†	A	300° 0-10 scale	1 7/16"	1.00	.86	.80	.
867-0084	HRS-4*	A	1-line scale	1 7/16"	1.00	.86	.80	.
867-0085	HRS-4†	A	1-line scale	1 7/16"	1.00	.86	.80	.
867-0086	HRS-5*	A	0-10 180° scale	1 7/16"	1.00	.86	.80	.
867-0078	HRP-P*	B	Pointer	1¼x½"	.50	.43	.40	.
867-0120	R*	C	180° 0-10 scale	1⅝"	.84	.72	.67	.
867-0060	HR*	D	White dot	15/16"	.48	.41	.39	.
867-0061	HR†	D	White dot	15/16"	.48	.41	.39	.
867-0090	HRT*	E	Chrome insert	2⅛"	1.20	1.05	.96	.
867-0092	HRT-M	E	Chrome circle	1½"	.83	.72	.67	.
867-0068	HRM*	F	Arrow	⅝"	1.17	1.00	.95	.

G

H

CALIBRATED PLANETARY DRIVE DIALS

Recommended for all types of equipment. Knobs are bakelite, with dials of nickel-plated brass. Type has a vernier scale. Type AM dials have dial p Type N is 1⅜" deep; Type AM, 1 7/16" deep. For ¼" Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Ratio	Scale	Dia.	EACH 1-24	25-49	50-99	100-499
867-0003	AM-2	G	5:1	0-100; 180°	3"	6.70	6.00	5.60	5.35
867-0006	AM-5	G	5:1	200-0; 360°	3"	6.70	6.00	5.60	5.35
867-0007	AM-6	G	5:1	0-150; 270°	3"	6.70	6.00	5.60	5.35
867-0104	N-2	H	5:1	0-100; 180°	4"	18.00	17.30	16.58	15.56

J

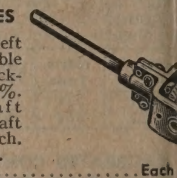
K

PANEL BUSHING AND SHAFT LOCK

Type SB bushing is made of nickel-plated brass. SL shaft lock ular component for use with variable potentiometers, capacito in a wide variety of electronic equipment. Av. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-49	50-99	100-199	2
867-1107	SB	J	Panel Bushing for ¼" Shafts	.27	.26	.243	
867-1109	SL	K	Shaft Lock for ¼" Shafts	.44	.38	.36	

PRECISION RIGHT-ANGLE DRIVES



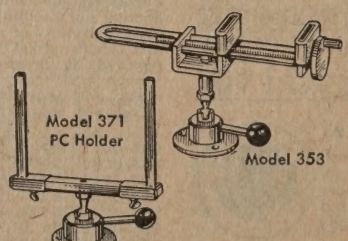
Type RAD. Precision right-angle drive for positive control of variable potentiometers and capacitors at right angles to front panel. Compact unit saves space. Drives up to two units. Rugged aluminum housing and gears for long-life performance and dependability. Overall shaft length, 2½"; shaft diameter, ¼". Shpg. wt., 3 oz.

867-1104.....Each 4.31

Type PRAD. As left but with durable brass gears. Backlash under 1½°. Overall shaft length, 2½". Shaft diameter, ¼ inch. Shpg. wt., 1 oz.

867-0117.....Each

WILTON PRINTED CIRCUIT BOARD HOLDER



MODEL 371. Mounts on Midget "arm". No. 345 (supplied). Speciall signed for rapid, low-cost printed production. Brackets adjust horiz 3" to 6". V-grooved vertical posts (⅛" 3/16" deep) permit insertion and remo workpiece without readjustments. It having a third hand—don't be witho "helper". Shpg. wt. 2 lbs.

989-7000.....Each

ELECTRONICS VISE ON MIDGET "POWRARM"

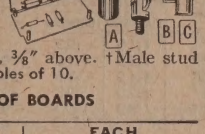
MODEL 353. Mounts on Midget "Powl No. 345 (supplied). For use with sma assemblies and PC boards. Holds firmly but gently; jaws are rubber-w to protect workpiece. Constructed of gauge steel with double slide bar—o easily adjusts to 6½" with the crank h Shpg. wt. 3 lbs.

989-7001.....Each

Use the Services of the Allied Electronics Facility Nearest

Standoffs, Washers, Clips, and Hardware

...YSTONE HINGED TERMINAL BOARD STANDOFFS



...onnects circuits or service without ... of shorting. Wiring is exposed for ...sting. Brass per Mil Spec. QQ-B-...Comp. 22, ½ hard. Cadmium plated ...Q-P-416 Class 2, Type 2 and gold ... 90° swivel. *5⁄8″ long below hinge, 3⁄8″ above. †Male stud ... Av. shpg. wt. 2½ oz. Sold in Multiples of 10.

A STANDOFFS FOR FRONT OF BOARDS

...ock ...lo.	Mfr's Type	Use with Hinge No.	Lgth.	EACH 10	20-90	100-Up
...3421	1657A	351	3⁄4″	.10	.09	.084
...3422	1657B	352	1″	.12	.11	.104
...3415	1548E	353	3⁄4″	.11	.10	.084
...3416	1548F	354	1″	.12	.11	.104
...3426	1692D	355	3⁄4″	.10	.09	.084
...3427	1692E	356	1″	.12	.11	.104
...3420	1657	357	1⁄2″	.08	.07	.06
...3414	1548C	358	1⁄2″	.08	.07	.06
...3425	1692C	359	1⁄2″	.08	.07	.06

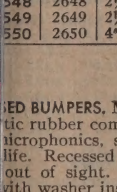
B MALE HINGED STANDOFFS

...321	357	4-40	.187″	1⁄2″	1⁄4″†	.33	.30	.27
...322	358	6-32	.250″	1⁄2″	5⁄16″†	.34	.31	.28
...323	359	8-32	.250″	1⁄2″	5⁄16″†	.34	.31	.28

C FEMALE HINGED STANDOFFS

...ock ...	Mfr's Type	Thd.	Dia.	Lgth.	Thd. Depth	EACH 10	20-90	100-Up
...315	351	4-40	.187″	3⁄4″	.172″	.34	.31	.28
...316	352	4-40	.187″	1″*	.250″	.35	.33	.30
...317	353	6-32	.250″	3⁄4″	.172″	.35	.32	.29
...318	354	6-32	.250″	1″*	.250″	.37	.34	.31
...319	355	8-32	.250″	3⁄4″	.172″	.35	.32	.29
...320	356	8-32	.250″	1″*	.250″	.37	.34	.31

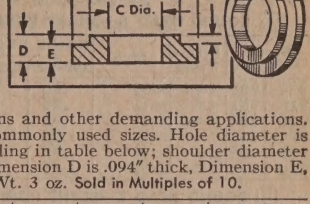
...H. SMITH CERAMIC STAND-OFF INSULATORS



Commercial-grade threaded insulators to suit a wide variety of RF applications. Grade L-5 ceramic is employed with outside highly glazed to prevent absorption of moisture and avoid leakage losses. All except Type 2640 are threaded at both ends to accept 6-32 or 1/4-20 machine screws. Type 2640 is threaded throughout. Av., 3 oz.

...k ...	Mfr's Type	Dimensions A	B	C	Thread	EACH (Mult. of 10) 10-40	50-90	100-Up
...540	2640	1⁄4″	1⁄4″	Thru	6-32	.160	.134	.121
...541	2641	1⁄2″	1⁄4″	5⁄32″	6-32	.164	.137	.123
...542	2642	3⁄8″	3⁄8″	5⁄32″	6-32	.170	.142	.128
...543	2643	1⁄2″	3⁄8″	3⁄16″	6-32	.203	.169	.152
...544	2644	1⁄2″	1⁄2″	3⁄64″	6-32	.222	.185	.167
...545	2645	3⁄4″	1⁄2″	1⁄4″	6-32	.234	.195	.176
...546	2646	1″	1⁄2″	3⁄8″	6-32	.258	.215	.194
...547	2647	1½″	1⁄2″	9⁄16″	6-32	.294	.245	.220
...548	2648	2½″	1⁄2″	1⁄2″	6-32	.310	.267	.240
...549	2649	2½″	3⁄4″	3⁄4″	1⁄4-20	.432	.360	.324
...550	2650	4″	3⁄4″	3⁄4″	1⁄4-20	.648	.540	.486

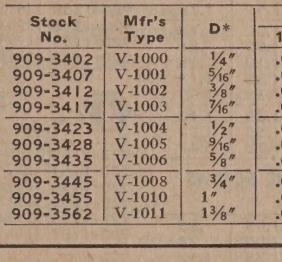
GRAYHILL MOLDED INSULATING WASHERS



Molded insulating washers carefully manufactured from rugged, black electrical-grade phenolic. Highly resistant to moisture absorption and do not support fungus growth. All have high dielectric strength and are ideally suited for any equipment destined for humid environmental conditions and other demanding applications. Available in a variety of commonly used sizes. Hole diameter is shown under "Dia. C" Heading in table below; shoulder diameter is shown under "Dia. B"; Dimension D is .094″ thick, Dimension E, .063″, Dimension F, .031″. Wt. 3 oz. Sold in Multiples of 10.

Stock No.	Mfr's Types	Screw Size	Dia. A	Dia. B	Dia. C	EACH 10-490	500-Up
801-0421	21B1001-2	#6	.500″	.375″	.145″	.10	.08
801-0422	21B1002-2	#8	.500″	.375″	.171″	.10	.08
801-0423	21B1003-2	#10	.500″	.375″	.198″	.10	.08
801-0424	21B1004-2	1⁄4″	.500″	.375″	.258″	.10	.08
801-0425	21B1005-2	5⁄16″	.500″	.375″	.319″	.10	.08
801-0426	21B1006-2	3⁄8″	.625″	.500″	.384″	.10	.08
801-0427	21B1021-2	#6	.375″	.250″	.145″	.10	.08
801-0428	21B1022-2	#4	.375″	.250″	.250″	.10	.08

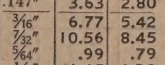
RICHCO PLASTIC COMPONENT CLIPS



High-dielectric, vinyl clips designed to hold and provide insulation for capacitors, resistors, batteries, fuses. Available in 12 sizes for parts with diameters from 1/4″ to 1 3/8″. V-1000 to V-1006 have one 3/32″ mtg. hole; V-1008 has one 5/32″ mounting hole; V-1010 and V-1011 have two 5/32″ holes, 3/4″ apart. All are 1/2″ long, except V-1010 and V-1011 which are 1 1/8″ long. *In table heading below, D indicates diameter of part to be held. Av. shpg. wt. 3 oz. Sold in Multiples of 10.

Stock No.	Mfr's Type	D*	EACH 10-90	100-490	500-Up
909-3402	V-1000	1⁄4″	.029	.026	.024
909-3407	V-1001	5⁄16″	.029	.026	.024
909-3412	V-1002	3⁄8″	.03	.027	.025
909-3417	V-1003	7⁄16″	.03	.027	.025
909-3423	V-1004	1⁄2″	.031	.028	.026
909-3428	V-1005	9⁄16″	.031	.029	.026
909-3435	V-1006	5⁄8″	.032	.029	.027
909-3445	V-1008	3⁄4″	.036	.033	.031
909-3455	V-1010	1″	.043	.039	.036
909-3562	V-1011	1 3⁄8″	.049	.044	.041

RUSSELL INDUSTRIES RUBBER HARDWARE



...ED BUMPERS. Molded of a rubber and ...tic rubber compound. Eliminate rat-...icrophonics, scratching of surfaces. ...life. Recessed design keeps nail or ... out of sight. *Indicates types sup-...vith washer insert. Supplied in packages of 100. 8 oz.

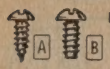
...k ...	Fig.	Max. Dia.	Hgt.	Head Depth	Shaft Depth	Base Opening	Shaft Width	Price Per 100 100-900	1000-Up
...715	D	3⁄8″	1⁄4″	3⁄16″	1⁄16″	1⁄4″	5⁄32″	1.98	1.58
...720	D	5⁄8″	1⁄2″	1⁄4″	1⁄4″	5⁄16″	5⁄32″	2.31	1.85
...721	*D	5⁄8″	1⁄2″	1⁄4″	1⁄4″	5⁄16″	5⁄32″	3.96	3.19
...733	D	5⁄8″	5⁄8″	7⁄16″	3⁄16″	5⁄16″	.147″	3.63	2.80
...724	*D	3⁄4″	3⁄8″	3⁄16″	3⁄16″	7⁄16″	3⁄16″	6.77	5.42
...739	*D	15⁄16″	5⁄8″	7⁄16″	3⁄16″	7⁄16″	7⁄32″	10.56	8.45
...704	E	3⁄8″	3⁄16″	3⁄32″	3⁄32″	3⁄16″	5⁄64″	.99	.79
...706	E	1⁄2″	1⁄4″	1⁄8″	1⁄8″	1⁄4″	1⁄8″	1.65	1.32
...707	*E	1⁄2″	1⁄4″	1⁄8″	1⁄8″	1⁄4″	1⁄8″	2.81	2.24
...718	*E	5⁄8″	5⁄16″	3⁄16″	1⁄8″	1⁄4″	3⁄16″	3.80	3.04
...730	E	5⁄8″	5⁄16″	3⁄16″	1⁄8″	1⁄4″	1⁄8″	2.15	1.72
...726	E	3⁄4″	3⁄8″	3⁄16″	3⁄16″	5⁄16″	5⁄32″	3.30	2.64
...727	*E	3⁄4″	3⁄8″	3⁄16″	3⁄16″	5⁄16″	5⁄32″	5.28	4.22
...711	*E	13⁄16″	1⁄2″	1⁄4″	1⁄4″	5⁄16″	5⁄32″	6.77	5.41
...742	E	1″	1″	5⁄8″	3⁄8″	5⁄16″	5⁄32″	8.42	6.73
...743	*E	1″	1″	5⁄8″	3⁄8″	5⁄16″	5⁄32″	10.89	8.71
...747	*E	1″	1 1⁄2″	5⁄8″	7⁄8″	5⁄16″	5⁄32″	16.23	12.94

RUBBER GROMMETS. Used to prevent wire from touching the sides of chassis of electronic equipment. Supplied in packages of 100. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	O.D.	I.D.	Groove W.	Groove Dia.	PRICE PER 100 100-900	1000-Up
909-8649	GOB-2104	1 1⁄32″	7⁄64″	1⁄16″	13⁄64″	1.49	1.19
909-8650	GOB-2105	1 1⁄32″	1⁄8″	1⁄16″	3⁄16″	1.65	1.32
909-8629	GOB-210	1 1⁄32″	1⁄8″	3⁄16″	1⁄4″	2.97	2.38
909-8630	GOB-215	7⁄16″	3⁄16″	1⁄16″	5⁄16″	1.98	1.58
909-8661	GOB-2173	1⁄2″	3⁄16″	1⁄16″	5⁄16″	2.48	1.98
909-8660	GOB-2172	1⁄2″	1⁄4″	1⁄32″	5⁄16″	2.48	1.98
909-8633	GOB-220	9⁄16″	1⁄4″	1⁄16″	3⁄8″	2.64	2.11
909-8664	GOB-2211	9⁄16″	9⁄32″	1⁄16″	13⁄32″	3.14	2.51
909-8676	GOB-3251	5⁄8″	1⁄4″	1⁄8″	3⁄8″	4.95	3.96
909-8666	GOB-2252	5⁄8″	5⁄16″	1⁄16″	7⁄16″	3.96	3.17
909-8668	GOB-2258	5⁄8″	3⁄8″	1⁄16″	17⁄32″	3.14	2.51
909-8670	GOB-2261	3⁄4″	1⁄4″	1⁄16″	9⁄16″	4.29	3.43
909-8642	GOB-1101-1	3⁄4″	3⁄8″	1⁄8″	17⁄32″	5.45	4.36
909-8641	GOB-1101	3⁄4″	7⁄16″	1⁄16″	9⁄16″	4.46	3.56
909-8637	GOB-230	13⁄16″	1⁄2″	1⁄16″	5⁄8″	5.28	4.22
909-8643	GOB-1102	1 1⁄16″	1⁄2″	1⁄16″	13⁄16″	7.76	6.20
909-8644	GOB-1102-2	1 1⁄16″	1⁄2″	1⁄8″	13⁄16″	7.76	6.20
909-8645	GOB-1103	1 1⁄8″	5⁄8″	1⁄16″	7⁄8″	11.55	9.24
909-8646	GOB-1104	2 1⁄8″	1 1⁄2″	1⁄16″	1 3⁄4″	24.09	19.28
909-8647	GOB-1105	1 1⁄8″	13⁄16″	3⁄64″	15⁄16″	11.55	9.24

...e, Wire or Phone for Prices on Larger Quantities

SELF-TAPPING SCREWS



Steel, cadmium plated. Available in round and slotted hex heads. 3 oz. per package of 100.

(A) ROUND HEAD A—SHARP POINT

Stock No.	Mfr's Type	Size	PRICE PER 100	
			100-900	1000-Up
920-1900	1801	4x1/2"	.80	.60
920-1902	1802	6x1/4"	.85	.70
920-1904	1804	6x3/8"	.90	.70
920-1906	1906	6x1/2"	1.00	.81
920-1908	1805	8x3/8"	.95	.75
920-1910	1806	8x1/2"	1.15	.95

(B) ROUND HEAD Z—BLUNT POINT

920-1912	1807	4x1/2"	.95	.75
920-1914	1808	6x1/4"	.95	.75
920-1916	1809	6x3/8"	.95	.75
920-1918	1810	6x1/2"	1.00	.81
920-1920	1811	8x3/8"	.95	.75
920-1922	1812	8x1/2"	1.15	.95

(C) SLOTTED HEX HEAD Z—BLUNT POINT

920-1929	1830	6x1/4"	1.15	.95
920-1931	1831	6x3/8"	1.15	.95
920-1933	1832	6x1/2"	1.15	.95
920-1935	1833	8x3/8"	1.15	.95
920-1937	1834	8x1/2"	1.15	.95

ROUND HEAD MACHINE SCREWS

Steel, cadmium plated. 3 oz.

920-1173	1173	2-56x1/4"	.80	.56
920-1174	1174	2-56x1/2"	.80	.56
920-1175	1175	2-56x3/4"	.85	.65
920-1177	1177	4-36x1/4"	.80	.56
920-1183	1183	4-36x1/2"	.90	.62
920-1350	1350	4-40x1/4"	.75	.56
920-1352	1352	4-40x1/2"	.85	.62
920-1354	1354	4-40x3/4"	1.10	.90
920-1000	1000	6-32x1/4"	.80	.59
920-1001	1001	6-32x3/8"	.90	.67
920-1002	1002	6-32x1/2"	1.00	.78
920-1355	1355	6-32x5/8"	1.00	.80
920-1356	1356	6-32x3/4"	1.15	.94
920-1357	1357	6-32x1"	1.20	.98
920-1358	1358	6-32x2"	1.95	1.76
920-1006	1006	8-32x1/4"	1.00	.78
920-1007	1007	8-32x3/8"	1.05	.81
920-1008	1008	8-32x1/2"	1.10	.85
920-1010	1010	8-32x5/8"	1.35	1.12
920-1359	1359	8-32x3/4"	1.30	1.09
920-1360	1360	10-32x1/2"	1.35	1.12
920-1361	1361	10-32x3/4"	1.55	1.32
920-1362	1362	10-32x1"	1.70	1.47

ROUND HEAD MACHINE SCREWS

Brass, nickel plated. 3 oz.

920-1044	1044	4-36x1/4"	1.05	.85
920-1045	1045	4-36x3/8"	1.00	.78
920-1046	1047	4-36x1/2"	1.35	1.12
920-1047	1047	4-40x1/4"	1.10	.88
920-1048	1048	4-40x3/8"	1.26	1.05
920-1049	1049	4-40x1/2"	1.35	1.12
920-1050	1050	6-32x1/4"	1.56	1.30
920-1051	1051	6-32x3/8"	1.62	1.35
920-1052	1052	6-32x1/2"	1.50	1.25
920-1056	1056	8-32x1/4"	1.92	1.60
920-1057	1057	8-32x3/8"	2.30	1.92
920-1058	1058	8-32x1/2"	2.70	2.25

BINDING HEAD MACHINE SCREWS

Steel, cadmium plated. 3 oz.

920-1369	1369	2-56x1/4"	.75	.53
920-1370	1370	2-56x1/2"	.80	.56
920-1372	1372	4-40x1/4"	.80	.56
920-1373	1373	4-40x1/2"	.85	.62
920-1374	1374	4-40x3/4"	1.10	.91
920-1375	1375	6-32x3/16"	.85	.65
920-1425	1425	6-32x1/4"	.85	.64
920-1426	1426	6-32x3/8"	.90	.70
920-1427	1427	6-32x1/2"	.95	.72
920-1377	1377	6-32x3/4"	1.15	.94
920-1378	1378	8-32x3/16"	1.05	.87
920-1429	1429	8-32x3/8"	1.00	.81
920-1430	1430	8-32x1/2"	1.05	.84
920-1380	1380	10-32x1/2"	1.35	1.12

CABINET SCREWS

Oval head. Steel, nickel plated. 1 lb.

Stock No.	Mfr's Type	Size	PRICE PER 100	
			100-900	1000-Up
920-1382	1382	6-32x3/4"	1.10	.89
920-1383	1383	8-32x3/4"	1.35	1.12
920-1111	1111	10-32x1/2"	1.15	.95
920-1112	1112	10-32x3/4"	1.20	.97
920-1113	1113	10-32x5/8"	1.30	1.00

NYLON SCREWS

Round Head. Screws will not rust tight so they can be easily undone. Natural coloring. 8 oz.

920-2420	2520	4-40x1/4"	3.50	2.98
920-2422	2522	4-40x1/2"	3.50	2.98
920-2423	2523	6-32x1/4"	3.50	2.98
920-2426	2526	6-32x5/8"	3.50	2.98
920-2427	2527	6-32x3/4"	3.50	2.98
920-2430	2530	8-32x3/8"	3.50	2.98
920-2431	2531	8-32x1/2"	3.50	2.98

Binding Head. Shpg. wt. 8 oz.

920-2400	2500	4-40x1/4"	3.50	2.98
920-2402	2502	4-40x1/2"	3.50	2.98
920-2403	2503	6-32x1/4"	3.50	2.98
920-2404	2504	6-32x3/8"	3.50	2.98
920-2405	2505	6-32x1/2"	3.50	2.98
920-2407	2507	6-32x3/4"	3.50	2.98
920-2410	2510	8-32x3/8"	3.50	2.98
920-2411	2511	8-32x1/2"	3.50	2.98

STEEL HEX NUTS

Made of stainless steel and cadmium-plated except types 1196 and 1199 which are nickel plated. 4 oz.

920-1363	1363	2-56x3/16"	.80	.65
920-1364	1364	3-48x3/16"	.80	.65
920-1365	1365	4-40x1/4"	.80	.65
920-1179	1179	6-32x1/4"	.80	.65
920-1180	1180	6-32x5/16"	.80	.65
920-1366	1366	8-32x1/4"	.80	.65
920-1181	1181	8-32x5/16"	.90	.75
920-1367	1367	10-32x3/8"	.90	.75
920-1368	1368	1/4-20x7/16"	1.45	1.15
920-1398	1398	4-36x1/4"	.80	.65
920-1199	1199	3/8-32x1/2x3/32"	2.50	2.22
920-1196	1196	15/32x9/16x3/64"	2.00	1.80

BRASS HEX NUTS

Nickel plated. 8 oz.

920-1168	1168	4-40x1/4"	1.30	1.00
920-1169	1189	6-32x1/4"	1.50	1.30
920-1190	1190	6-32x5/16"	1.50	1.30
920-1192	1192	8-32x5/16"	1.50	1.30
920-1193	1193	10-32x5/16"	1.70	1.40
920-1187	1187	1/4-32x7/16"	3.00	2.50

NYLON HEX NUTS (4 oz.)

920-2454	2554	4-40x1/4"	.70	.56
920-2455	2555	6-32x5/16"	.70	.56
920-2456	2556	8-32x11/32"	.70	.56
920-2457	2557	10-32x3/8"	.70	.56

INTERNAL LOCKWASHERS

Steel, cadmium plated. *Narrow rim. 2 oz.

920-1127	1127	#4	.55	.40
920-1128	1128	#6	.55	.40
920-1129	1129	#8	.60	.45
920-1130	1130	#10	.60	.45
920-1132	1132	1/4"	.80	.65
920-1131	1131	3/8"	1.15	1.00
920-1145	1145	3/8"*	1.50	1.20
920-1146	1146	15/32"*	1.75	1.40
920-1118	1118	#2	.90	.70
920-1119	1119	#3	.80	.65

SPADE BOLTS

Steel cadmium plated. Av. shpg. wt. 8 oz.

920-1500	1500	6-32x5/16"	3.50	2.98

EXTERNAL LOCKWASH

Steel, cadmium plated.

Stock No.	Mfr's Type	Size	PRICE P	
			100-900	1
920-1139	1139	#4	.55	
920-1140	1140	#6	.55	
920-1141	1141	#8	.60	
920-1142	1142	#10	.60	
920-1144	1144	1/4"	.70	
920-1143	1143	3/8"	1.32	

FLAT WASHERS

Steel, nickel plated.

920-1149	1149	#4	1.05
920-1150	1150	#6	.90
920-1151	1151	#8	.70
920-1152	1152	#10	1.05
920-1147	1147	1/4"	.90
920-1148	1148	3/8"	.95

COUNTER SUNK WA

Brass, nickel plated. 2 oz

920-1115	1115	#6	.80
920-1116	1116	#8	1.00
920-1117	1117	#10	1.15

SHOULDER WASHER

Fiber. Per MIL-F-1148A. CH. Shoulder height, .031 reads inside X outside diameter. 3 oz.

920-2150	2150	.140x.375	1.00
920-2151	2151	.110x.250	.90
920-2152	2152	.136x.250	.95
920-2153	2153	.136x.312	1.05
920-2154	2154	.250x.500	1.10
920-2155	2155	.172x.375	1.05
920-2156	2156	.196x.375	1.05
920-2159	2159	.265x.500	1.10
920-2157	2157	.375x.750	1.40
920-2158	2158	.385x.625	1.35

Natural Nylon. Per MIL-P-20693A. .031. Size, inside X outside dia. 4 oz

920-2560	2660	.140x.375	2.50
920-2561	2661	.110x.250	2.20
920-2562	2662	.136x.250	2.20
920-2563	2663	.136x.312	2.30
920-2564	2664	.250x.500	2.40
920-2565	2665	.172x.375	2.50
920-2566	2666	.196x.375	2.50
920-2569	2669	.265x.500	3.30
920-2567	2667	.375x.750	6.50
920-2568	2668	.385x.625	4.00

FLAT WASHERS

Fibre. MIL-F-1148A. Grad 1/16" thick except 2166, 3/32". 2 oz.

920-2160	2160	.136x.250	.95
920-2161	2161	.110x.250	.95
920-2162	2162	.140x.375	.90
920-2163	2163	.172x.375	.90
920-2164	2164	.196x.375	.90
920-2165	2165	.250x.500	.90
920-2166	2166	.250x.500	.95
920-2167	2167	.312x.500	.95
920-2168	2168	.385x.625	1.05
920-2169	2169	.375x.750	1.25

Nylon. MIL-P-20693A. 1/16". 2514, 15: 2516, 17, 18: .062". 2676: 3/32". 2 oz.

920-2414	2514	.115x.281	1.90
920-2570	2670	.136x.250	1.90
920-2571	2671	.110x.250	1.90
920-2572	2672	.140x.375	2.30
920-2515	2515	.140x.312	2.00
920-2573	2673	.172x.375	2.50
920-2416	2516	.170x.375	2.20
920-2574	2674	.196x.375	2.50
920-2417	2517	.200x.437	2.30
920-2575	2675	.250x.500	2.50
920-2576	2676	.250x.500	3.10
920-2418	2518	.260x.562	2.50
920-2577	2677	.312x.500	2.50
920-2578	2678	.385x.625	2.80
920-2579	2679	.375x.750	3.40

H. H. Smith Hardware for Industry

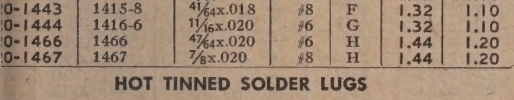
LOCKING TERMINAL LUGS

vide selec- of the st widely d locking minal lug les, with sizes from through

. Designed for broad usage in military, industrial and commer- applications. Sold in quantities of 100. Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	LxD (Inches)	Hole	Fig.	PRICE PER 100	
					100-900	1000-Up
20-1407	1410-4	7/8x.018	#4	A	1.32	1.10
20-1408	1410-6	7/8x.018	#6	A	1.32	1.10
20-1409	1410-8	7/8x.018	#8	A	1.32	1.10
20-1410	1410-10	57/64x.018	#10	A	1.44	1.20
20-1411	1410-14	13/16x.018	1/4"	A	1.44	1.20
20-1412	1411-4	47/64x.020	#4	B	1.32	1.10
20-1413	1411-6	47/64x.020	#4	B	1.32	1.10
20-1414	1411-8	47/64x.020	#8	B	1.32	1.10
20-1415	1412-4	5/8x.018	#4	C	1.20	1.00
20-1416	1412-6	5/8x.018	#6	C	1.20	1.00
20-1417	1412-8	5/8x.018	#8	C	1.20	1.00
20-1418	1413-4	23/32x.018	#4	D	1.32	1.10
20-1419	1413-6	23/32x.018	#6	D	1.32	1.10
20-1420	1413-8	23/32x.018	#8	D	1.32	1.10
20-1421	1414-4	13/16x.018	#4	E	1.32	1.10
20-1422	1414-6	13/16x.018	#6	E	1.32	1.10
20-1423	1414-8	13/16x.018	#8	E	1.32	1.10
20-1424	1414-10	53/64x.018	#10	E	1.44	1.20
20-1441	1415-4	41/64x.018	#4	F	1.32	1.10
20-1442	1415-6	41/64x.018	#6	F	1.32	1.10
20-1443	1415-8	41/64x.018	#8	F	1.32	1.10
20-1444	1416-6	11/16x.020	#6	G	1.32	1.10
20-1466	1466	47/64x.020	#6	H	1.44	1.20
20-1467	1467	7/8x.020	#8	H	1.44	1.20

HOT TINNED SOLDER LUGS



*Ph. Br. †Brass. ‡Copper. Av. wt. per 100, 2 oz.

20-1478	1484*	5/8x.020	#6	J	1.50	1.20
20-1479	1485-4*	17/32x.012	#4	K	1.20	1.00
20-1480	1485-6*	17/32x.012	#6	K	1.20	1.00
20-1481	1485-8*	17/32x.012	#8	K	1.20	1.00
20-1482	1485-10*	17/32x.012	#10	K	1.20	1.00
20-1483	1486-4*	13/16x.012	#4	R	1.20	1.00
20-1484	1486-6*	13/16x.012	#6	R	1.20	1.00
20-1485	1486-8*	13/16x.012	#8	R	1.20	1.00
20-1486	1486-10*	13/16x.012	#10	R	1.20	1.00
20-1487	1488-4*	9/16x.012	#4	L	1.20	1.00
20-1488	1488-6*	9/16x.012	#6	L	1.20	1.00
20-1489	1488-8*	9/16x.012	#8	L	1.20	1.00
20-1490	1490†	3/4x.020	#10	S	1.44	1.20
20-1491	1491‡	15/16x.020	#10	T	2.40	2.00
20-1492	1493†	1 1/8x.027	1/4"	W	3.00	2.50
20-1493	1494-6†	5/8x.020	#6	M	1.32	1.10
20-1494	1494-8†	5/8x.020	#8	M	1.32	1.10
20-1495	1495†	5/8x.020	#8	N	1.44	1.20
20-1496	1496†	3/4x.020	1/4"	P	1.44	1.20
20-1497	1497†	7/8x.017	3/8"	X	1.80	1.50

SNAP BUTTON HOLE PLUGS

Steel prongs, nickel plated. 656, vented. 2 oz.

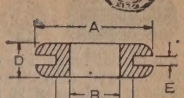
Stock No.	Mfr's Type	Hole	IDxODxDepth	PRICE PER 100	
				100-900	1000-Up
20-0650	650	1/4"	13/32x15/64x1/16	2.75	2.20
20-0651	651	5/16"	7/16x1/4x1/16	2.75	2.20
20-0652	652	3/8"	1/2x15/64x1/16	2.75	2.20
20-0653	653	1/2"	21/32x9/32x5/64	3.00	2.40
20-0654	654	5/8"	13/16x19/64x5/64	4.00	3.20
20-0655	655	3/4"	59/64x19/64x5/64	4.00	3.20
20-0608	608	7/8"	1 1/16x19/64x1/16	4.50	3.60
20-0612	612	1"	1 9/64x21/64x3/32	5.25	4.21
20-0656	656	1"	1 5/32x19/64x5/64	22.00	17.60

CABLE CLAMP HOLDERS

teel cadmium plated. No. 8 mounting hole. 8 oz.

Stock No.	Mfr's Type	Cable Dia.	PRICE PER 100		
			100-900	1000-4000	5000-Up
20-1471	1471	3/16"	.85	.734	.661
20-1470	1470	3/16"	.90	765	689
20-1472	1472	5/16"	1.00	.85	.765

GROMMETS



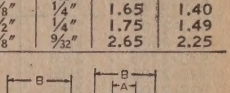
Rubber. High-quality grommets with excep- tional aging qualities. High dielectric prop- erties and oil resistant. "E" is 1/16" for all except 2189, 1/32". Wt. per 100, 8 oz.

Stock No.	Mfr's Type	A	B	C	D	PRICE PER 100	
						100-900	1000-Up
920-2185	2185	5/16"	1/8"	3/16"	3/16"	2.40	2.04
920-2172	2172	7/16"	3/16"	5/16"	3/16"	2.20	1.87
920-2170	2170	5/8"	1/4"	3/8"	1/4"	2.50	2.13
920-2174	2174	5/8"	5/16"	7/16"	1/4"	2.40	2.04
920-2175	2175	21/32"	3/8"	1/2"	1/4"	2.50	2.13
920-2177	2177	3/4"	7/16"	9/16"	1/4"	2.50	2.13
920-2186	2186	1 1/16"	1/2"	3/4"	5/16"	5.30	5.01
920-2187	2187	1 1/8"	5/8"	7/8"	5/16"	5.40	4.90
920-2188	2188	1 1/16"	9/16"	13/16"	5/16"	5.30	5.01
920-2189	2189	1"	3/4"	7/8"	5/32"	5.20	4.42

Vinyl. Durometer hard ness, 45 to 85. Com pletely oil resistant. "E" is 1/16" for all. Av. shpg. wt. per 100, 8 oz.

920-2145	2145	11/32"	1/8"	1/4"	3/16"	1.10	.94
920-2146	2146	7/16"	3/16"	5/16"	7/32"	1.35	1.15
920-2147	2147	3/16"	1/4"	3/8"	1/4"	1.65	1.40
920-2148	2148	5/8"	3/8"	1/2"	1/4"	1.75	1.49
920-2149	2149	13/16"	1/2"	5/8"	9/32"	2.65	2.25

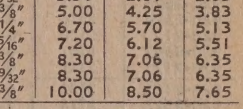
RECESS RUBBER BUMPERS



Wide selection of recess rubber bumpers designed for military, industrial and commerical ap- plications. *With molded-in metal washer. †With 1/2" screw. Wt. per 100, 8 oz.

Stock No.	Mfr's Type	Fig.	A	B	C	PRICE PER 100		
						100-900	1000-4900	5000-Up
920-2192	2192	Y	7/32"	17/32"	1/4"	1.70	1.46	1.30
920-2193	2193	Y	1/4"	5/8"	5/16"	2.20	1.87	1.68
920-2194	2194	Y	9/32"	3/4"	3/8"	3.30	2.81	2.63
920-2184	2184	Y	9/32"	5/8"	9/32"	3.30	2.81	2.63
920-2135	2135	Y*	3/8"	31/32"	3/8"	5.00	4.25	3.83
920-2196	2196	Z†	7/32"	17/32"	1/4"	6.70	5.70	5.13
920-2197	2197	Z†	1/4"	5/8"	5/16"	7.20	6.12	5.51
920-2198	2198	Z†	9/32"	3/4"	3/8"	8.30	7.06	6.35
920-2199	2199	Z†	1/4"	5/8"	9/32"	8.30	7.06	6.35
920-2195	2195	Z†*	3/8"	31/32"	3/8"	10.00	8.50	7.65

SNAP-LOCK PLASTIC GROMMETS

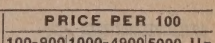


Halves snap tight for greater dielec- tric, extreme chemical and wear resistance, rigid bearing surface. "D" is 1/16". "E" is 1/4". Av. wt. per 100, 4 oz.

Stock No.	Mfr's Type	A	B	C	PRICE PER 100		
					100-900	1000-4900	5000-Up
920-2178	2178	3/16"	5/16"	7/16"	3.30	2.81	2.53
920-2179	2179	1/4"	3/8"	1/2"	3.50	2.98	2.68
920-2180	2180	3/8"	1/2"	5/8"	3.65	3.10	2.79

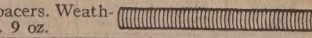
BRASS AND NYLON RODS

Variety of applications as spacers. Weath- er-proofed. One-ft. lengths. 9 oz.



Stock No.	Mfr's Type	Des.	Thread	EACH
920-1400	1400-1	Brass	6-32	.50
920-1401	1401-1	Brass	8-32	.50
920-1402	1402-1	Brass	10-32	.50
920-1403	1403-1	Brass	1/4-20	.55
920-1432	1420-1	Nylon	6-32	1.10
920-1434	1421-1	Nylon	8-32	1.20
920-1436	1422-1	Nylon	10-32	1.50
920-1437	1423-1	Nylon	1/4-20	1.80

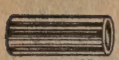
BIRTCHER 21 SERIES PCBTAINER



For 1/16" thick boards. Only .200 maximum width when inserted. Made from beryllium copper. Wt. 6 oz.

Stock No.	Mfr's Type	Length (In.)	EACH			
			1-9	10-24	25-49	50-Up
739-1527	21B-2-4-1	2	.57	.46	.37	.30
739-1528	21B-2-6-1	3	.61	.50	.40	.32
739-1529	21B-2-8-1	4	.66	.52	.42	.34
739-1530	21B-2-9-1	4 1/2	.70	.56	.45	.36
739-1531	21B-2-10-1	5	.72	.57	.46	.37
739-1532	21B-2-12-1	6	.76	.61	.49	.39

H. H. Smith Spacers, Posts and Handles



BRASS SPACERS

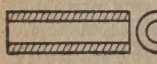
Round spacers for raising sub panels, chassis, condensers, etc. Durable cadmium-plated brass. Precision machined; lengths and outer diameters accurate to ±1/32". Tapped bushings for threads indicated in tables. Sold in multiples of 10 only. Av. shpg. wt. for 10 6 oz.

ROUND—NON-THREADED 1/4" O.D.

Stock No.	Mfr's Type	Screw Size	Length	EACH 10-90	100-240	250-Up
920-8500	8700	4	1/8"	.03	.025	.023
920-8503	8703	4	3/16"	.03	.028	.025
920-2340	2340	4	1/4"	.04	.033	.030
920-8506	8706	4	5/16"	.04	.037	.033
920-2341	2341	4	3/8"	.05	.044	.039
920-2342	2342	4	1/2"	.06	.053	.048
920-2343	2343	4	3/4"	.08	.063	.057
920-2344	2344	4	1"	.09	.072	.065
920-8501	8701	6	1/8"	.03	.025	.023
920-8504	8704	6	3/16"	.03	.028	.025
920-2100	2100	6	1/4"	.04	.033	.030
920-8507	8707	6	5/16"	.04	.037	.033
920-2101	2101	6	3/8"	.05	.044	.039
920-2102	2102	6	1/2"	.06	.053	.048
920-2103	2103	6	3/4"	.08	.063	.057
920-2104	2104	6	1"	.09	.072	.065
920-8505	8705	8	3/16"	.03	.028	.025
920-2105	2105	8	1/4"	.04	.033	.030
920-2106	2106	8	3/8"	.05	.044	.040
920-2107	2107	8	1/2"	.06	.053	.048
920-2108	2108	8	3/4"	.08	.063	.057
920-2109	2109	8	1"	.09	.072	.065

ROUND—THREADED 1/4" O.D.

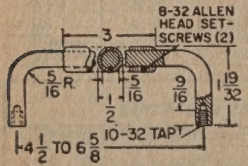
Stock No.	Mfr's Type	Tap	Length	EACH 10-90	100-240	250-Up
920-2370	2370	4-40	1/4"	.05	.039	.035
920-8566	8766	4-40	5/16"	.05	.043	.039
920-2371	2371	4-40	3/8"	.06	.050	.045
920-2372	2372	4-40	1/2"	.07	.060	.054
920-8575	8775	4-40	5/8"	.08	.070	.063
920-2373	2373	4-40	3/4"	.10	.084	.076
920-2374	2374	4-40	1"	.13	.104	.094
920-2120	2120	6-32	1/4"	.05	.039	.035
920-8567	8767	6-32	5/16"	.05	.043	.039
920-2121	2121	6-32	3/8"	.06	.050	.045
920-2122	2122	6-32	1/2"	.07	.060	.054
920-8573	8773	6-32	9/16"	.08	.065	.059
920-2123	2123	6-32	3/4"	.10	.084	.076
920-2124	2124	6-32	1"	.13	.104	.094
920-2126	2126	8-32	3/8"	.06	.050	.045
920-2127	2127	8-32	1/2"	.07	.060	.054
920-2128	2128	8-32	3/4"	.10	.084	.076
920-2129	2129	8-32	1"	.13	.104	.094



ALUMINUM SPACERS

1/4" O.D. tubular spacers with precision machined ends, lengths accurate to ±.005". Aluminum with iridite finish (meet MIL-C-5541 specifications). Inside diameter for #4 screws is .113"; for #6 screws, .140"; for #8, .169". Sold in multiples of 10 only. Av. shpg. wt. 6 oz.

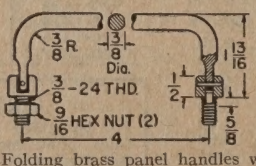
Stock No.	Mfr's Type	Screw Size	Length Inches	EACH 10-90	100-240	250-Up
920-8281	8481	4	1/4	.13	.105	.095
920-8283	8483	4	1/2	.14	.118	.106
920-8301	8501	6	1/4	.13	.105	.095
920-8303	8503	6	1/2	.14	.118	.106
920-8305	8505	6	3/4	.17	.143	.128
920-8307	8507	6	1	.18	.150	.135



ADJUSTABLE HANDLES

Adjustable brass panel handles with mounting center range from 4½" to 6⅝". Internal 10-32 thread with Allen-Head locking screws. Av. shpg. wt., 6 oz.

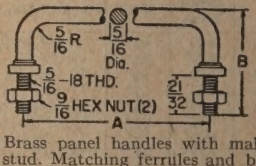
Stock No.	Mfr's Type	Finish	EACH 1-9	10-Up
920-1759	1659	Nickel Plate	4.52	3.85
920-1761	1661	Black Oxide	4.52	3.85



FOLDING HANDLES

Folding brass panel handles with spring-loaded detents that snap into upright or left-or-right folded position. With brass, nickel plated hex nuts. Mount in ⅜" panel holes. Av. shpg. wt. 6 oz.

Stock No.	Mfr's Type	Finish	EACH 1-9	10-Up
920-1762	1662	Nickel Plate	5.20	4.40
920-1763	1663	Black Oxide	5.20	4.40



PAN HAND

Brass panel handles with male thre stud. Matching ferrules and brass, ni plated hex nuts. Av. shpg. wt. 6 oz.

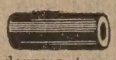
Stock No.	Mfr's Type	Diam. AxB	EACH 1-9	10
920-1707	1607	2x2½"	1.62	1.
920-1709	1609	3x2½"	1.68	1.
920-1711	1611	4x2½"	1.74	1.
920-2053	2053	4¼x2⅛"	1.80	1.
920-1714	1614	6x2¹¹⁄₁₆"	1.86	1.

ALUMINUM POSTS

Round .250" O.D. metallic rods tap through, or at each end. Support separate components or structural members without need for screws or machine nuts. Aluminum with iridite finish. Length O.D. within ±.005" tolerance. *Minimum full-thread de Sold in multiples of 10 only. Av. wt. 3 oz.

Stock No.	Mfr's Type	T	Length Inches	*d	EACH 10-90	100-240	250-
920-8123	8323	4-40	1/2	Thru	.16	.13	.1
920-8127	8327	4-40	1	1/4	.22	.18	.1
920-8129	8329	4-40	1 1/2	1/4	.24	.20	.1
920-8143	8343	6-32	1/2	Thru	.16	.13	.1
920-8145	8345	6-32	3/4	Thru	.19	.155	.1
930-8147	8347	6-32	1	3/8	.22	.18	.1
920-8149	8349	6-32	1 1/2	3/8	.24	.20	.1
920-8151	8351	6-32	2	3/8	.26	.218	.1
920-8152	8352	6-32	2 1/2	3/8	.29	.24	.2
920-8153	8353	6-32	3	3/8	.31	.255	.2
920-8155	8355	6-32	4	3/8	.38	.32	.2

FIBER SPACERS



Round fiber bushings for screw sizes indicate table. Meet MIL-F-1148A, Grade CH specificati Ideal for use in raising sub panels, chassis, densers, transformers, etc. in electronic assemblies. Have 1/4" side diameter. Sold in multiples of 10 only. Av. wt. 2 oz.

Stock No.	Mfr's Type	Screw Size	Length	EACH 10-90	100-240	250-
920-8680	8880	4	1/8"	.04	.033	.0
920-8683	8883	4	3/16"	.05	.038	.0
920-2335	2335	4	1/4"	.05	.043	.0
920-8686	8886	4	5/16"	.06	.049	.0
920-2336	2336	4	3/8"	.07	.055	.0
920-2337	2337	4	1/2"	.08	.065	.0
920-2338	2338	4	3/4"	.10	.085	.0
920-2339	2339	4	1"	.12	.100	.0
920-8681	8881	6	1/8"	.04	.033	.0
920-2130	2130	6	1/4"	.05	.043	.0
920-8687	8887	6	5/16"	.06	.049	.0
920-2131	2131	6	3/8"	.07	.055	.0
920-2132	2132	6	1/2"	.08	.065	.0
920-8696	8896	6	5/8"	.09	.075	.0
920-2133	2133	6	3/4"	.10	.085	.0
920-2134	2134	6	1"	.12	.100	.0
920-2140	2140	8	1/4"	.05	.043	.0
920-2142	2142	8	1/2"	.08	.065	.0
920-2143	2143	8	3/4"	.10	.085	.0
920-2144	2144	8	1"	.12	.100	.0

LEATHER EQUIPMENT HANDLES

Black leather with matching stitching. Spring Glide conto handle moves up for carrying, down when not in use. Will not r under extreme sound conditions. Chrome plated caps. Retracto handle attaches with rivets or screws, drops down when not in Nickel plated steel hardware. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Description	Lgth.	EACH 1-9	10-49	50
920-2089	2089	Spring Glide	6"	3.30	2.75	2.
920-2093	2093	Retracto-Link	4½"	3.00	2.50	2.
920-2094	2094	Retracto-Link	5½"	3.00	2.50	2.
920-2095	2095	Retracto-Link	6¾"	3.00	2.50	2.

Quick Page Reference On Popular Wire Types

*Available on request

PRODUCT SERIES	DEARBORN	COLUMBIA	BELDEN	ALPHA
Service and Power Cords	363	366	370	...
Replacement Cords	...	367	...	...
Extension Cords	...	367	...	...
Test Prod Wire	361	366	370	...
Aircraft Wire	360	...	...	...
Shield. Mike Cable	362	366	368	376
Shield. Audio Cable (Spiral Wrapped)	362	367	370	...
Shield. Audio Cable (Braid Shield)	362	367	370	...
Audio/Data Cable	...	367	369	...
Shield Control Cable	...	366	...	376
Flexible Copper Braid & Shield	...	...	372	376
Unshield Control Cable	...	366	371	...
RG Coaxial Cables	361	...	373	...
Machine Tool Wire	363	*	...	...
Magnet Wire	361	...	370	...
Juke Box Cable	362	*	370	...
Teflon Cables, Shielded (Mil-W-16878 D)	362	...	...	377
UL/CSA Hookup Wire	363	...	372	...
Hookup Wire (Mil-W-76B Type MW)	360	...	372	377
Hookup Wire (Mil-W-16878 D Type B)	360	...	372	377
Hookup Wire, Teflon (Mil-W-16878 D Type E)	360	...	372	377
Hookup Wire, Kynar	363	...	...	...
Bus Bar Wire (Mil-W-3861)	362	...	...	...
Heat Shrink Tubing (Irradiated Polyolefin)	364	...	...	375
Lacing Tape, Nylon	364	...	...	374

Special Striping Service Available by Allied Electronics

A new, fast service is now offered by Allied Electronics and Dearborn Wire on non-stock tracer or striping combinations. Dearborn hookup wire, (Military or U.L.) PVC or teflon, can be striped with 1, 2 or 3 tracer colors on almost any color base. When ordering tracer or striped wire always specify the base color first and then the 1st tracer, 2nd tracer and 3rd tracer as required.

Example: 302010 Blue/Yellow
or 302010 Blue/Yellow/Black/Orange

The first item is blue wire with yellow tracer only. The second is blue wire with 1st tracer of yellow, 2nd of black and 3rd of orange. The charge is the same whether the number of tracers is 1, 2 or 3. As little as 100 ft. of PVC or teflon hookup wire can be striped and the service charges are shown in the tables, right. Only Dearborn wire will be striped in this program. Nylon hookup wire can be ascertained by your local Allied Electronics salesman. Where a set-up charge is shown, this is the total additional charge for the special tracers and must be added to the cost of the base wire. For example, for 300 ft. of PVC hookup wire with a base color of blue and either 1, 2 or 3 tracers, you calculate the cost of 300 ft. of base wire plus the set-up charge of $3.50. If 2000 ft. were needed, by checking the table, the calculation would be the cost of 2000 ft. of base color wire plus $1.75 per 1000 ft. for tracer of striping charges and no set-up charge would be required.

PVC HOOKUP WIRE	Quantity (ft.)	Cost
	100-1999	3.50 Set-up
Non-stock tracer colors any combinations	2000-9999	1.75 per M
	10,000-24,999	1.25 per M
	25,000-Up	1.00 Per M
TEFLON HOOKUP WIRE	100-999	10.50 Set-up
Non-stock tracer colors any combinations	1000-4999	10.50 per M
	5000-24,999	7.50 per M
	25,000-49,999	6.00 per M
	50,000-Up	4.50 per M

Shipments on most orders will be made within 10 days to 2 weeks ARO at Allied Electronics.

Dearborn Military Specification Wire

MIL-W-76B HOOKUP WIRE

TYPE "MW". Uncovered 80°C. .016" PVC Insulation. Rated: 1000 volts. In black, brown, red, orange, yellow, green, blue, violet, grey, white. Tracer colors: white/black, white/brown, white/red, white/orange, white/yellow, whit green, white/blue, white/violet, white/grey. Specify col Tracer available in 1000' spools only.

Mfr's Type	Conductor AWG	MIL Type	NOM O.D.	100' Spools Solid Colors Stock No.	100' Spools Solid Colors EACH	1000' Spools Solid Colors Stock No.	1000' Spools Solid Colors EACH	1000' Spools Tracer Colors Stock No.	1000' Spools Tracer Colors EAC
302407	#24(7x32)	MWC24(7)U	.058"	768C1437	1.87	768C1439	9.00	786C1440	10.5
302401	#24(solid)	MWC24(1)U	.055"	768C1433	1.80	768C1435	7.43	786C1436	8.9
302207	#22(7x30)	MWC22(7)U	.065"	768C1429	2.08	768C1431	10.43	786C1432	11.9
302201	#22(solid)	MWC22(1)U	.059"	768C1424	1.75	768C1426	8.48	786C1427	9.9
302010	#20(10x30)	MWC20(10)U	.073"	768C1420	2.39	768C1422	11.85	786C1423	13.3
302001	#20(solid)	MWC20(1)U	.066"	768C1414	2.07	768C1416	10.28	786C1417	11.7
301816	#18(16x30)	MWC18(16)U	.080"	768C1410	2.96	768C1412	15.75	786C1413	17.2
301801	#18(solid)	MWC18(1)U	.074"	768C1405	2.64	768C1407	13.20	786C1408	14.7
301619	#16(19x29)	MWC16(19)U	.091"	768C1401	3.99	768C1403	23.03	786C1404	24.5

MIL-W-16878/D VINYL HOOK-UP WIRE

TYPE "B". Uncovered .010" PVC insulation with −40°C to +105°C temperature range. 600-volt work range. Stranded conductor. In solid colors and 9 tracer colors on white. Solid colors: black, brown, red, orange, yellow, green, blue, violet, grey and white. Tracer colors: white/black, white/brown, white/red, white/orange, white/yello white/green, white/blue, white/violet, white/grey. Check prop column for solid and tracer color pricing. Other colors availab on special order. Specify color. Tracer colors 1000' only.

Mfr's Type	Conductor AWG	MIL Type	NOM O.D.	100' Spools Solid Colors Stock No.	100' Spools Solid Colors EACH	1000' Spools Solid Colors Stock No.	1000' Spools Solid Colors EACH	1000' Spools Tracer Colors Stock No.	1000' Spools Tracer Colors EACH
173207	#32(7x40)	B-32	.028"	768C1126	2.39	768C1127	12.93		
173007	#30(7x38)	B-30	.032"	768C1124	1.96	768C1125	10.02		
172807	#28(7x36)	B-28	.034"	768C1122	1.92	768C1123	9.11		
172607	#26(7x34)	B-26	.038"	768C1120	1.92	768C1121	10.32		
172407	#24(7x32)	B-24	.044"	768C1116	1.92	768C1118	9.51	786C1119	11.01
172207	#22(7x30)	B-22	.051"	768C1112	2.11	768C1114	10.37	786C1115	11.37
172007	#20(7x28)	B-20	.058"	768C1108	2.51	768C1110	12.45	786C1111	13.95
171819	#18(19x30)	B-18	.068"	768C1104	3.11	768C1106	16.80	786C1107	18.30
171619	#16(19x29)	B-16	.077"	768C1100	3.59	768C1102	20.70	786C1103	22.20

MIL-W-16878/D TEFLON HOOK-UP WIRE

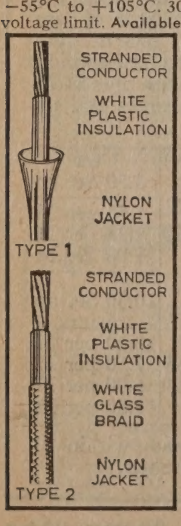
TYPE "E". Silver plated copper conductor, insulated with .010" extruded Teflon insulation, suitable for operational temperatures to +200°C. Resistant to heat, moisture and solvents. 10 solid, 9 tracer colors. Solid: black, brown, red, orange, yellow, green, blue, violet, grey, white. Tracer: White/black, white/brown, white/red, whit orange, white/yellow, white/green, white/blue, white/violet, a white/grey. Check proper column for solid and tracer color pricin Specify color.

Mfr's Type	Conductor AWG	MIL Type	NOM O.D.	100' Spools Solid Colors Stock No.	100' Spools Solid Colors EACH	1000' Spools Solid Colors Stock No.	1000' Spools Solid Colors EACH	1000' Spools Tracer Colors Stock No.	1000' Spools Tracer Colors EACH
13207	#32(7x40)	E-32	.029"	768C0824	5.41	768C0825	24.75		
13007	#30(7x38)	E-30	.032"	768C0822	5.61	768C0823	24.75		
12807	#28(7x36)	E-28	.035"	768C0820	5.91	768C0821	25.50		
12607	#26(7x34)	E-26	.041"	768C0818	6.31	768C0819	29.25		
12407	#24(7x32)	E-24	.046"	768C0812	6.81	768C0814	31.50	768C0815	42.00
12419	#24(19x36)	E-24	.046"	768C0816	7.92	768C0817	39.00		
12207	#22(7x30)	E-22	.052"	768C0806	7.51	768C1002	36.75	768C0809	47.25
12219	#22(19x34)	E-22	.052"	768C0810	8.32	768C0811	41.48		
12007	#20(7x28)	E-20	.061"	768C0800	9.01	768C0802	48.00	768C0803	58.50
12019	#20(19x32)	E-20	.061"	768C0804	9.52	768C0805	49.50		
11819	#18(19x30)	E-18	.070"	768C0704	12.42	768C0706	71.25	768C0707	81.75
11619	#16(19x29)	E-16	.080"	768C0700	15.62	768C0702	89.55	768C0703	100.05

MLW-16878D POLYVINYLCHLORIDE

TYPE "D". Plastic, stranded T.C. conductor, with polyvinylchloride insulation. Operating temperature range: −55°C to +105°C. 3000-volt operating voltage limit. Available in white color only.

Mfr's Type	Conductor AWG	MIL Type	Wall Thickness	NOM O.D.	100' Spools Stock No.	100' Spools EACH	1000' Spools Stock No.	1000' Spools EACH
231419	#14(19x27)	D-14	.031"	.130"	768C1204	6.72	768C1205	49.4
231219	#12(19x25)	D-12	.037"	.162"	768C1202	10.72	768C1203	80.1
231037	#10(36x36)	D-10	.037"	.183"	768C1200	14.32	768C1201	106.5
238133	#8(133x29)	D-8	.040"	.247"	768C1208	37.69	768C1209	270.4
236133	#6(133x27)	D-6	.040"	.291"	768C1206	47.50	768C1207	341.0



MIL-W-5086A UNSHIELDED AIRCRAFT WIRE FOR ELECTRICAL SYSTEMS

Type I (Mfr's Type 102219 through 101219). Single-conductor stranded tinned copper, white polyvinyl chloride insulation, clear nylon (polyamide) jacket overall. −55° to +105° C. Resists abrasives and chemicals. Type II (Mfr's Type 112219 through 111219). Same as Type I, but with white glass braid, cle nylon jacket overall. Type II (Mfr's Type 11104 through 110004). Same, but clear nylon (polyamid jacket is replaced with flame retardent nylon la quered braid overall. Available in 100' or 1000' Spool

Mfr's Type	MIL Type Designation	Conductor Size	Conductor Strand	Nominal O.D.	Nom. Wt. Lbs. Per 100-Ft.	100' SPOOLS Stock No.	100' SPOOLS EACH	1000' SPOOLS Stock No.	1000' SPOOLS EACH
102219	AN-22	22	19/34	.068"	½	768-0910	4.19	768-0911	22.65
102019	AN-20	20	19/32	.078"	1	768-0908	4.43	768-0909	24.56
101819	AN-18	18	19/30	.088"	1	768-0906	5.23	768-0907	29.84
101619	AN-16	16	19/29	.098"	1¼	768-0904	6.09	768-0905	36.75
101419	AN-14	14	19/27	.117"	1¾	768-0902	7.97	768-0903	51.90
101219	AN-12	12	19/25	.137"	2½	768-0900	10.84	768-0901	70.86
112219	AN-22	22	19/34	.075"	¾	768-1022	5.59	768-1023	30.44
112019	AN-20	20	19/32	.085"	1	768-1020	6.31	768-1021	35.55
111819	AN-18	18	19/30	.095"	1¼	768-1018	7.08	768-1019	43.20
111619	AN-16	16	19/29	.105"	1½	768-1014	8.44	768-1015	49.43
111419	AN-14	14	19/27	.125"	1½	768-1012	10.21	768-1013	64.68
111219	AN-12	12	19/25	.143"	2¾	768-1010	12.92	768F1011	84.53
111049	AN-10	10	49/27	.189"	5	768-1008	22.17	768F1009	149.93
118133	AN-8	8	133/29	.240"	8	768-1030	43.96	768F1031	313.11
116133	AN-6	6	133/27	.293"	12	768F1028	57.90	768F1029	417.48
114133	AN-4	4	133/25	.355"	18	768F1026	78.50	768F1027	555.66
112665	AN-2	2	665/30	.425"	29	768F1024	112.85	768F1025	715.61
111817	AN-1	1	817/30	.470"	35	768F1016	120.15	768F1017	810.00

See Page 359 for Pricing on Special Stripes or Tracers for Hookup Wire

Dearborn RG Cable . . Magnet and Test Prod Wire

MIL-C-17D POLYETHYLENE DIELECTRIC RG COAXIAL CABLES

axial cable for use as RF transmission line, antenna lead-in, test ipment lead. Low-loss polyethylene dielectrics. Meet MIL-C-17D specs. Outer jacket safe from most acids, oils, chemicals. †Push-on connector.

r's pe	RG No.	Imp. Ohms	Cond. AWG	O. D.	Cap. pF	Uses Connector Series	100' Spools Stock No.	100' Spools EACH	500' Spools Stock No.	500' Spools EACH	1000' Spools Stock No.	1000' Spools EACH
5B	5B/U	50	16 (Solid)	.335″	29.5	N, C	768-0490	59.58	768F0491	216.68	768F0492	428.55
8	8/U	50	13 (7x21)	.405″	29.5	N, C, HN, and UHF	768-0495	21.03	768X0496	63.45	768X0497	126.98
8A	8A/U	52	13 (7x21)	.415″	29.5	N, C, HN, and UHF	768-0498	21.03	768F0499	72.00	768F0500	144.00
9	9/U	50	13 (7x21)	.420″	30.0	N, C, HN, and UHF	768F0505	54.57	768F0506	195.00	768F0507	389.55
9B	9B/U	50	13 (7x21)	.430″	30	N, C, HN, and UHF	768-0508	68.59	768F0509	248.70	768F0510	496.86
1	11/U	75	18 (7x26)	.405″	20.5	N, C, HN, and UHF	768-0516	18.42	768X0517	54.53	768X0518	108.90
1A	11A/U	75	18 (7x26)	.412″	20.5	N, C, HN, and UHF	768-0519	19.22	768F0520	65.40	768F0521	130.30
4A	14A/U	52	10 (Solid)	.558″	29.5	N, C, UHF	768F0535	56.07	768F0536	190.50	768F0537	345.00
7A	17A/U	52	5 (Solid)	.885″	29.5	N, C, HN, LC	768F0538	88.11	768F0539	328.50	768F0540	648.00
5B	55B/U	53.5	20 (Solid)	.206″	28.5	TNC, BNC, BN, C, UHF	768-0544	17.02	768F0545	61.50	768F0546	123.00
8	58/U	53.5	20 (Solid)	.195″	28.5	TNC, BNC, BN, C, UHF, N, †	768-0549	7.37	768X0550	20.28	768X0551	40.58
8A	58A/U	50	21 (19x33)	.199″	29.5	TNC, BNC, BN, C, UHF, N, †	768-0552	8.41	768-0553	23.18	768U0554	46.43
8C	58C/U	50	21 (19x33)	.199″	29.5	TNC, BNC, BN, C, UHF, N, †	768-0555	9.01	768F0556	26.03	768F0557	52.05
9	59/U	73	22 (Solid)	.242″	21.0	TNC, BNC, BN, C, UHF, N, †	768-0564	9.01	768X0565	23.40	768X0566	46.88
9A	59A/U	75	.023CW	.246″	20.5	TNC, BNC, BN, C, UHF, N, †	768-0567	9.32	768F0568	32.08	768F0569	64.13
9B	59B/U	75	.023CW	.246″	20.5	TNC, BNC, BN, C, UHF, N, †	768-0570	8.32	768F0571	28.32	768F0572	56.63
2	62/U	93	22CW	.250″	13.5	TNC, BNC, BN, C, UHF, N, †	768-0576	9.32	768F0577	26.80	768F0578	53.63
2A	62A/U	93	22CW	.249″	13.5	TNC, BNC, BN, C, UHF, N, †	768-0579	8.72	768-0580	29.49	768-0581	59.88
3B	63B/U	125	22CW	.415″	10	N, C, HN, UHF	768-0582	23.79	768F0583	80.85	768F0584	147.00
1	71/U	95	22CW	.250″	13.5	N, C, HN and UHF	768-0585	13.26	768F0586	43.05	768F0587	85.50
1A	71A/U	95	22CW	.250″	13.5	N, C, HN and UHF	768-0588	17.62	768F0589	61.35	768F0590	122.55
1B	71B/U	93	22CW	.250″	13.5	TNC, BNC, BN, C, UHF, N, †	768-0591	13.92	768F0592	45.75	768F0593	91.43
9B	79B/U	125	22CW	.415″	10	N, C, HN, UHF	768-0594	43.56	768F0595	146.40	768F0596	271.13
8A	108A/U	75	2—(7x28)	.235″	24.5	Twin	768-0597	20.25	768F0598	62.26	768F0599	124.50
4	174/U	50	7/34CW	.105″	30	BNC, Subminax 5116,-27	768-0603	6.01	768-0604	16.50	768-0605	33.00
2	212/U	50	.0556S	.336″	29.5	N, C	768-0620	71.49	768F0621	243.38	768F0622	442.50
3	213/U	50	13 (7x21)	.412″	30.5	N, C, HN, UHF	768F0623	20.03	768F0624	70.13	768F0625	140.25
4	214/U	50	13 (7x21)	.432″	30.5	N, C, HN, UHF	768F0626	83.49	768F0627	284.22	768F0628	516.75
5	215/U	50	13 (7x21)	.412″	30.5	N, C, HN, UHF	768F0629	33.84	768F0630	117.75	768F0631	234.00
8	218/U	50	.195C	.880″	30	N, C, HN, LC	768F0632	108.14	768F0633	363.00	768F0634	675.00
23	223/U	50	.035S	.216″	30	TNC, BNC, BN, C, UHF, N, †	768-0638	32.44	768F0639	110.55	768F0640	216.00

LOW-LOSS FOAM COAXIAL CABLE

eal for use in community TV installations; offer much lower loss an regular RG coaxial cables. Low attenuation and low capaci- nce. Cellular polyethylene reduces signal attenuation as much as 35%. RG59/U ideal as color-TV antenna lead-in. Stable electrical characteristics even with changes in temperature and frequency. Bare copper, except *bare copperweld. †Push-on.

8F	8/U	50	13 (7x21)	.405″	24.5	N, C, HN, UHF	768X0502	23.14	768X0503	80.10	768X0504	151.43
1F	11/U	75	18 (7x26)	.405″	16.5		768-0522	22.03	768X0523	69.53	768Z0524	139.05
8F	58/U	53.5	20 (Solid)	.195″	17.0	TNC, BNC, BN, C, UHF, N, †	768-0558	7.97	768X0560	23.25	768X0561	46.13
9F	59/U	73	22 (Solid)*	.242″	17.3	TNC, BNC, BN, C, UHF, N, †	768-0573	10.01	768-0574	26.63	768X0575	51.00

MIL-C-17D TEFLON DIELECTRIC COAXIAL CABLE

r's pe	RG No.	Imp. Ohms	Conductor AWG	O.D.	Cap. pF	Uses Connector Series	50' Spools Stock No.	50' Spools EACH	100' Spools Stock No.	100' Spools EACH
1	141/U	50	199 (Solid)	.195″	29	TNC, BNC, N, C, UHF, Push-on	768-0601	45.36	768-0602	66.26
8B	178B/U	50	30 (7x28)	.072″	29	Subminax	768-0606	12.02	768-0607	13.88
0B	180B/U	95	30 (7x38)	.142″	15	BNC, Subminax, TNC	768-0608	28.04	768-0609	37.50
7	187/U	75	7x38	.110″	19.3	BNC, Subminax 5116, 27	768-0610	20.53	768-0611	27.05
8	188/U	50	7x.0067	.110″	29	BNC, Subminax 5116, 27	768-0612	20.43	768-0613	25.46
8A	188A/U	50	26 (7x.0067)	.106″	29	BNC, Subminax	768-0614	20.43	768-0615	23.64
5	195/U	95	7x38	.155″	15.2	BNC, TNC, Subminax 5116, 27	768-0616	33.64	768-0617	47.28
6A	196A/U	50	30 (7x38)	.076″	29	Subminax	768-0618	14.02	768-0619	18.00
5A	115A/U	50	7x21	.415″	29.5	N, C, HN	768-0600	3.00 PER FOOT ONLY		

HIGH-GRADE MAGNET WIRE

pper wire covered with tough, abrasion resistant Formvar. kes up less winding space, provides infinite moisture resistance. Has exceptional ability to resist petroleum solvents; impervious to acids and all forms of chemical solutions. *Size/Type.

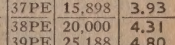
HEAVY FORMVAR MAGNET WIRE ON 1-LB. SPOOLS

tock No.	*	Feet	EACH	Stock No.	*	Feet	EACH
68-0101	20HF	313	3.09	768-0123	31HF	4410	4.50
68-0103	21HF	397	3.14	768-0125	32HF	4900	4.53
68-0105	22HF	501	3.18	768-0127	33HF	6441	4.78
68-0107	23HF	628	3.23	768-0129	34HF	7950	4.92
68-0109	24HF	798	3.41	768-0131	35HF	9002	5.51
68-0111	25HF	1094	3.81	768-0133	36HF	12,800	6.12
68-0113	26HF	1200	3.96	768-0135	37HF	15,898	6.92
68-0115	27HF	1583	4.12	768-0137	38HF	20,000	7.71
68-0117	28HF	1999	4.27	768-0139	39HF	25,188	8.27
68-0119	29HF	2780	4.37	768-0141	40HF	31,700	10.20
68-0121	30HF	3200	4.43				

PLAIN ENAMELED MAGNET WIRE ON 1-LB. SPOOLS

Stock No.	*	Feet	EACH	Stock No.	*	Feet	EACH
768-0100	18PE	198	2.02	768-0122	30PE	3200	2.72
768-0102	20PE	313	2.10	768-0124	31PE	4410	2.73
768-0104	21PE	397	2.13	768-0126	32PE	4900	2.76
768-0106	22PE	501	2.16	768-0128	33PE	6441	2.78
768-0108	23PE	628	2.19	768-0130	34PE	7950	2.87
768-0110	24PE	798	2.28	768-0132	35PE	9002	3.20
768-0112	25PE	1094	2.37	768-0134	36PE	12,800	3.50
768-0114	26PE	1200	2.43	768-0136	37PE	15,898	3.93
768-0116	27PE	1583	2.54	768-0138	38PE	20,000	4.31
768-0118	28PE	1999	2.67	768-0140	39PE	25,188	4.80
768-0120	29PE	2780	2.70	768-0142	40PE	31,700	5.66

TEST PROD WIRE

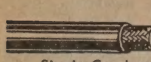


gged, rubber-covered wire designed to withstand tremely high voltages. Offers extreme flexibility and limpness to facilitate testing. Breakdown voltage, 12kV for 20 AWG; 20kV for 18 AWG. Wt. per 100', 2 lbs.

ype	Color	AWG	Str.	Insul. Thkns.	O. D.	Stock No.	100' Spools, EA.	Stock No.	500' Spools, EA.	Stock No.	1000' Spools, EA.
2041	Red	#20	41x36	.046″	.137″	768-3207	4.91	768-3209	14.70	768-3211	27.90
2041	Black	#20	41x36	.046″	.137″	768-3206	4.91	768-3208	14.70	768-3210	27.90
1865	Red	#18	65x36	.047″	.144″	768-3201	5.51	768-3203	16.95	768-3205	32.85
1865	Black	#18	65x36	.047″	.144″	768-3200	5.51	768-3202	16.95	768-3204	32.85

Dearborn Commercial and Military Cables

MICROPHONE CABLE



Single-Conductor

Multiple-Conductor

Plastic and rubber-jacketed mike cable with tinned, stranded copper conductors. All have tinned copper braided shield except *tinned copper spiral shield. Plastic-jacketed types have plastic insulation and rubber-jacketed types, rubber insulation. Multiple-conductor types are color coded. Single-conductor type is especially suitable for lapel or lavalier mikes; 2-conductor types, for low-impedance mikes; 6-conductor type, for power supply cable. †No. Conductors. Av. shpg. wt.: 25′ spool, 1 lb.; 100′ spool, 6 lbs.

PLASTIC JACKET (250 WVDC)

Mfr's Type	†	Size	O.D.	25-Ft. Spool Stock No.	25-Ft. Spool EA.	50-Ft. Spool Stock No.	50-Ft. Spool EA.	100-Ft. Spool Stock No.	100-Ft. Spool EA.
722201	1*	#22	.155″	768-2200	2.20	768-2201	3.20	768-2202	5.75
732202	2	#22	.231″	768-2300	5.21	768-2301	7.45	768-2302	11.45

RUBBER JACKET (600 WVDC)

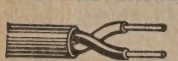
Type 662-	†	Size	O.D.	100′ Spool Stock No.	100′ Spool EA.	250′ Spool Stock No.	250′ Spool EA.	500′ Spool Stock No.	500′ Spool EA.
001	1	#20	.230″	768-2000	18.70	768-2001	34.00	768-2002	67.67
002	2	#20	.270″	768-2003	19.18	768-2004	35.00	768U2005	69.47
003	3	#20	.285″	768-2006	21.31	768-2007	39.50	768X2008	77.28
004	4	#20	.305″	768-2009	24.07	768-2010	45.25	768X2011	87.57
006	6	#20	.345″	768-2012	28.50	768U2013	70.00	768X2014	135.00

MULTIPLE-CONDUCTOR INTERCOM CABLE (Not Paired)

Grey plastic (.020″ thickness) jacketed cable with multiple, non-paired, 010″ PUC insulated, #22 stranded copper conductors. Excellent for permanent installation of speakers, control and intercom circuits. Color coded.

No. of Cond.	Nom. O.D.	Type 832-	100′ Spool Stock No.	100′ Spool EA.	No. of Cond.	Nom. O.D.	Type 832-	100′ Spool Stock No.	100′ Spool EA.
3	.145″	203	768-2702	4.11	12	.255″	212	768-2718	13.17
4	.170″	204	768-2706	5.39	15	.280″	215	768-2720	21.75
5	.175″	205	768-2709	6.35	30	.365″	230	768-2728	67.50
6	.185″	206	768-2712	9.08	40	.425″	240	768-2730	73.50
7	.190″	207	768-2714	10.25	50	.500″	250	768-2732	85.50
8	.200″	208	768-2717	10.76	60	.530″	260	768X2736	116.25

PAIRED UNSHIELDED INTERCOM CABLE (JACKETED)



For intercom and telephone wiring. Color-coded conductors are No. 22 solid copper, cabled in twisted pairs with high-dielectric plastic jacket overall.

No. Cond.	Nom. O.D.	Type 852-	25-Ft. Spool Stock No.	25-Ft. Spool EA.	50-Ft. Spool Stock No.	50-Ft. Spool EA.	100-Ft. Spool Stock No.	100-Ft. Spool EA.
2 (1 pr.)	.130″	201	768-2800	2.33	768-2801	2.50	768-2802	3.50
6 (3 pr.)	.220″	203	768-2803	3.84	768-2804	4.78	768-2805	7.31
8 (4 pr.)	.255″	204	768-2806	5.81	768-2807	6.60	768-2808	10.50
12 (6 pr.)	.275″	206	768-2809	6.47	768-2810	7.20	768-2811	11.10

SHIELDED PLASTIC INTERCOM CABLE

A B C

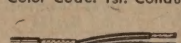
Two-conductor shielded cable for intercoms, sound and PA systems. All have plastic jackets with color-coded conductors. Fig. A has tinned copper shield; Fig. B, spiral-type tinned copper shield; Fig. C, aluminum-wrapped shield with ground wire.

Size	Nom. O.D.	Fig.	Mfr's Type	25-Ft. Spool Stock No.	25-Ft. Spool EA.	50-Ft. Spool Stock No.	50-Ft. Spool EA.	100-Ft. Spool Stock No.	100-Ft. Spool EA.
#22	.185″	A	742202	768-2400	3.27	768-2401	4.15	768-2402	7.43
#22	.195″	C	972202	768-3103	2.94	768-3104	3.20	768-3105	5.17
#20	.210″	C	972002	768-3100	3.40	768-3101	3.60	768-3102	6.36
#20	.195″	B	692002	768-2100	3.47	768-2101	4.40	768-2102	6.60
#22	.175″	B	692202	768-2103	3.07	768-2104	4.50	768-2105	5.63

MILITARY CABLES AND TINNED BUS WIR

MIL-W-16878D SHIELDED TEFLON CABLES

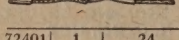
Each conductor stranded silver plated copper, Type E extruded T teflon, .010″ color coded insulation. Braided silver plated cop shield, 90% coverage. Voltage Rating: 600 volts. Temperat Rating: −65°C to +200°C. Resistant to acids, alkalis, oil, fla Color Code: 1st. Conductor: white; 2nd: black; 3rd: red.



TEFLON TAPE WRAP JACKET OVER SHI

Sintered, wrapped, jacketed overall.

Mfr's. Type	No. of Cond.	Conductor AWG Size	Conductor Stranding	Nom. O.D. at max. width high point	Stock No.	1 EA
62401	1	24	19/36	.095″	768-0685	30
62402	2	24	19/36	.140″	768-0686	43
62403	3	24	19/36	.147″	768-0687	59
62201	1	22	19/34	.102″	768-0860	31
62202	2	22	19/34	.154″	768-0861	47
62203	3	22	19/34	.162″	768-0862	67
62001	1	20	19/32	.110″	768-0855	34
62002	2	20	19/32	.170″	768-0856	51
62003	3	20	19/32	.175″	768-0857	73
61801	1	18	19/30	.120″	768-0850	43
61802	2	18	19/30	.190″	768-0851	68
61803	3	18	19/30	.219″	768-0852	88



FEP EXTRUDED JACKET OVER SHIELD

Abrasion-resistant white Teflon jacke

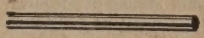
72401	1	24	19/36	.085″	768-0884	27
72402	2	24	19/36	.130″	768-0885	38
72403	3	24	19/36	.135″	768-0886	53
72201	1	22	19/34	.091″	768-0881	27
72202	2	22	19/34	.150″	768-0882	41
72203	3	22	19/34	.158″	768-0883	60
72001	1	20	19/32	.100″	768-0878	30
72002	2	20	19/32	.168″	768-0879	44
72003	3	20	19/32	.178″	768-0880	65
71801	1	18	19/30	.110″	768-0875	41
71802	2	18	19/30	.188″	768-0876	64
71803	3	18	19/30	.207″	768-0877	84

MULTI-COND., TYPE B, NYLON, SHIELD & JACKET

Stranded tinned copper conductors. PVC insul.; color codes: 1: white; 2: bl 3: red. .003″ nylon jacket, 90% cover braided T.C. shield, white PVC jacket.

Mfr's. Type	No. of Cond.	Gauge Size	Strand-ing	Nom. Wall	Jkt. Thks.	Nom. O.D.	100′ Spool Stock No.	100′ Spool EA.	1000′ Spool Stock No.	1000′ Spool EA
262401	1	24	19/36	.010″	.010″	.092″	768-1312	11.32	768-1313	79
262402	2	24	19/36	.010″	.016″	.152″	768-1314	17.13	768-1315	119
262403	3	24	19/36	.010″	.016″	.161″	768-1316	23.74	768X1317	169
262201	1	22	19/34	.010″	.010″	.100″	768-1306	12.52	768-1307	84
262202	2	22	19/34	.010″	.016″	.168″	768-1308	18.82	768X1309	131
262203	3	22	19/34	.010″	.017″	.178″	768-1310	26.03	768X1311	185
262001	1	20	19/32	.010″	.010″	.106″	768-1300	13.02	768-1301	89
262002	2	20	19/32	.010″	.019″	.186″	768-1302	20.69	768X1303	146
262003	3	20	19/32	.010″	.019″	.196″	768-1304	27.83	768X1305	199

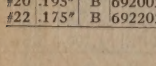
MIL-W-3861 TYPE S TINNED BUS-BAR WIRE



Finest quality, soft-drawn solid cop wire. Tinned for easy soldering. W suited for making non-insulated ho ups in all types of electronic equipment. Excellent choice for grou ing and tie-in circuits in high-fidelity and PA amplifiers. 18-ga and 20-gauge types suitable for shortwave antennas.

Mfr's Type	Size	O.D.	100-Ft. Spool Stock No.	100-Ft. Spool Lbs.	100-Ft. Spool EACH	1000-Ft. Spool Stock No.	1000-Ft. Spool Lbs.	1000-Ft. Spool EAC
926	#26	.016″	768-0208	¼	1.24	768-0209	1	4.3
924	#24	.020″	768-0206	¼	1.28	768-0207	1½	4.8
922	#22	.025″	768-0204	¼	1.32	768-0205	2¼	5.8
920	#20	.032″	768-0202	½	1.55	768-0203	3½	8.1
918	#18	.040″	768-0200	¾	2.08	768-0201	5¼	11.7

"JUKE BOX" SPEAKER CABLE



Type A has two parallel 24-gauge conductors, both stranded—one tinned, one bare. Plastic insulation. Has .058x.115″ O.D. Available in gray or clear—specify color when ordering. Type B has two parallel 18-gauge conductors, 41x34 stranded. Has .115x.215″ O.D. Av able in brown, black, white or gray—specify color desir when ordering. Shpg. wt. per 100 feet: 24 gauge, 1 lb.; gauge, 2½ lbs.

Mfr's Type	Type	Gauge	100′ Spools Stock No.	100′ Spools EACH	500′ Spools Stock No.	500′ Spools EACH	1000′ Spools Stock No.	1000′ Spools EACH
1242T	A	24	768-0355	2.47	768-0356	6.63	768-0357	12.35
1182T	B	18	768-0330	5.61	768-0335	18.23	768CX0340	36.45

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U.L. Listed and C.S.A.–Approved Hookup Wire; Lamp and Power Cordage

KYNAR* HOOKUP WIRE

xtremely high-quality wire wrap type, especially suitable for int to point terminations in computer applications (back panel ards). Excellent resistance to environmental and chemical abra- ns such as acids, oil, alkalies, flame, moisture and fungus. The perb abrasion characteristics and superior resistance to cold w makes this type of mechanically tough insulation suitable for areas where large amounts of wires are used in close quarters. ires listed below are suitable for use with wire-wrap wiring uipment of the type used for automatic point to point termina- n. Conductor is (solid) OFHC (oxygen-free high conductivity) nealed copper. Insulated with Kynar*, a vinylidene fluoride plas- having excellent resistance to ultra violet and weathering; erating temperature range to +125°C continuous; exposure to 0 million roentgens does not change insulation characteristics; echanically tough; self-extinguishing; flame retardant. Specify lors: red, blue, green, white. All hook-up wire supplied on special ardy large hub reels, 1000′ putup only. U.L. Rating: 105°C signed. Average shpg. wt. 2 lbs.

Mfr's. P/N	AWG Size	Insul. Thk's	Nom. O.D.	U.L. Style	Stock No.	PER 1000′ HUB 1-4	5-9	10-Up
73001	30(1)	.005″	.0195″	1422	768C2503	37.50	25.00	22.50
72801	28(1)	.0035″	.020″	1423	768C2502	38.25	25.50	22.75
72601	26(1)	.005″	.027″	1422	768C2501	36.75	24.50	22.00
72401	24(1)	.010″	.042″	1327	768C2500	39.00	26.00	24.25

ENNWALT T.M.

"TEW" HOOKUP WIRE

yle 1015, Sizes #22 through #10, Style 1028 for Size #8. 600 volts. 5°C Ratings. Stranded tinned copper conductor; PVC insulation. tter "B" after part number indicates bonded tinned copper sulation. Available in black, red, green or white—specify color. ther colors available on special order.

Mfr's Type	Conductor AWG	Wt., Lbs. 1000′	500′ Spools Stock No.	500′ Spools EACH	1000′ Spools Stock No.	1000′ Spools EACH
2207	#22(7x30)	6	768C1516	7.04	768C1517	12.42
2207B	#22(7x30)	6	768C1518	7.52	768C1519	13.67
2010	#20(10x30)	7.5	768C1512	8.60	768C1513	15.68
2010B	#20(10x30)	7.5	768C1514	9.08	768C1515	16.88
1816	#18(16x30)	9.8	768C1508	11.22	768C1509	19.43
1816B	#18(16x30)	9.8	768C1510	11.57	768C1511	20.63
1626	#16(26x30)	14	768C1506	13.58	768C1507	25.65
1441	#14(41x30)	20.3	768C1504	18.23	768CX1505	37.07
1265	#12(65x30)	29	768C1502	30.37	768CX1503	56.63
1000	#10(105x30)	55	768CX1500	45.17	768CU1600	85.13
8133	#8(133x29)	74	768CX1520	75.00	768CZ1623	144.75

MTW MACHINE TOOL WIRE

600-volt. 90°C Rating. Stranded copper conductor. U.L. Listed. Styled given below. Supplied in 500′ spools. *Available in black, red, green and white. †Black, red and white. ‡Black only.

UL STYLE #1335 1/32″ INSUL.

Stock No.	Mfr's. Type	Conductor Size	Wt. Lbs.	NOM OD	500′ Spools EACH
768C1704	*461816	18(16x30)	5.0	.113	11.22
768C1703	*461626	16(26x30)	7.1	.125	13.58
768C1702	*461419	14(19x27)	10.5	.139	18.23
768C1701	*461219	12(19x25)	14.5	.158	27.35
768CX1700	*461019	10(19x.0234)	27.5	.182	45.17

UL STYLE #1336 3/64″ INSUL.

768C1803	†521419	14(19x27)	12.5	.165	22.14
768C1802	†521219	12(19x25)	15.5	.185	30.47
768CX1801	†521019	10(19x.0234)	29.5	.214	46.58
768CX1800	†520819	8(19x.0295)	37.0	.249	68.82

UL STYLE #1337 4/64″ INSUL.

768U1903	‡530819	8(19x.0295)	43.0	.265	75.20
768U1902	‡530619	6(19x.0372)	58.5	315	112.20
768Z1901	‡530419	4(19x.0469)	85.0	.365	173.93
768Z1900	‡530219	2(19x.0591)	123.0	.440	250.35

UL STYLE #1061 SEMI-RIGID HOOKUP WIRE

Suitable for business machine applications. Voltage Rating: 300 volts. Temperature Rating: 10°C to +806°C. .009 PVC insulation over solid or stranded tinned copper. Available in black, red, green or white—specify color.

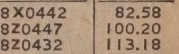
Mfr's Type	Conductor AWG	Wt., Lbs. 1000′	500′ Spools Stock No.	500′ Spools EACH	1000′ Spools Stock No.	1000′ Spools EACH
422601	#26(1)	1.5	768C1622	5.10	768C1623	9.15
422401	#24(1)	2.2	768C1618	4.73	768C1619	8.93
422201	#22(1)	3	768C1614	5.18	768C1615	9.08
422001	#20(1)	4.5	768C1608	6.15	768C1609	11.70
422607	#26(7/34)	1.5	768C1624	5.63	768C1625	10.32
422407	#24(7/32)	2.2	768C1620	5.25	768C1621	9.51
422207	#22(7/30)	3	768C1616	6.00	768C1617	10.37
422007	#20(7x28)	4.6	768C1610	6.45	768C1611	12.75
422010	#20(10x30)	4.6	768C1612	7.05	768C1613	13.05
421807	#18(7x26)	5.5	768C1604	7.65	768C1605	14.10
421816	#18(16x30)	7	768C1606	8.25	768C1607	16.25
421626	#16(26x30)	9	768C1600	10.32	768C1601	19.16

FLEXIBLE RUBBER AND NEOPRENE SERVICE CORD AND POWER CABLE

igh quality construction. All types except S.O. have ubber insulation and rubber jackets. S.O. types ave neoprene jackets. All are U.L. Listed. For appliances, power tools and applications with other electrical products. Specify stranded spool length desired. Average shpg. wt. per 100′, 3 lbs.

Mfr's Type	U.L. Type	AWG Size	No. Cond.	Amps Cap.	Voltage Rating	O.D.	50′ Spools Stock No.	50′ Spools EACH	100′ Spools Stock No.	100′ Spools EACH	250′ Spools Stock No.	250′ Spools EACH
182V	SV	18	2	5	300	.250″	768-0342	5.51	768-0343	7.20	768-0344	17.13
182C	SJ	18	2	7	300	.300″	768-0311	6.92	768-0312	8.03	768-0313	19.11
183C	SJ	18	3	7	300	.340″	768-0346	8.29	768-0347	11.76	768-0348	29.25
184C	SJ	18	4	7	300	.360″	768-0350	16.77	768-0351	22.86	768X0352	47.63
162C	SJ	16	2	10	300	.325″	768-0301	8.01	768-0302	11.78	768-0303	26.93
163C	SJ	16	3	10	300	.355″	768-0305	13.52	768-0306	15.75	768X0307	34.80
164C	SJ	16	4	10	300	.395″	768-0308	18.62	768-0309	25.43	768U0310	52.95
142	S	14	2	15	600	.530″	768-0413	15.62	768-0414	23.03	768U0415	47.93
143	S	14	3	15	600	.560″	768-0417	20.43	768-0418	30.30	768U0419	63.30
144	S	14	4	15	600	.605″	768-0420	26.14	768U0421	38.78	768U0422	80.93
122	S	12	2	20	600	.605″	768-0407	21.31	768U0408	31.50	768U0409	65.63
123	S	12	3	20	600	.635″	768-0410	27.38	768U0411	40.58	768U0412	84.08
102	S	10	2	25	600	.640″	768-0400	30.44	768U0401	37.58	768U0402	82.58
103	S	10	3	25	600	.690″	768-0404	35.78	768U0405	52.08	768U0406	111.60
142	SO	14	2	15	600	.530″	768-0435	21.53	768-0436	31.95	768X0437	66.53
143	SO	14	3	15	600	.560″	768-0440	28.74	768-0441	39.60	768X0442	82.58
144	SO	14	4	15	600	.605″	768-0445	32.80	768X0446	44.70	768Z0447	100.20
123	SO	12	3	20	600	.635″	768-0430	35.88	768X0431	53.33	768Z0432	113.18
103	SO	10	3	25	600	.690″	768-0425	50.17	768X0426	70.88	768Z0427	147.75

RUBBER (SP) LAMP CORD



onsist of two parallel #18 stranded copper wires. All ypes are polarity-ribbed. U.L. Listed. Available in 100, 500 and 1000 foot spools. Specify spool length desired from table below. Shpg. wt. per 100′, 3 lbs.

Mfr's Type	Type	Jacket	Color	100′ Spools Stock No.	100′ Spools EACH	500′ Spools Stock No.	500′ Spools EACH	1000′ Spools Stock No.	1000′ Spools EACH
1182S	SP	Rubber	Brown	768-0317	6.21	768-0319	22.35	768-0321	44.70
1182S	SP	Rubber	Black	768-0316	6.21	768-0318	22.35	768-0320	44.70

Lacing Tapes and Heat Shrink Tubing

DEARBORN

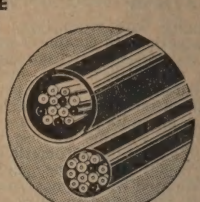
FLEXIBLE SHRINKABLE TUBING

ST 150—COMMERCIAL AND INDUSTRIAL TYPE HEAT SHRINKABLE FLEXIBLE TUBING ON COILS

Size	Exp. I.D.	Recov. I.D.	Wall Thick.	Stock No.	Wt., Lbs.	25′ Coil	Stock No.	Wt., Lbs.	100′ Coil 1-4	100′ Coil 5-9
3/64″	.046″	.023″	.020″	768-0005	.1	2.40	768-0006	.1	7.55	6.30
1/16″	.062″	.031″	.020″	768-0007	.1	2.55	768-0008	.3	8.00	6.65
3/32″	.093″	.046″	.020″	768-0009	.1	2.95	768-0010	.5	9.20	7.65
1/8″	.125″	.062″	.020″	768-0011	.2	3.10	768-0012	1.1	10.25	8.65
3/16″	.187″	.093″	.025″	768-0013	.3	3.80	768-0014	1.4	12.50	10.55
1/4″	.250″	.125″	.025″	768-0015	.4	4.80	768-0016	1.4	15.85	13.35
3/8″	.375″	.187″	.030″	768-0017	.5	5.30	768-0018	2.0	17.50	14.70
1/2″	.500″	.250″	.030″	768-0019	.8	6.00	768-0020	4.5	19.85	16.75
3/4″	.750″	.375″	.035″	768-0021	1.3	8.05	768-0022	5.0	26.60	22.40
1″	1.000″	.500″	.040″	768-0023	2.2	11.60				

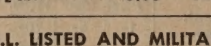
768-0001. Assortment. Ten 6-inch lengths each of six sizes from 3/64″ through 1/4″ (60 pieces). Shpg. wt. 1/2 lb. 4.00

768-0002. Assortment. Ten 6-inch lengths each of four sizes from 3/8″ through 1″ (40 pieces). Shpg. wt. 1/2 lb. 8.00



High quality radiated Poly elfin, provides e tremely snu highly flexib insulation. E cellent when a plied as insul tion over splic Supplied at "E panded I.D. size; shrinks to "Recov. I.D." size in only seconds when heated to a temperature 325°F. Available in black only. Avera shpg. wt. per 100 feet, 1½ lbs. Inquire f availability of larger quantities than tho shown.

ST-301 HEAT SHRINKABLE TUBING—U.L. LISTED AND MILITARY APPROVED



Excellent quality heat shrinkable tu ing, constructed to meet highly rig military specifications (WEPS) MIL-23053B/5. Capable of shrinking (2:1) to *recovered inside diamet in 7 seconds. when heated to 275°. Irradiated, thermally stabiliz Polyoelfin, can be slipped over irregularly shaped material. Availab in black, white, red or clear—specify color.

4-FOOT LENGTHS (Av. Shpg. wt. 1½ lbs.)

Stock No.	Size	Exp. I.D.	Recov. I.D.*	Wall Thick.	25 Lengths/Box 1-4	5-9	10-49
768CX0025	3/64″	.050″	.023″	.016″	13.80	11.70	10.20
768CX0027	1/16″	.062″	.031″	.017″	14.60	12.30	10.70
768CX0029	3/32″	.093″	.046″	.020″	16.90	14.25	12.40
768CX0031	1/8″	.125″	.062″	.020″	17.90	15.20	13.25
768CX0033	3/16″	.191″	.089″	.020″	21.90	18.50	16.15
768CX0035	1/4″	.250″	.125″	.025″	27.60	23.20	20.25
768CX0037	3/8″	.378″	.178″	.025″	30.60	25.75	22.45

Stock No.	Size	Exp. I.D.	Recov. I.D.*	Wall Thick.	5 Lengths/Box 1-4	5-24	25-49
768CX0039	1/2″	.500″	.250″	.025″	6.90	5.85	5.10
768CX0041	3/4″	.750″	.375″	.030″	9.25	7.98	6.80
768CX0043	1″	1.000″	.500″	.035″	13.00	10.92	9.52
768CX0044	2″	2.00″	1.00″	.0451″	27.00	22.62	19.72

Stock No.	Size	Exp. I.D.	Recov. I.D.	Wall Thick.	2 Lengths/Box 1-12	13-62	63-Up
768CX0046	3″	3.00″	1.50″	.050″	17.10	14.32	12.48
768CX0047	4″	4.00″	2.00″	.055″	25.00	20.88	18.22

6-INCH LENGTHS (Av. shpg. wt. 4 oz.)

Stock No.	Size	Min. I.D.	Recov. I.D.*	Nom. Wall Thickness	6″ Lgths. Per Box	Per Box
768C0024	3/64″	.050″	.023″	.016″	40	3.60
768C0026	1/16″	.062″	.031″	.017″	36	3.60
768C0028	3/32″	.093″	.046″	.020″	32	3.60
768C0030	1/8″	.125″	.062″	.020″	28	3.60
768C0032	3/16″	.191″	.089″	.020″	24	3.60
768C0034	1/4″	.250″	.125″	.025″	20	3.60
768C0036	3/8″	.378″	.178″	.025″	16	3.60
768C0038	1/2″	.500″	.250″	.025″	14	3.60
768C0040	3/4″	.750″	.375″	.030″	12	3.60
768C0042	1″	1.000″	.500″	.035″	8	3.60

Assortments. 6″ lengths, assorted colors. Shpg. wt. 1½ lbs.
768-0003. 30 Lengths (3/64 through 3/16″) 4.0
768-0004. 16 Lengths (1/4 through 3/4″) 8.0

NYLON LACING TAPE MIL-T-43435 TYPE I

Flat braided high-tenacity nylon yarn impregnated with microcrystalline fungicidal wax or impregnations to military specs. Available in 500-yard spools. Wt. 1½ lbs.

Stock No.	Mfr's Type	Test Tensile Strength	Width	Color	Finish	Spools, EACH 1-9	10-24	25-49	50-99	100-Up
768-2607	805032W	50 lbs.	.090″	Natural	A	7.50	6.95	6.25	5.50	5.00
768-2606	805032B	50 lbs.	.090″	Black	A	8.30	7.76	7.20	6.20	5.65
768-2609	805036W	50 lbs.	.090″	Natural	W	7.80	7.25	6.75	5.90	4.00
768-2608	805036B	50 lbs.	.090″	Black	W	8.75	8.25	7.75	6.60	4.70
768-2611	805040W	50 lbs.	.090″	Natural	G	7.53	6.88	6.44	5.58	4.98
768-2610	805040B	50 lbs.	.090″	Black	G	8.75	8.25	7.75	6.25	5.65
768-2601	802534W	25 lbs.	.062″	Natural	W	4.80	4.42	4.13	3.65	3.60
768-2600	802534B	25 lbs.	.062″	Black	W	5.69	5.35	5.00	4.35	4.50

Nylon Lacing Tape MIL-T-43435 Type I (Supersedes MIL-T-713D)

POLYESTER LACING TAPE MIL-T-43435 TYPE II

Flat braided polyester yarn impregnated with microcrystalline fungicidal wax or impregnations to meet military specifications. Available in 500-yard spools. 1½ lbs.

Stock No.	Mfr's Type	Test Tensile Strength	Width	Color	Finish	Spools, EACH 1-9	10-24	25-49	50-99	100-Up
768-2613	805058W	50 lbs.	.090″	Natural	A	6.95	6.40	5.80	5.25	4.75
768-2612	805058B	50 lbs.	.090″	Black	A	8.10	7.55	7.00	6.00	5.40
768-2615	805062W	50 lbs.	.090″	Natural	W	6.95	6.40	5.85	5.00	4.75
768-2614	805062B	50 lbs.	.090″	Black	W	8.10	7.55	7.00	6.00	5.40

NYLON LACING TWINE MIL-T-713D TYPE P

Round twisted nylon fiber impregnated with microcrystalline wax. Provides excellent knot retention, excellent for lacing or spot ties. 70-lb. test has 550 yards per 1 lb. spool, 32-lb. test has 1100 yards per spool. Shpg. wt. 1 lb.

Stock No.	Mfr's Type	Test Tensile Strength	Nom. Diam.	Spool Length	Color	Finish	Spools, EACH 1-9	10-24	25-49	50-99	100-Up
768-2617	807013W	70 lbs.	.039″	550 yds.	Natural	W	8.75	7.75	6.95	5.75	4.75
768-2616	807013B	70 lbs.	.039″	550 yds.	Black	W	10.35	8.95	7.60	6.54	5.45
768-2605	804814W	48 lbs.	.029″	750 yds.	Natural	W	8.75	7.75	6.95	5.75	4.75
768-2604	804814B	48 lbs.	.029″	750 yds.	Black	W	10.35	8.95	7.60	6.54	5.45
768-2603	803215W	32 lbs.	.025″	1100 yds.	Natural	W	8.75	7.75	6.95	5.75	4.75
768-2602	803215B	32 lbs.	.025″	1100 yds.	Black	W	10.35	8.95	7.60	6.54	5.45

FINISHES AND COATINGS

W-WAX

A microcrystalline fungicidal wax whic exceeds military specifications, provid excellent knot retention and is suitab for either lacing or spot ties.

G-SYNTHETIC RUBBER

A special continuous coating of fungicid synthetic elastomer (rubber) which exceed Mil Spec requirements, ties easily and ha outstanding knot holding characteristic

A-SYNTHETIC RESIN

A synthetic rubber-like resin formulate with fungicidal ingredients. Handling cha acteristics are excellent, knot retentio is outstanding; meets or exceeds Mil Spe requirements.

OPERATIONAL TEMPERATURE RANGES: −67°F to +250°F.

For Prompt Service, Order from the Allied Facility Nearest Yo

Cable Wrap, Heat Shrinkable Tubing, Blowers

100-FT. SPOOLS

Stock No.	Mfr's Type	Outside Diameter	Description	EACH 1-9	10-49	50-99	100-Up
9-3301	HT1/8C	1/8"		3.25	2.70	2.40	1.80
9-3303	HT1/4C	1/4"	Clear	5.40	4.50	4.00	3.20
9-3305	HT3/8C	3/8"	Polyethylene	8.30	7.50	6.08	4.60
9-3307	HT1/2C	1/2"		12.00	11.20	8.64	6.40
9-3371	HT1/8UR	1/8"	Black	3.60	3.00	2.65	2.00
9-3373	HT1/4UR	1/4"	Polyethylene	6.00	5.50	4.60	3.60
9-3375	HT3/8UR	3/8"	(Ultraviolet	9.00	8.35	6.68	5.25
9-3377	HT1/2UR	1/2"	Resistant)	12.80	12.00	9.44	7.20
9-3321	HT1/8FR	1/8"	White	4.35	3.60	3.20	2.40
9-3323	HT1/4FR	1/4"	Rulan	7.20	6.64	5.52	4.40
9-3325	HT3/8FR	3/8"	(Fire	10.70	9.80	8.07	6.40
9-3327	HT1/2FR	1/2"	Resistant)	15.20	13.60	11.04	8.80
9-3331	HT1/4FR-B	1/4"	Black Rulan	8.28	7.64	6.35	5.06
9-3341	HT1/8N	1/8"	Nylon	6.75	6.20	5.20	4.15
9-3343	HT1/4N	1/4"	(Natural)	12.40	10.10	8.94	8.20
9-3345	HT3/8N	3/8"		22.40	20.40	18.83	16.20

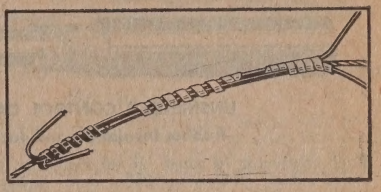
50-FT. SPOOLS

Stock No.	Mfr's Type	Outside Diameter	Description	EACH 1-19	20-49	50-199	200-Up
9-3309	HT3/4C	3/4"	Clear Polyethylene	8.00	7.35	6.00	4.45
9-3379	HT3/4UR	3/4"	Black Polyethylene	8.45	7.80	6.45	5.40
9-3381	HT1/2UR-G	1/2"	Gray Polyethylene	7.60	7.20	5.87	4.25
9-3347	HT1/2N	1/2"	Nylon (Natural)	17.20	16.40	16.60	12.90

TEFLON CABLE WRAP—100-FT. SPOOLS

Stock No.	Mfr's Type	Outside Diameter	PER FOOT 20-999	1000-4999	5000-Up
869F3351	HT1/8T1	1/8" (.030" wall)	.55	.45	.43
869F3353	HT1/8T2	1/8" (.020" wall)	.30	.28	.27
869F3355	HT1/4T	1/4"	1.10	.90	.85
869F3357	HT3/8T	3/8"	1.70	1.40	1.33
869F3359	HT1/2T	1/2"	2.20	1.80	1.70
869F3360	HT3/4T	1/4"	4.40	3.60	3.40
869F3361	HT1T	1"	6.00	4.90	4.70

NEWMAN HELI-TUBE



SPIRALLY-CUT EXPANDABLE PLASTIC CABLE HARNESS

- Protects Against Abrasion
- Applies Quickly and Easily
- Retains Cable Flexibility
- Use with Any Cable Clamp
- Unwinds Easily for Wiring Modifications

Plastic cable harness features strong gripping ability plus excellent flexibility. Ideal for wrapping wire bundles in a variety of electronic circuits and components. Allows individual wires, taps or lead-offs to enter or break out of the harness at any point. Constructed of clean, virgin resins for outstanding flexibility and working ease. Available in four colors for easy circuit identification. Wraps on like tape, reduces labor costs in production lines and assembly stations. Finish is impermeable to moisture and resists chemicals and solvents—non-staining and non-toxic. Protects against abrasion. Can be used with any type of cable clamp. Order from table at left.

Allow 2 to 3 weeks for delivery of Teflon cable wrap. Minimum order, 1/4" or larger is 20 feet. 1/8", 50 feet.

RUSSELL INDUSTRIES HEAT SHRINKABLE TUBING AND HEAT TUNNEL

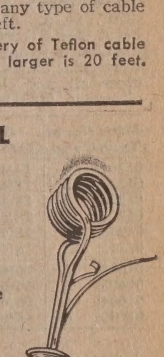
POLYOLEFIN SHRINKAGE TUBING

l-purpose polyolefin tubing that is easy use and forms a tight mechanical bond, en over irregularly shaped materials. ubing is supplied in an expanded form d easily slips over objects to be covered. hen a temperature of approximately 5° F is applied, it immediately returns its pre-determined size (about one-half naller) and forms a tight-fitting mechan- al bond over the object. Will not cold-flow or melt, but retains exceptional form stability throughout its entire temperature range. Longitudinal shrinkage is 5% maximum when tubing is completely recovered. Features high mechanical strength for protection of delicate components.

All pieces are 1" long. **Sold in pkgs. of 100. Black only.** Order optional heat tunnel at right. Av. shpg. wt. per 100 pieces, 5 oz.

Stock No.	Mfr's Type	Size	Min. I.D.	Recov. I.D.	Nom. Wall Thick.	PKG. OF 100 EACH
909-8769	HUG-364	3/64"	.046"	.023"	.016"	2.25
909-8763	HUG-116	1/16"	.063"	.033"	.017"	2.40
909-8767	HUG-332	3/32"	.093"	.046"	.020"	2.55
909-8557	HUG-18	1/8"	.125"	.062"	.020"	2.70
909-8765	HUG-316	3/16"	.187"	.093"	.020"	3.30
909-8755	HUG-14	1/4"	.250"	.125"	.025"	3.90
909-8761	HUG-38	3/8"	.375"	.187"	.024"	4.05
909-8753	HUG-12	1/2"	.500"	.250"	.025"	4.45
909-8759	HUG-34	3/4"	.750"	.375"	.030"	6.30
909-8751	HUG-1	1"	1.000"	.500"	.035"	10.20

HEAT TUNNEL FOR SHRINKABLE TUBING

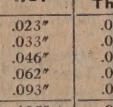


- Lightweight, Easy to Use
- Comfortable Molded Handle
- Compact and Portable
- Three-Wire Grounded Cord
- Shrinks Tubing Up to 1½" Diameter
- Permanently Affixed Spring Clip Stand
- 700° F, 350 Watts

Ideal for use with HUG-tubing at left. Comfortable, easy to use. 110 VAC. Type HUG-TH. 909-8750. 4 lbs..17.95

17.95

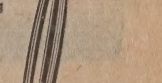
MASTER HEAT GUN BLOWERS



wo heat gun models that deliver instant heat up to 000° F without the danger of an open flame. Perfect r use with "shrinkable" tubing, forming plastics, nd forced drying. Type HG-501 produces heat from 00 to 750° F, and Type HG-751 from 750 to 1000° F. With 8-ft. eoprene cord. Accessories sold below. 115 VAC.

59-1604. Type HG-501. 14 amps. Shpg. wt., 5 lbs.....49.90
59-1605. Type HG-751. 20 amps. Shpg. wt., 5 lbs.....59.95
59-1606. Type 100 Nozzle Adapter. Shpg. wt., ¼ lb.....2.95
59-1607. Type 145 Baffle Plate. For tubing to ¾" dia. ½ lb..2.75
59-1608. Type 150 Baffle Plate. For tubing to 1¼" dia. ¼ lb..2.95

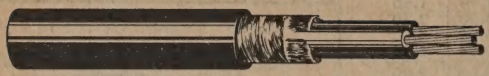
MASTER AIR HEATER BLOWERS



Maintain continuous flow of heated air where you need it. For portable use or permanent mounting. Overall length, 12" (except Type AH-301, 9"). With 8-ft. cord. For 110-120 volts, 60 Hz AC.

Stock No.	Mfr's Type	Amps	Temp. (F)	Wt., Lbs.	EACH
859-1600	AH-301	10	300°	7	56.65
859-1601	AH-501	14	500°	8¼	59.95
859-1602	AH-751	18	750°	8¼	78.35

Control and Microphone Cable, Service Cord, Test Lead



UNSHIELDED CONTROL CABLE

Rubber Insulation and Jacket

Each conductor 20 gauge, 26/30 stranding, tinned copper. Color-coded rubber insulation, rubber outer jacket. Nominal insulation thickness .020″, nominal jacket thickness .035″. Various applications include: control circuits, broadcast and studio use, traffic and fire alarm controls, other heavy duty multi-control applications are also possible. Extra limp. Resistant to all types of impact and abrasion.

Mfr's Type	No. of Cond.	Nom. O.D.	100′ Spool		500′ Spool	
			Stock No.	EACH	Stock No.	EACH
03602	2	.240″	758-0600	9.00	758-0601	43.00
03603	3	.255″	758-0602	9.80	758-0603	46.45
03604	4	.275″	758-0604	11.20	758Z0605	49.40
03605	5	.300″	758-0606	11.50	758Z0607	51.00
03606	6	.315″	758-0608	22.20	758Z0609	107.30
03610	10	.410″	758-0610	49.25	758-0611	225.10

SHIELDED CONTROL/MICROPHONE CABLE

Neoprene Jacket—Heavy Duty

Tinned copper conductors, color-coded rubber insulation (18 ga.-.020″, 16 ga.-.025″), cabled, filled, cotton wrap, tinned copper braid shield, cotton wrap, neoprene jacket. Various applications include: microphones, control circuits, video and audio interconnecting cables, broadcast and studio use. Engineered to prevent cross-talk and eliminate hum pick-up. Extra limp. Resistant to oil, ozone, moisture, sunlight, abrasion and aging.

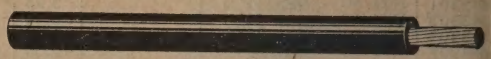
Mfr's Type	No. of Cond.	AWG (Stranding)	Nom. O.D.	100′ Spool		500′ Spool	
				Stock No.	EACH	Stock No.	EACH
01201	1	18(41/34)	.240″	758-0001	16.25	758-0002	79.10
01202	2	18(41/34)	.295″	758-0003	16.95	758Z0004	80.00
01203	3	18(41/34)	.305″	758-0005	37.50	758Z0006	171.10
01204	4	18(41/34)	.330″	758-0007	46.30	758Z0008	222.25
01206	6	18(41/34)	.370″	758-0010	62.75	758Z0011	285.15
01212	12	18(41/34)	.555″	758Z0012	152.10	758Z0013	675.60
01602	2	16(65/34)	.335″	758-0400	25.00	758Z0401	134.00
01603	3	16(65/34)	.355″	758-0402	27.50	758Z0403	138.00
01604	4	16(65/34)	.385″	758-0404	29.00	758Z0405	141.00
01606	6	16(65/34)	.445″	758-0406	79.65	758Z0407	310.30

SHIELDED CONTROL/MICROPHONE CABLE

Rubber Jacket—Heavy Duty

Tinned copper conductors, color-coded rubber insulation .020″, cabled, filled, cotton wrap, tinned copper braid shield, cotton wrap, rubber jacket. Various applications include: microphones, control circuits, video and audio interconnecting cables, broadcast and studio use. Specially engineered to prevent cross-talk and eliminate hum pick-up. Extra limp. Resistant to strong impact and abrasion of all types.

Mfr's Type	No. of Cond.	AWG (Stranding)	Nom. O.D.	100′ Spool		500′ Spool	
				Stock No.	EACH	Stock No.	EACH
01300	1	20(26/34)	.230″	758-0100	11.90	758Z0101	54.90
01302	2	20(26/34)	.270″	758-0102	13.35	758Z0103	60.00
01304	3	20(26/34)	.285″	758-0104	14.70	758Z0105	69.25
01306	4	20(26/34)	.305″	758-0106	16.20	758Z0107	77.50
01308	5	20(26/34)	.330″	758-0108	19.80	758Z0109	101.40
01310	6	20(26/34)	.345″	758-0110	24.50	758Z0111	120.50
01315	10	20(26/34)	.440″	758-0112	62.00	758Z0113	280.00
01316	12	20(26/34)	.525″	758-0114	75.00	.....	.....
01317	15	20(26/34)	.505″	758-0115	105.00	.....	.....



RUBBER TEST LEAD WIRE

Extra flexible stranded tinned copper conductor, rubber insulati
Extra limp. Designed to withstand extremely high voltag
Choice of red or black, three insulation thickness.

Mfr's Type	Insul. Thick. & Color	AWG (Stranding)	Nom. O.D.	100′ Spool		500′ Spool	
				Stock No.	EA.	Stock No.	EA
01326	.040″ Red	20(41/36)	.125″	758-0124	3.25	758-0125	12.
01326	.040″ Black	20(41/36)	.125″	758-0126	3.25	758-0127	12.
01319	.047″ Red	20(41/36)	.140″	758-0116	3.40	758-0117	13.
01319	.047″ Black	20(41/36)	.140″	758-0118	3.40	758-0119	13.
01321	.045″ Red	18(65/36)	.140″	758-0120	3.70	758-0121	15.
01321	.045″ Black	18(65/36)	.140″	758-0122	3.70	758-0123	15.

SERVICE AND POWER CORD

Neoprene Jacket

Stranded bare copper conductors, color-coded rubber insulatio
neoprene jacket overall. U.L. Listed. Resistant to oil, ozo
moisture, sunlight, abrasion and aging.

Mfr's Type	Size Cond. & Type	Volt Rating	Nom. O.D.	100′ Spool		250′ Spool	
				Stock No.	EACH	Stock No.	EAC
01477	18/2 SVO	300V	.250″	758-0214	9.00	758-0215	18.
01478	18/2 SJO	300V	.305″	758-0216	9.50	758-0217	19.
01479	18/3 SJO	300V	.330″	758-0218	11.75	758-0219	24.
01481	16/2 SJO	300V	.330″	758-0220	11.50	758-0221	24.
01482	16/3 SJO	300V	.360″	758-0222	15.10	758-0223	31.
01484	18/2 SO	600V	.390″	758-0224	15.50	758Z0225	32.
01485	18/3 SO	600V	.405″	758-0226	20.20	758Z0227	36.
01487	16/2 SO	600V	.405″	758-0228	18.50	758Z0229	37.
01488	16/3 SO	600V	.430″	758-0230	19.00	758Z0231	39.

SERVICE AND POWER CORD

Rubber Jacket

Stranded bare copper conductors, color-coded rubber insulatio
rubber jacket overall. U.L. Listed. Various applications inclu
power tools, appliances, business machines, etc.

Mfr's Type	Size Cond. & Type	Volt Rating	Nom. O.D.	100′ Spool		250′ Spool	
				Stock No.	EACH	Stock No.	EAC
01420	18/2 SV	300V	.250″	758-0200	5.90	758-0201	12.5
01425	18/2 SJ	300V	.305″	758-0202	7.10	758Z0203	15.5
01435	18/3 SJ	300V	.345″	758-0204	10.00	758Z0205	21.2
01438	18/4 SJ	300V	.365″	758-0206	18.20	758Z0207	37.6
01445	16/2 SJ	300V	.325″	758-0208	8.95	758Z0209	19.2
01450	16/3 SJ	300V	.375″	758-0212	13.90	758Z0213	30.6
01446	16/4 SJ	300V	.395″	758-0210	21.00	758Z0211	42.3
01500	14/2 S	600V	.540″	758-0300	17.20	758Z0301	37.8
01505	14/3 S	600V	.565″	758-0302	24.25	758Z0303	49.2
01509	14/4 S	600V	.605″	758-0304	30.50	758Z0305	66.7
01510	12/2 S	600V	.580″	758Z0306	26.00	758Z0307	51.2
01515	12/3 S	600V	.635″	758Z0308	31.50	758Z0309	69.0
01517	10/2 S	600V	.650″	758Z0310	30.00	758Z0311	68.2
01519	10/3 S	600V	.760″	758Z0312	43.30	758Z0313	91.1

Make Allied your Headquarters for all your wire needs. Write, wire or phone your nearest Allied Electronics office. Our staff will assist you and expedite your order for fastest delivery.

Audio and Data Cable, Power Cord Sets

COLUMBIA

SHIELDED MULTI-CONDUCTOR CABLE

Plastic Jacket

Each conductor 20 gauge 26/34 stranded tinned copper. Color-coded polyethylene insulation .015", cotton wrap, tinned copper braid shield, overall gray PVC jacket .035". Various applications include: control circuits, microphones, video and audio interconnecting cables, broadcast and studio use. Engineered to prevent cross talk and eliminate hum pick-up. Low capacitance.

Mfr's Type	No. of Cond.	Nom'l O.D.	100' Spool Stock No.	100' Spool EACH	500' Spool Stock No.	500' Spool EACH
01643	3	.250"	758-0408	10.45	758Z0409	52.00
01644	4	.260"	758-0410	12.80	758Z0411	58.00
01645	5	.275"	758-0412	13.70	758Z0413	68.00
01646	6	.300"	758-0414	23.50	758Z0415	115.00
01648	8	.330"	758-0416	28.50	758Z0417	135.00
01650	10	.375"	758-0418	42.50	758Z0419	192.00
01652	12	.380"	758-0420	63.00	758Z0421	305.00
01655	15	.410"	758-0422	90.00	758Z0423	435.00
01660	20	.455"	758-0424	122.00	758Z0425	590.00

SPIRAL SHIELDED AUDIO CABLE

PVC Jacket

Tinned copper conductors, color-coded PVC insulation, conductors twisted, tinned copper spiral shield, gray PVC jacket overall. Various applications include: recording studios, radio transmitters, sound systems, electronic circuits where shielding is required. Spiral shield allows ease of pigtail soldering. Offers high resistance to hum pickup and cross-talk.

Mfr's Type	Size & No. of Cond.	Strand.	Nom'l O.D.	100' Spool Stock No.	100' Spool EA.	500' Spool Stock No.	500' Spool EA.
02882	22/2	7/30	.175"	758-0516	4.55	758-0517	20.20
01335	22/3	7/30	.190"	758-0130	7.55	758-0131	34.00
02888	20/2	10/30	.195"	758-0518	5.45	758-0519	23.00
02893	20/3	10/30	.210"	758-0522	8.80	758-0523	39.95
02892	18/2	16/30	.230"	758-0520	6.55	758-0521	29.40
02768	18/3	16/30	.235"	758-0514	8.40	758Z0515	37.70

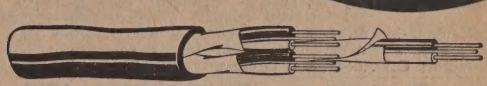
BRAID SHIELDED AUDIO CABLE

PVC Jacket

Tinned copper conductor, color-coded PVC insulation, conductors twisted, tinned copper braid shield, gray PVC jacket overall. Applications include: recording studios, radio transmitters, sound systems, electronic circuits where shielding is required. Engineered to prevent cross-talk and hum pick-up.

Mfr's Type	Size & No. of Cond.	Strand.	Nom'l O.D.	100' Spools Stock No.	100' Spools EA.	500' Spools Stock No.	500' Spools EA.
02679	22/2	7/30	.185"	758-0502	6.80	758-0503	30.50
02678	22/3	7/30	.200"	758-0500	8.20	758-0501	36.50
02680	22/4	7/30	.210"	758-0504	13.60	758-0505	63.70
02681	20/2	10/30	.204"	758-0506	9.90	758-0507	45.00
01332	20/3	10/30	.214"	758-0128	12.20	758-0129	56.40
02683	20/4	10/30	.232"	758-0508	12.85	758-0509	62.20
02686	18/2	16/30	.224"	758-0510	12.50	758-0511	60.75
02687	18/3	16/30	.236"	758-0512	18.00	758-0513	84.20

Allied offers the best percentage of order handling in the country. Cut down on paper work by ordering from Allied—we can supply most of your needs from our huge stocks.



INDIVIDUAL SHIELDED MULTIPLE PAIR AUDIO/DATA CABLE

PVC Jacket

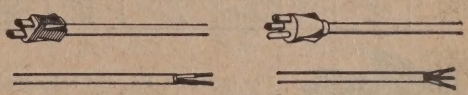
Tinned copper conductor, color-coded insulation (solid—.015" PVC, stranded—.008" polypropylene), each pair and its drain wire under Durafoil® aluminum foil/polyester shield, gray PVC jacket overall. Various applications include: RF and pulse applications requiring superior circuit isolation.

SOLID CONDUCTORS

Mfr's Type	No. Pairs	Cond. Size	Nom'l Jkt. Thick.	Nom'l O.D.	100' Spools Stock No.	100' Spools EACH	500' Spools Stock No.	500' Spools EACH
06035	3	22	.030"	.280"	758-0700	10.90	758Z0701	49.00
06036	6	22	.035"	.400"	758-0702	21.00	758Z0703	100.00
06037	9	22	.040"	.455"	758-0704	29.50	758Z0705	145.00
06039	11	22	.040"	.500"	758Z0708	35.00	758Z0709	170.00
06038	15	22	.045"	.555"	758Z0706	46.00	758Z0707	228.00

STRANDED CONDUCTORS

06040	3	22	.030"	.270"	758-0710	12.55	758Z0711	58.50
06041	6	22	.035"	.395"	758-0712	24.50	758Z0713	121.00
06042	9	22	.040"	.440"	758Z0714	36.00	758Z0715	172.00
06043	11	22	.040"	.485"	758Z0716	41.50	758Z0717	203.00
06044	15	22	.045"	.540"	758Z0718	55.00	758Z0719	272.00
06045	19	22	.055"	.620"	758Z0720	73.00	758Z0721	360.00
06046	27	22	.070"	.760"	758Z0722	109.00	758Z0723	540.00



POWER SUPPLY AND REPLACEMENT CORDS

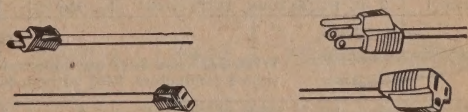
Black rubber. Molded plastic male cap on one end. Other end has outer jacket removed, stripped and tinned. Machine hanked. U.L. Listed. For portable tools, appliances, business machines.

TWO CONDUCTOR

Stock No.	Mfr's Type	Size & Type	Length	Rating	EACH
758-0800	20250	18/2 SV	6'	10A-125V	.80
758-0801	20252	18/2 SV	9'	10A-125V	.95
758-0802	20258	18/2 SJ	10'	10A-125V	1.00
758-0803	20262	16/2 SJ	10'	13A-125V	1.18

THREE CONDUCTOR

758-0804	20264	18/3 SJ	6'	10A-125V	1.00
758-0809	20310	18/3 SJ	8'	10A-125V	1.06
758-0805	20266	18/3 SJ	9'	10A-125V	1.20
758-0810	20316	18/3 SJ	12'	10A-125V	1.48
758-0812	24926	16/3 SJ	6'	13A-125V	1.35
758-0811	20324	16/3 SJ	8'	13A-125V	1.45
758-0813	24932	16/3 SJ	12'	13A-125V	1.80



EXTENSION CORDS

Black rubber. Molded plastic cap and connector. U.L. Listed. applications include: portable tools, appliances, business machines.

TWO CONDUCTOR

Stock No.	Mfr's Type	Size & Type	Length	Rating	EACH
758-0806	20272	18/2 SV	6'	10A-125V	.95
758-0814	26010	18/2 SJ	10'	10A-125V	1.45
758-0815	26025	18/2 SJ	25'	10A-125V	2.75
758-0816	26110	16/2 SJ	10'	13A-125V	1.65

THREE CONDUCTOR

758-0807	20288	18/3 SJ	10'	10A-125V	1.65
758-0817	26525	18/3 SJ	25'	10A-125V	3.20
758-0808	20294	16/3 SJ	15'	13A-125V	3.60
758-0818	26625	16/3 SJ	25'	13A-125V	5.40

SPECIAL INSTRUMENTATION CABLES

TYPE 8700. Miniature coax cable #28 solid tinned copper. Polypropylene insulation, black vinyl jacket. Insulation thickness .005"; jacket thickness .008"; 80% shield coverage; 48 pF per ft. capacitance between conductors. O.D. .054". May be steam sterilized for medical research.

50'	100'			250'	
Stock No.	EACH	Stock No.	Lbs.	EACH	Stock No.	EACH
732-5000	5.34	732-5001	½	6.15	732-5002	14.40

TYPE 8725. Four pairs No. 20 (7x28) tinned copp cable is Beldfoil shielded. Chrome vinyl outer jac et. 105°C maximum operating temperature. Rated at 400 W Only 27 pF capacitance per foot between conductors. O.D. .36 Conductors are color-coded in the following combinations: Blac Red, Green, White, White/Red, White/Black, White/Green, a White/Yellow.

732U5014 500' Spool. Shpg. wt., 37 lbs. ..... 126.
732Z5015 1000' Spool. Shpg. wt., 77 lbs. ..... 253.

PAIRED VINYL INTERCOM AND TELEPHONE UNSHIELDED CABLE

Color-coded conductors cabled in pairs. Free from cross-talk and interference. Vinyl insulation for high dielectric strength. Weather and tear-resistant. "F" in Stock N suffix—shipped from factory in Chicago.

Mfr's Type	Cond.	AWG (Stranding)	O.D.	Wt./100' Lbs.	100-Ft. Spool		500-Ft. Spool		1000-Ft. Spool	
					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8442	2	22 (7x30)	.165"	1¾	.....	.....	732-2079	12.00	732-2080	24.0
8740	2	22 solid	.150"	1½	732-5045	4.18	732-5046	10.05	732-5047	20.1
8741	4	22 solid	.201"	3	732-5048	6.95	732-5049	18.85	732U5050	37.7
8742	6	22 solid	.240"	4	732-5051	9.07	732-5052	26.25	732U5053	52.5
8743	12	22 solid	.305"	5	732-5054	14.90	732K5055	46.15	732U5056	92.3
8744	18	22 solid	.354"	7	732-5057	21.90	732U5058	69.00	732Z5059	138.0
8745	30	22 solid	.420"	11	732-5061	38.20	732Z5060	119.30	732Z5061	238.6
8747	12	22 (7x30)	.340"	6	732-5064	18.00	732X5065	55.90	.....	.....
8748	18	22 (7x30)	.389"	8	732-5066	26.85	732U5067	86.65	732Z5067	173.3
8749	30	22 (7x30)	.425"	14	732-5067	45.55	732Z5068	145.50	732Z5069	291.0
8753	22	22 solid	.384"	9½	732-5072	27.77	732U5073	89.30	732Z5075	178.6
8754	26	22 solid	.409"	11	732-5076	31.00	732Z5077	100.50	732Z5078	201.0
8755	38	22 solid	.480"	14½	.....	.....	732Z5079	149.25	732Z5080	289.5
8756	46	22 solid	.510"	18	.....	.....	732Z5081	180.75	732Z5082	361.5
8757	8	22 solid	.255"	4	.....	.....	732X5083	34.75	732Z5084	69.5

Mfr's Type	Cond.	AWG (Stranding)	O.D.	Wt./100' Lbs.	Length Desired (Minimum 25 ft.)	Stock No.	Price Per Foot	
							Under 100'	Over 100
8746	54	22 Solid	.550"	17¼	Cut to customer's specified length.*	732F5063	.61	.42
8750	54	22 (7x30)	.595"	20½	Maximum continuous 1500'.	732F5070	.84	.58

38 AND 51 PAIR CABLE

For intercom, PA, and balanced-line sound systems. Provide quiet circuit, no crosstalk or interference. TYPE 8751 vinyl insulated, 8752 polypropylene insulated. Color-coded, cabled in pairs. Beldfoil alum num-Mylar overall shield. Chrome vinyl jacke Shipped from factory in Chicago, Ill.

8751	102	22 Solid	.725"	33	Cut to customer's specified length.*	732F5071	1.60	1.10
8752	76	22 Solid	.600"	25	Maximum continuous 1500'	732F5072	1.43	1.00

TWO-CONDUCTOR UNSHIELDED CABLE

For PA and intercoms, speaker extensions. Copper, vinyl-insulated, tinned conductors, except TYPES 8481, 8482 and 8486—untinned. Cabled, chrome vinyl jackets, except TYPE 8795—rose gray vinyl jacket polyethylene insulated. Resists water, oil, grease, su and ozone. †Twisted-pair types without jacket.

Mfr's Type	Cond.	AWG (Stranding)	O.D.	Wt./100' Lbs.	100-Ft. Spool		500-Ft. Spool		1000-Ft. Spool	
					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8205	2	20 (10x30)	.190"	2¼	732-0902	5.67	732-0903	14.10	732U0904	28.20
†8460	2	18 (7x26)	.175"	2¼	732-2128	6.35	732-2129	16.90	732-2130	33.80
8461	2	18 (7x26)	.226"	3¼	732-2131	7.50	732-2132	20.85	732U2133	41.70
†8470	2	16 (19x29)	.195"	2½	.....	.....	732-2148	21.55	732U2149	43.10
8471	2	16 (19x29)	.256"	4	.....	.....	732-2150	28.35	732U2151	56.70
8473	2	14 (19x29)	.332"	6	.....	.....	732U2154	45.00	732U2155	90.00
8477	12	19x25	.384"	8¾	.....	.....	732U2160	63.00	732U2161	126.00
†8481	2	22 Solid	.112"	1	732-2166	3.33	732-2167	7.35	732-2168	14.70
†8482	2	19 Solid	.130"	1½	732-2169	4.35	732-2170	10.95	732-2171	21.90
8486	2	19 Solid	.162"	2	.....	.....	732-2175	13.50	732-2176	27.00
8795	2	22 Solid	.160"	1¾	.....	.....	732-5140	11.50	.....	.....

THREE-CONDUCTOR UNSHIELDED CABLE

TYPES 8483 and 8487 are copper, vinyl-insulated, untinned conductors. 8483 without jacket. 8487 chrome vinyl jacket. TYPE 8794 has polyethylene insulation rose gray vinyl jacket. All are cabled.

8483	3	19 Solid	.132"	2	732-2172	5.78	732-2173	15.75	732X2174	31.50
8487	3	19 Solid	.180"	2½	.....	.....	732-2177	19.50	732U2178	39.00
8794	3	22 Solid	.168"	2	.....	.....	732-5139	14.50	.....	.....

VINYL PLASTIC-COVERED MICROPHONE AND SHIELDED POWER-SUPPLY CABLE

SINGLE

MINIATURE

MULTIPLE

Lightweight, small-diameter cable with low loss, low capacitance. Resists ozone deteriora tion and chemical solvent action. Tinned cop per-braid shield. 8411 is ideal for lapel or lavalier mikes. 8420 is miniature.

Mfr's Type	No. Cond.	AWG (Stranding)	Cap. pF	O.D.	Wkg. Volts	Wt./100' Lbs.	Stock No.	50' Spool	Stock No.	100' Spool	Stock No.	250' Spool	Stock No.	500' Spool
8401	1	25 (7x33)	25	.200"	5000	2¾	732-2000	5.03	732-2001	6.30	732-2002	13.20	732-7865	26.40
8411	1	25 (7x33)	34	.144"	3500	1¾	732-2025	3.86	732-2026	4.95	732-2027	10.45	732-2028	20.90
8422	2	22 (16x34)	18	.231"	1000	4	732-2057	7.55	732-2058	8.95	732-2059	19.75	732-2056	39.40
8403	3	20 (26x34)	25	.244"	600	5	732-2007	10.00	732-2008	12.60	732-2009	28.30	732K2006	56.60
8404	4	20 (26x34)	25	.255"	600	5½	.....	.....	732-2011	13.65	732-2012	31.15	732K2010	62.30
8405	5	20 (26x34)	25	.275"	600	5¾	.....	.....	.....	.....	732-2014	36.40	732K2013	72.80
8420	2	24 (45x40)	22	.185"	500	2½	732-2048	6.90	734-2049	8.85	732-2050	20.50	732-2051	41.00

*Cut to customer's specified length subject to available stock lengths—minimum length 25'; 25' to 199', tolerance plus 25', minus 0; 200' or over, tolerance plus 50', minus 0.

STRAIN GAUGE CABLE

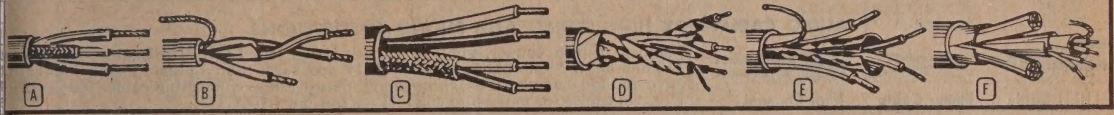
8434, 8723

8728, 8729

TYPE 8434: Conductors consist of 3 strands of tinned copper, and 4 strands of copperweld; 8723: conductors consist of 7 strands of tinned copper. Both types polyethylene insulated conductors, aluminized Mylar shields, chrome vinyl jacket. TYPE 8729: Conductors of tinned copper, polyethylene insulated, under Beldfoil aluminum Mylar shield, tinned drain wire, chrome vinyl jacket. TYPE 8728: Tinned copper, polypropylene insulated, cabled in pairs, each pair Beldfoil aluminum-polyester shielded with stranded copper drain wire, polyester film over each shield, overall Beldfoil shield and tinned drain wire, chrome vinyl jacket.

Mfr's Type	Size	Strands	O.D.	Wkg. Volts	Wt./100' Lbs.	Stock No.	100' Spool	Stock No.	500' Spool	Stock No.	1000' Spool
8434	25	7x33	.179"	400	2	732-2073	10.25	732-2071	31.15	732-2072	62.30
8723	22	7x30	.165"	400	2½	732-5009	10.25	732-5010	30.60	732U5011	61.20
8728	22	7x30	.188"	400	2¾			732-5018	46.15	732U5019	92.30
8729	22	19x34	.250"	600	4¼			732X5020	49.75	732U5021	99.50

SPECIAL INTERCOM AND AUDIO CABLES



TYPE 8722. 4 vinyl insulated conductors; 2 shielded with aluminum-"Mylar" wrapping; 2 unshielded. #20 stranded, tinned copper ground wire; chrome vinyl jacket.

TYPE 8724. Same as 8722 above, except has #22 gauge wire.

TYPE 8726. 12 conductors cabled in 3 quads. "Beldfoil" shield over 2 conductors of each quad, and clear "Mylar" shield over entire quad. Color-coded shields. Ground wire. Chrome vinyl jacket overall.

TYPE 8727. 28 conductor cable. Construction and all other specifications are identical with Type 8726 above.

TYPE 8730. 4 cond., polypropylene ins., Beldfoil shield over one pair, ground wire.

TYPE 8732. 4 polyethylene insulated cond. 1 pair tinned copper shielded, 1 pair unshielded. Chrome vinyl plastic jacket.

TYPE 8733. 3 conductors separately aluminum-"Mylar" shielded. Ground wire for each conductor is tinned, cadmium bronze ribbon under "Beldfoil" Z fold.

TYPE 8734. 3 vinyl insulated conductors. One conductor has a tinned copper shield. The other two conductors are unshielded. Has chrome vinyl jacket overall.

TYPE 8763. 3 poyelthylene insulated conductors; aluminum-"Mylar" shield over 2 conductors; 1 unshielded. No 20 stranded ground wire. Chrome vinyl jacket overall.

Mfr's Type	Fig.	Cond.	AWG (Stranding)	O.D.	Wt./100' Lbs.	100-Ft. Std. Spool		500-Ft. Std. Spool		1000-Ft. Std. Spool	
						Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8722	E	4	20 (7x28)	.260"	3¾			732-5007	37.50	732U5008	75.00
8724	D	4	22 (7x30)	.165"	2¼			732-5012	29.85	732U5013	59.70
8726	F	12	22 (7x30)	.330"	7¼	732-5016	33.30				
8727	E	28	22 (7x30)	.450"	14½	732-5017	68.00				
8730	E	4	22 (7x30)	.250"	3¼			732-5022	37.50	732U5023	75.00
8732	C	4	22 (7x30)	.188x.296"	3	732-5026	11.45	732-5027	32.65	732U5028	65.30
8733	D	3	22 (7x30)	.205"	2½	732-5029	10.90	732-5030	31.15	732U5031	62.30
8734	A	3	22 (7x30)	.194"	2	732-5032	9.10	732-5033	25.75	732U5034	51.50
8763	B	3	20 (7x28)	.210"	3			732-5098	28.90	732U5099	57.80

INSTRUMENTATION CABLE (Multiple Pair Individually Shielded)

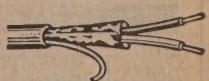
Heavy-duty, low-loss multi-conductor cable. Color-coded for quick, easy identification. Consists of pairs of tinned, solid and stranded copper conductors. Each pair has Beldfoil aluminum-Mylar tape shield that eliminates noise and crosstalk between pairs. Chrome vinyl jacket fights water, sun, oil and grease. Tear-resistant. All conductors are 22-gauge tinned copper. 300 volts suggested working voltage. Polypropylene insulation; maximum operating temperature, 105°C. *Vinyl insulation; maximum operating temperature, 80°C.

Mfr's Type	Pairs	O.D.	Wt./100' Lbs.	100-Ft. Std. Spool		500-Ft. Std. Spool		1000-Ft. Std. Spool	
				Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8767*	3	.270"	5	732-5105	16.90	732U5106	52.20	732Z5107	104.40
8768*	6	.394"	8½	732-5108	34.40				
8764*	9	.440"	13	732-5100	47.00				
8765*	11	.485"	14½	732-5101	56.65			732Z5102	369.00
8766*	15	.540"	19½	732-5103	78.00	732U5104	252.00		
8769	19	.620"	26	732X5109	122.00				
8777	3	.270"	5	732-5121	19.00	732X5122	60.80	732Z5123	121.60
8778	6	.394"	8½	732-5124	38.60	732Z5125	127.50	732Z5126	255.00
8774	9	.440"	13	732-5116	58.60				
8775	11	.485"	15½	732-5117	68.55				
8776	15	.540"	19	732-5118	90.50	732Z5119	294.00	732Z5120	588.00

STANDARD AND MINIATURE BROADCAST AUDIO CABLES

Two-conductor, color-coded broadcast audio cables come in standard and miniature size. TYPES 8437 and 8441 have braided, tinned copper shields; TYPES 8450 and 8451 have spiral-wrapped aluminum-Mylar shields. All types have tinned drain wires. Available in 100, 500 or 1000 foot spools. Average shpg. wt., per 100 feet, 2½ lbs. TYPE 8451 available in Black Vinyl or Gray jacket.

STANDARD CABLE


MINIATURE CABLE

Mfr's Type	AWG (Stranding)	Cap. pF	O.D.	Wkg. Volts	Mfr's Type	AWG (Stranding)	Cap. pF	O.D.	Wkg. Volts
8437	22 Solid	48	.200"	200	8450	22 Solid	40	.118"	200
8441	22 (16x34)	49	.210"	200	8451	22 (7x30)	34	.135"	200

PRICE PER SPOOL

Mfr's Type	Cable Size	Jacket	Wt./100' Lbs.	Stock No.	100' Spool	Stock No.	500' Spool	Stock No.	1000' Spool
8437	CBS	Black Vinyl	2½			732-2074	27.40	732K2075	54.80
8441	CBS	Black Vinyl	3	732-2078	10.22	732-2076	30.75	732K2077	61.50
8450	Miniature	Black Vinyl	1½	732-2102	6.65	732-2103	16.70	732-2104	33.45
8451	Miniature	Black Vinyl	1½	732-2108	7.00	732-2106	19.50	732-2107	39.00
8451	Miniature	Gray	1½	732-2105	7.00	732-2109	19.50	732-2110	31.00

Wire and Cable

HEAVY-POLYTHERMALEZE MAGNET WIRE

- Dual Polyester Film Insulated Magnet Wire
- Features 180° C Temperature Rating
- Exceptional Ability to Resist Solvents
- Complies with MIL-W-583 Specifications

Polythermaleze is a dual polyester film insulated magnet wire with 180° C temperature rating. Especially valuable where heat (as in transformers) is a problem. Has exceptional ability to resist water, oil, acids, and other solvents. Withstan mechanical abrasion equally well. Complies wi MIL-W-583 specifications.

½-lb. Spool				1-lb. Spool			
Stock No.	Size	Type	EACH	Stock No.	Size	Type	EACH
732-0027	14	8059	1.62	732-0041	14	8073	2.87
732-0028	16	8060	1.68	732-0042	16	8074	2.97
732-0029	18	8061	1.71	732-0043	18	8075	3.12
732-0030	20	8062	1.76	732-0044	20	8076	3.12
732-0031	22	8063	1.77	732-0045	22	8077	3.12
732-0032	24	8064	1.83	732-0046	24	8078	3.21
732-0033	26	8065	1.92	732-0047	26	8079	3.42

½-lb. Spool				1-lb. Spool			
Stock No.	Size	Type	EACH	Stock No.	Size	Type	EACH
732-0034	28	8066	2.07	732-0048	28	8080	3.72
732-0035	30	8067	2.30	732-0049	30	8081	4.17
732-0036	32	8068	2.48	732-0050	32	8082	4.59
732-0037	34	8069	2.79	732-0051	34	8083	5.34
732-0038	36	8070	3.30	732-0052	36	8084	6.48
732-0039	38	8071	3.90	732-0053	38	8085	7.77
732-0040	40	8072	4.77	732-0054	40	8086	10.08

AUDIO CABLES FOR HI-FI, STEREO AND PHONO APPLICATIONS

Hi-Fi Cable Phono Cable Dual Channel

Stranded, tinned copper, vinyl or rubber insulation. 8421: Hi-Fi cable, spiral wr 8430 and 8431: Mono phono pickups. 8419 and 8429: Stereo phono pickups. 8416: f stereo and language labs. 8417: Single, miniature audio connecting cable. 100% shiel *Use two cables for maximum channel separation. †.106x.213".

Mfr's Type	Jacket	No. Cond. & AWG	O.D.	Wt./100' Lbs.	25 Ft.		50 Ft.		100 Ft.		250 Ft.	
					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH	Stock No.	EAC
8421	Chr. Vinyl	1-25 (7x33)	.180"	2¼	732-2052	2.98	732-2053	3.66	732-2054	6.00	732-2055	13.2
8431	Rubber	1-24 (16x36)	.095"	¾	732-2069	2.44	.....	.....	732-2070	5.25	.....	.....
*8430	Vinyl	2-32 (7x40)	.050"	¼	732-2067	1.56	.....	.....	.....	.....	732-2068	6.3
8416	Ch. Vinyl	2-25 (7x33)	†	2½	732-2036	3.20	732-2038	3.96	732-2039	7.05	732-2037	16.2
*8429	Vinyl	2-32 (7x40)	.057"	¼	732-2066	2.62	.....	.....	.....	.....	732-2067	12.0
8419	Vinyl	3-32 (7x40)	.067"	½	732-2046	3.06	.....	.....	.....	.....	732-2047	14.8
8417	Chr. Vinyl	1-25 (7x33)	.140"	1⅓	732-2040	2.44	732-2041	2.70	732-2042	5.03	732-2043	10.9

VINYL "JUKE BOX" CABLE

Cable for juke box use. Vinyl inner insulation, vinyl outer jacket, and stranded, color-coded, tinned copper conductors. All shields are aluminum Mylar. TY 8783, unshielded; 8786, 4 shielded, 2 unshielded.

Type	Cond.	AWG (Stranding)	O.D.	Wt./100' Lbs.	Stock No.	100' Spool	Stock No.	500' Spool
8783	3	1—20 (10x30) 2—16 (26x30)	.250"	4½	732-5131	11.80	732U5132	35.25
8786	6	2—22 (7x30) 4—24 (7x32)	.256"	4	732-5133	12.90	732-5134	39.90

VINYL "JUKE BOX" SPEAKER CABLE

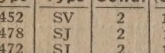
8782 has two parallel conductors No. 24 stranded (7x32) copper, one bare, one tinned. In chrome, white or clear vinyl. O.D., .058x.115". 8649 same except No. 2 stranded (7x28) Specify chrome or clear. O.D., .073x.146

Mfr's Type	Wt./100' Lbs.	Stock No.	50' Spool	Stock No.	100' Spool	Stock No.	500' Spool	Stock No.	1000' Spool
8782	¾	732C5128	1.70	732C5129	1.89	732C5130	6.30	732C5131	12.60
8649	1½	.....	.....	732C4055	2.88	732C4021	10.50	732C4022	21.00

RUBBER-JACKETED SERVICE CORDS AND MULTIPLE-CONDUCTOR CABLES

Cords and cables for use on appliances, power tools, Public Address systems, speakers, remote control circuits, extension cords, test equipment, press-to-talk intercom circuits, etc. Maximum voltage rating, 300 V a —60°C. Stranded copper conductors have rubber insulation, cable with fillers, with black rubber jackets. Color-coded for fast, eas identification.

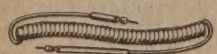
Mfr's Type	U. L. Type	No. Cond.	AWG (Stranding)	Cond.	O.D.	Wt./100' Lbs.	Stock No.	100' Spool	Stock No.	250' Spool	Stock No.	500' Spool	Stock No.	1000 Spo
8452	SV	2	18 (41x34)	Bare	.245"	3¾	.....	.....	.....	.....	732X2111	34.95	732K2112	66.9
8478	SJ	2	18 (41x34)	Bare	.298"	5½	732-2162	12.10	732-2163	19.50	.....	.....	.....	.....
8472	SJ	2	16 (65x34)	Bare	.325"	6¾	732-2152	16.50	732-2153	26.70	.....	.....	.....	.....
8474	.....	2	14 (41x30)	Bare	.360"	8¼	732-2156	21.20	.....	.....	.....	.....	.....	.....
8479	.....	3	14 (41x30)	Bare	.380"	10¼	732-2164	24.60	732U2165	40.80	.....	.....	.....	.....
8453	SV	3	18 (41x34)	Tinned	.265"	4½	732-2113	14.68	.....	.....	732X2114	48.45	.....	.....
8454	.....	4	18 (41x34)	Tinned	.265"	5½	732-2115	17.00	.....	.....	732X2116	52.95	732K2117	105.9
8455	.....	5	3—20(26x34); 2—18(41x34)	Tinned	.280"	5½	732-2118	16.90	732-2119	28.50	.....	.....	.....	.....



BELDEN TEST-PROD WIRE

STANDARD. Rubber-covered limp, flexible conductor withstands extremely high voltages. No. 18 stranded tinned copper, with cotton wrapping. Puncture voltage: Type 8898, 29,000 volts; Type 8899, 20,000 volts.

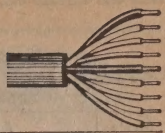
Mfr's Type	Color	AWG (Stranding)	O.D.	Rubber Insul.	Working Voltage	Wt./100' Lbs.	STANDARD SPOOLS					
							Stock No.	25'	Stock No.	100'	Stock No.	500'
8898	Red	18 (65x36)	.230"	.088"	10,000	3¾	732-6034	3.38	732-6035	5.97	732-6036	25.00
8898	Black	18 (65x36)	.230"	.088"	10,000	3¾	732-6031	3.38	732-6032	5.97	732-6033	25.00
8899	Red	18 (65x36)	.144"	.045"	5000	1¾	732-6043	2.05	732-6044	4.41	732-6045	16.20
8899	Black	18 (65x36)	.144"	.045"	5000	1¾	732-6037	2.05	732-6038	4.41	732-6039	16.20
8899	Green	18 (65x36)	.144"	.045"	5000	1¾	732-6040	2.05	732-6041	4.41	732-6042	16.20
8899	Yellow	18 (65x36)	.144"	.045"	5000	1¾	732-6043	2.05	732-6047	4.41	732-6048	16.20
MINIATURE. Similar to above. Puncture voltage, 10,000 volts.												
8890	Red	24 (45x40)	.066"	.019"	1000	½	732-6021	1.69	732-6022	2.85	732-6023	12.00
8890	Black	24 (45x40)	.066"	.019"	1000	½	732-6018	1.69	732-6019	2.85	732-6020	12.00



COILED CORD. Pair of tinned copper cables with red and black rubber insulation. Retract to 8 inches; stretch to 5 feet. No. 20 AWG (42x36). O.D., .173". Handles 5000 volts working, 20,000 volts puncture. Type 8878 has prods. Av. shpg. wt. per pair, ½ lb.

732-6013. Type 8878. . . . Per Pair 3.72 732-6014. Type 8879. Without Prods. . . . . Per Pair 1.59

MULTIPLE-CONDUCTOR CABLE (Not Paired)



nductors are made of flexible, tinned copper stranded re, with color-coded vinyl plastic insulation. Conctors are cabled together and enclosed overall in a rome-vinyl plastic jacket. Resist oil, gasoline and eather. Waterproof jacket is also tear-resistant. Can be easily stripped for use. New types: 8489 for long runs, up to 180', of rotor control cable; 8619 for sound systems, control wiring, remote control. Suggested working voltages: 22-gauge, 200 volts; 18-gauge, 400 volts; 16- and 14-gauge, 600 volts.

Mfr's Type	Cond.	AWG (Stranding)	O.D.	Wt./100' Lbs.	100-Ft. Spool Stock No.	100-Ft. Spool EACH	500-Ft. Spool Stock No.	500-Ft. Spool EACH	1000-Ft. Spool Stock No.	1000-Ft. Spool EACH
8443	3	22 (7x30)	.150"	2	732-2081	5.42	732-2082	14.65	732-2083	29.30
8444	4	22 (7x30)	.168"	2½	732-2084	7.14	732-2085	19.95	732U2086	39.90
8445	5	22 (7x30)	.180"	2¾	732-2087	8.25	732-2088	23.85	732U2089	47.70
8446	6	18, 22 (16x30)	.222"	4¼	732-2090	12.30	732-2091	36.60	732U2092	73.20
8447	7	18, 22 (16x30)	.246"	4¾	732-2093	14.20	732U2094	42.45	732U2095	85.20
8448	8	18, 22 (16x30)	.250"	5	732-2096	15.20	732U2097	46.50	732Z2098	93.00
8449	9	18, 22 (16x30)	.261"	5¼	732-2099	16.25	732U2100	50.25	732Z2101	100.50
8456	10	22 (7x30)	.260"	5¼	732-2120	16.00	732U2121	49.50	732U2122	99.00
8457	12	22 (7x30)	.260"	5½	732-2123	18.00	732X2124	56.25	732Z2125	112.50
8458	15	22 (7x30)	.320"	8	732-2124	30.40	732X2125	92.95	.....	.....
8459	25	22 (7x30)	.370"	11½	732-2126	46.70	732Z2127	145.50	.....	.....
8465	5	18 (16x30)	.272"	5¾	732-2134	16.10	732U2135	49.90	732Z2136	99.80
8466	12	18 (16x30)	.402"	13½	732-2137	38.80	732Z2138	128.25	.....	.....
8467	7	18 (16x30)	.320"	8½	732-2139	21.20	732U2140	65.60	732Z2141	131.20
8468	15	18 (16x30)	.490"	18¼	732-2142	54.00	732Z2143	172.50	732Z2144	345.00
8469	9	18 (16x30)	.375"	10¼	732-2145	28.80	732Z2146	91.50	732Z2147	183.00
8489	4	18 (16x30)	.250"	5¼	732-2179	13.00	732U2180	39.00	732U2181	78.00
8619	19	18 (16x30)	.505"	19	.....	.....	732Z4003	199.50	732Z4004	399.00
8620	4	16 (19x29)	.375"	8¼	732-4005	20.42	732X4006	64.50	732Z4007	129.00
8621	7	16 (19x29)	.455"	13	732-4008	37.50	732Z4009	114.00	.....	.....
8622	12	16 (19x29)	.600"	21¼	732U4010	61.00	732X4011	192.00	732X4012	384.00
8623	15	16 (19x29)	.650"	26¾	732U4013	85.50	.....	.....	.....	.....
8624	19	16 (19x29)	.715"	42¼	732U4014	106.00	.....	.....	.....	.....
8627	4	14 (19x27)	.495"	14¼	732-4015	36.40	.....	.....	.....	.....
8628	7	14 (19x27)	.630"	23	732-4016	61.80	.....	.....	.....	.....
8629	12	14 (19x27)	.770"	38½	732X4017	104.00	.....	.....	.....	.....

RUBBER, HYPALON AND NEOPRENE MICROPHONE AND SHIELDED POWER-SUPPLY CABLE

ecommended for high abrasion resistance and for stallations where cable must make tight bends or perfectly flat. Tinned conds. tinned copper-braid ield. Rubber-covered, except 8407 and 8428, heavyity neoprene jacket; 8402 and 8408 heavy-duty own Hypalon jacket. 8413 is a miniature size.

MULTIPLE

SINGLE

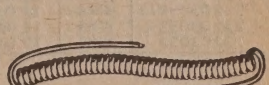
MINIATURE

fr's ype	No. Cond.	AWG (Stranding)	Cap. pF	O.D.	Wkg. Volts	Wt./100' Lbs.	Stock No.	50' Spool	Stock No.	100' Spool	Stock No.	250' Spool	Stock No.	500' Spool
402	2	20 (26x34)	42	.268"	600	6	.....	.....	732-2003	14.40	732-2004	34.35	732U2005	68.70
408	2	16 (65x34)	50	.385"	600	10½	.....	.....	732-2017	24.75	732U2018	60.00	732U2019	120.00
410	1	25 (7x33)	33	.245"	3000	4¼	732-2022	9.50	732-2023	11.90	732-2024	27.45	732K2021	54.90
412	2	20 (26x34)	42	.268"	600	5¼	732-2029	10.45	732-2031	13.35	732-2032	30.60	732K2030	61.20
426	6	20 (26x34)	40	.349"	600	9¼	.....	.....	732-2061	25.50	732U2062	62.70	.....	.....
427	7	20 (26x34)	40	.360"	600	10¼	.....	.....	732-2063	28.05	.....	.....	.....	.....
418	8	20 (26x34)	42	.386"	600	11½	.....	.....	732-2044	31.50	732K2045	76.50	.....	.....
428	2	18 (41x34)	47	.295"	600	6¾	.....	.....	732-2065	17.25	.....	.....	732K2064	81.00
413	2	24 (45x40)	38	.190"	300	2¾	732-2033	10.25	732-2034	12.75	.....	.....	732K2035	61.20
407	4	16 (65x34)	37	.422"	600	15	.....	.....	732-2016	30.45	732U2015	73.50	.....	.....

RETRACTILE (COILED) MICROPHONE AND TELEPHONE CABLE

ICROPHONE: Types 8409 and 8490 are unshielded cords; 8499 has piral wrap copper shield, others have aluminum Mylar tape shields. ype 8499 is single-conductor shielded cord; 8497 has one of its 3 onductors shielded; 8491 has two of its 4 conductors shielded. Neorene jackets. TELEPHONE: 8494 and 8495 are unshielded. Spade rm., strain relief, vinyl jackets. Av., 1/4 lb. *except 3½ lbs.

TELEPHONE

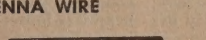


MICROPHONE

Mfr's Type	For	No. Cond.	AWG (Stranding)	O.D.	Extends From	Extends To	Jacket	Stock No.	EACH
8409	Microphone	4	28(7x36)	.165"	12"	6'	Neoprene	732-2020	1.35
8490*	Microphone	5	23(21x36)	.265"	11½"	6'	Neoprene	732-2182	1.77
8491	Microphone	4	23(21x36)	.300"	12"	6'	Neoprene	732-2183	2.04
8497	Microphone	3	23(21x36)	.250"	11½"	6'	Neoprene	732-2186	1.77
8499	Microphone	1	24(45x40)	.160"	7½"	4'	Neoprene	732-2187	1.20
8494	Telephone	4	23(21x36)	.245"	10"	4½'	Vinyl	732-2184	2.04
8495	Telephone	3	23(21x36)	.220"	10"	4½'	Vinyl	732-2185	1.65
8605	Microphone	1	24 (19x36)	.160"	21½"	12'	Vinyl	732-4000	1.80

MARINE RADIO ANTENNA WIRE

inned copperweld, with brown weather esistant polyethylene insulation. Not ffected by sun, moisture or salt spray. hpg. wt. per 100-ft. spool, 3¾ lbs.



Mfr's Type	AWG Stranding	O.D. In.	Stock No.	100-Ft. Spool	Stock No.	500-Ft. Spool
8201	20(7x28)	.278	732-0900	8.00	732-0901	22.65

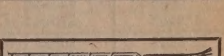
7mm IGNITION WIRE

For all cars, light trucks and tractors. Tinned copperweld, high dielectric rubber insulation with overall black neoprene sheath for maximum cable protection. Shpg. wt. per 100-ft. spool, 4¾ lbs.

Mfr's Type	AWG Stranding	O.D. In.	Color	Stock No.	100-Ft. Spool
8689	20(7x28)	.278	Black	732-4054	8.25

INSULATED LITZ WIRE

YPE 8817. Celenamel insulated 5x44 stranded cop- er, with one nylon wrap. Excellent for winding ntenna primaries. Also for hand-wiring RF coils and IF coils. Outside diameter .008". 100-ft spool. Shpg. wt., ¼ lb.
732-6001 ..... .81

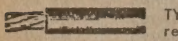


HIGH-VOLTAGE CABLE

High voltage cables for use by R&D organizations and power companies. Recommended for steady state DC voltages and pulse discharge systems. 8870 copperweld, cond. polyethylene, polyeth. ins., tinned copper braid. 8871 polyeth. rod,copper braid, cond. polyeth. polyeth. ins., copper braid. Both blk. polyeth. jkt.

Mfr's Type	AWG (Stranding)	O.D.	Working Voltage	Breakdown Voltage†	Wt./100′ Lbs.	25′ Spool		100′ Spool	
						Stock No.	EACH	Stock No.	EACH
8870	22 (Solid-Copperweld)	.440″	80,000	160,000	8	.....	.....	732-6010	38.85
8871	16 (Braided-Copper)	.830″	200,000	400,000	25	732-6011	65.00	732U6012	175,50

MIL 16878D—VINYL, 600 VOLT, 105° C



TYPE B. Tinned, stranded copper. In brown, red, orange, yellow, green white, black and blue. Specify color desired.

Mfr's Type	Gauge (Strand)	O.D.	Wt./100′ Lbs.	100′ Spools		1000-Ft. Spools	
				Stock No.	EA.	Stock No.	EA.
8598	30 (7x38)	.032″	¼	732C3037	2.22	.....	.....
8597	28 (7x36)	.035″	¼	732C3036	2.18	.....	.....
8505	26 (7x34)	.039″	¼	732C3010	2.18	732C3011	10.40
8504	24 (7x32)	.044″	¼	732C3008	2.18	732C3009	9.70
8503	22 (7x30)	.050″	½	732C3006	2.38	732C3007	10.60
8502	20 (7x28)	.058″	½	732C3004	2.88	732C3005	12.75
8501	18 (7x26)	.068″	¾	732C3002	3.15	732C3003	16.20
8500	16(19x29)	.077″	1	732C3000	4.09	732C3001	21.60

MIL 16878D—VINYL INSULATION, 3000 VOLTS, 105° C

TYPE D. Tinned, stranded copper. In brown, red, orange, yellow, green, white, black, blue. Specify color.

8971	22 (7x30)	.090″	¾	732C7012	2.70	.....	.....
8970	20 (7x28)	.098″	¾	732C7011	3.18	.....	.....
8969	18 (7x26)	.108″	1¼	732C7010	3.51	.....	.....

MIL 16878D—TEFLON-INSULATED, 600 VOLTS, 200° C

TYPE E. Stranded, silver-coated copper wire. In brown, red, orange, yellow, green, white, black, and blue. Specify color. Av. wt./100′ ¾ lb.

Mfr's Type	AWG (Strand)	O.D.	100-Ft. Spools		500-Ft. Spools	
			Stock No.	EACH	Stock No.	EACH
83001	28 (7x36)	.036″	732C9000	7.00	732C9001	14.10
83002	26 (7x34)	.041″	732C9002	7.55	732C9003	15.95
83003	24 (19x36)	.046″	732C9004	9.20	732C9005	20.45
83006	22 (19x34)	.052″	732C9006	10.12	732C9007	22.95
83007	20 (19x32)	.060″	732C9008	11.68	732C9009	27.30
83009	18 (19x30)	.071″	732C9010	15.68	732C9011	38.83
83010	16 (19x29)	.080″	732C9012	19.10	732C9013	48.53

MIL-W-76B—VINYL INSULATION, 600 AND 2500 V., 80° C

TYPE HW. Tinned stranded copper wire with heavy-wall insulation. 8585, 2500 V, all other 600 V; Wall thickness is .048″ except Type 8585, .034″. Available in red, white and black. Specify color wanted.

Stock No.	Mfr's Type	Gauge	Wt., O.D.	Wt., Lbs.	100-Ft. Spool
732C3035	8585	16 (26x30)	.128″	1¾	3.72
732C3034	8584	14 (14x30)	.171″	3	6.36
732C3033	8583	12 (65x30)	.191″	3¾	8.55
732C3032	8582	10 (105x30)	.220″	5¼	13.05

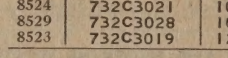
MIL-W-76B—VINYL INSULATION, 1000 VOLTS, 80° C

TYPE MW. In brown, red, orange, yello green, white, black and blue—spec choice when ordering.

Mfr's Type	Gauge	O.D.	Wt./100′ Lbs.	100-Ft. Spools	
				Stock No.	EAC
8525	24 (7x32)	.058″	½	732C3022	2.13
8530	22 (Solid)	.059″	½	732C3029	2.00
8524	22 (7x30)	.064″	½	732C3020	2.38
8529	20 (Solid)	.066″	½	732C3027	2.40
8523	20 (10x30)	.070″	½	732C3018	2.73
8522	18 (16x30)	.080″	¾	732C3016	3.33
8528	18 (Solid)	.074″	¾	732C3025	3.06
8531	16 (Solid)	.085″	1	732C3031	3.87
8521	16 (26x30)	.098″	1	732C3014	4.58
8520	14 (41x30)	.111″	1¾	732C3012	6.45
8527	12 (65x30)	.130″	3	732C3024	9.80

Mfr's Type	1000-Ft. Spools		Mfr's Type	1000-Ft. Spools	
	Stock No.	EACH		Stock No.	EAC
8525	732C3023	9.30	.....	.....	.....
8530	732C3030	8.55	8522	732C3017	16.7
8524	732C3021	10.95	8528	732C3026	14.7
8529	732C3028	10.80	8521	732C3015	24.0
8523	732C3019	12.45	8520	732C3013	37.5

MIL-W-76B—SHIELDED, NYLON JACKET, 1000 V, 80° C

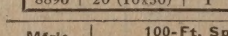


TYPE MW. Cable with tinned copp inner conductor and shield. Vir insulation between inner conduct and shield with nylon jacket over all. White only. *100-ft.

Type	Gauge	*Lbs.	O.D.	Type	Gauge	*Lbs.	O.D.
8893	22 (7x30)	1	.096″	8892	18 (16x30)	1¾	.114″
8896	20 (10x30)	1	.105″	8894	16 (26x30)	2¼	.132″

Mfr's Type	100-Ft. Spools		1000-Ft. Spools	
	Stock No.	EACH	Stock No.	EACH
8893	732-6026	8.75	732-6027	47.25
8896	732-6029	8.65	732-6030	51.75
8892	732-6024	9.90	732-6025	54.60
8894	732-6028	12.45	.....	.....

TYPE 8885 SHIELDED GRID-WIRE



Single-conductor copper braid shield. 300 volts suggested working voltage.

Stock No.	O.D.	Stranding	Spool Lgth.	Lbs.	EAC
732-6016	.117″	20 (10x30)	25′	½	2.4
732-6017			100′	1½	4.9

U.L.-LISTED HOOKUP WIRE 105° C (CSA 600-V TYPE TEW)

Vinyl insulated hookup and lead wire. Tinned copper conductor. Available in eight insulation colors: brown, red, orange, yellow, green, white, black, and dark blue. When ordering, specify insulation col wanted.

Mfr's Type	AWG (Stranding)	O.D.	Wt./100′ Lbs.	STANDARD SPOOLS					
				Stock No.	100′	Stock No.	500′	Stock No.	1000′
8920	22 (7x30)	.095″	¾	732C7008	2.69	.....	.....	732C7009	12.60
8919	20 (10x30)	.102″	1	732C7006	3.15	.....	.....	732C7007	16.00
8918	18 (16x30)	.112″	1¼	732C7004	3.90	.....	.....	732C7005	20.25
8917	16 (26x30)	.126″	1¾	732C7002	5.20	732C7003	14.70	.....	.....
8916	14 (41x30)	.141″	2½	732C7000	7.00	732C7001	20.10	.....	.....

FLEXIBLE COPPER BRAID SHIELDING AND BONDING CABLE

Flexible tinned copper braiding for shielding conductors and cables of all sizes. Provides approximately 90% shield coverage when applied over recommended dia. Braided in tubular form for easy shielding of any wiring. Strandin column below indicates number of AWG tinned solid co per wires braided together to form complete shield.

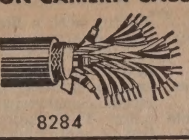
Mfr's Type	AWG Stranding	Approx. Cir Mil Area	Oval MAX. I.D. (Inch)	Flat Width (Inch)	Wt./100′ Lbs.	50-Ft. Spool		250-Ft. Spool	
						Stock No.	EACH	Stock No.	EACH
8660	96x34	3800	5/32	7/32	1½	732-4023	4.27	732-4024	13.05
8668	120x34	4700	3/16	5/16	2	732-4031	5.87	732-4032	17.25
8661	192x34	7600	1/4	9/16	3	732-4025	6.76	732-4026	21.45
8669	336x34	13.300	5/8	11/16	5	732-4033	14.60	732-4034	46.95
8662	576x34	22,900	—	19/32	7½	732-4027	20.58	732-4028	67.50
8663	168x34	6700	5/16	7/16	3	732-4029	7.24	732-4030	23.10
8670	480x30	48,000	—	3/4	15	732-4035	32.60	732K4036	105.75
8671	864x36	21,600	—	11/16	7½	732-4037	23.82	732-4038	78.30
8672	528x36	13,200	—	9/16	5	732-4039	16.68	732-4040	51.00

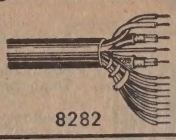
Order from Allied Electronics for Prompt Shipmen

TELEVISION CAMERA CABLES

8283

8286


8284


8282

8280

TYPE 8283. 82-conductor color camera cable. Tinned-copper, color-coded vinyl-insul. conductors. Tinned copper braid shield. Chrome vinyl plastic jacket. 1.22" nom. O.D. 94 lbs. per 100-ft.
32F0959. Minimum 25-ft. ..... Per Ft. 5.10
00' or More ..... Per Ft. 3.55

TYPE 8286. 28-conductor Hypalon TV camera cable, 75 ohms, designed to remain flexible in cold weather. Ideal for transistorized cameras. Tinned copper braid shield with black Hypalon jacket. Similar to 8280. .730" nom. O.D. Per 100-ft., 38 lbs.
32F0961. Minimum 25-ft. ..... Per Ft. 1.45
00' or More ..... Per Ft. 1.00

TYPE 8280. 28-conductor camera cable. Tinned-copper, color-coded vinyl-insul. conductors. Tinned copper braid shield. Chrome vinyl jacket, .750" nom. O.D. Per 100-ft., 34 lbs.
32F0955. Minimum 25-ft. ..... Per Ft. 1.45
00' or More ..... Per Ft. 1.00

TYPE 8282. 13-conductor TV-eye cable. Tinned-copper, color-coded, vinyl insulated conductors. Chrome vinyl jacket, .470" nom. O.D. 15½ lbs. per 100-ft.
732F0958. Minimum 25-ft. ..... Per Ft. .64
100' or More ..... Per Ft. .44

TYPE 8284. 24-conductor camera cable. Tinned-copper, color-coded vinyl-insul. conductors. Tinned copper braid shield. Chrome vinyl plastic jacket, .800" nom. O.D. 41 lbs. per 100-ft.
732F0690. Minimum 25-ft. ..... Per Ft. 1.77
100' or More ..... Per Ft. 1.23

TV CABLE ORDERING INFORMATION. Cut to customer's specified length subject to available stock lengths—minimum length 25'; 25' to 199', plus 25', minus 0; 200' or more, plus 50', minus 0. Shipped from factory in Richmond, Indiana. No C.O.D.

MINIATURE 75-OHM SHIELDED LOW-CAPACITY VIDEO CABLE

TYPE 8279. Miniature version of Type 8281 (at right). Tinned compacted conductor No. 23 AWG (7x31), polyethylene insulated, with tinned copper braid shield, black ploeythylene jacket. 100% sweep tested. Capacitance, 21 pF/per foot. Attenuation: 4.9 dB at 100 MHz. Nominal impedance, 75 ohms. Nominal outside diameter: 0.220".
32-0954. 100-Ft. Spool. 3½ lbs. ..... Per Spool 16.48
32-0952. 250-Ft. Spool. 8¼ lbs. ..... Per Spool 24.75
32-0953. 500-Ft. Spool. 14¾ lbs. ..... Per Spool 49.50

75-OHM VIDEO CABLE

TYPE 8281. Finds many applications in the transmission of video signals in TV studios. Provides superior picture definition (color or black-and-white), ends periodicity problems. Inner conductor is #20 solid tinned copper, polyethylene insulated. Tinned-copper double braid shield. Jacket is black polyethylene. Nominal capacitance of 21 pF. Attenuation 2.7 dB at 100 MHz. For UHF TV and other high-frequency uses. Nominal outside dia: 0.304". Velocity of propagation: 66%. 100% sweep.
732X0956. 500-Ft. Spool. 37 lbs. ..... Per Spool 105.00
732Z0957. 1000-Ft. Spool. 77 lbs. ..... Per Spool 210.00

RG HIGH-FREQUENCY COAXIAL CABLE

MIL-C-17A. Low-loss, flexible polyethylene inner jacket, covered with copper-braid shield, black plastic outer jacket, except RG9/U, gray plastic outer jacket, silver-coated copper shielding. Impervious to weather, corrosives. RG8/U and RG9/U are medium-size video and communications cable. RG11/U is medium-sized 75-ohm video and communications cable. RG58/U ideal for RF, test equipment.

Mfr's Type	RG No.	AWG (Stranding)	O.D. (In.)	Imp. Ohms	Cap. pF	Conductors	Wt./100' Lbs.	Stock No.	100' Spool	Stock No.	500' Spool	Stock No.	1000' Spool
8237	8/U	13 (7x21)	.405	52	29.5	Bare Copper	11¼	732-0923	24.25	732X0921	64.80	732X0922	129.60
8242	9/U	13 (7x21)	.420	51	30.0	Silvered Copper	14¼	732-0933	61.85	.....	.....	732X0932	397.50
8243	9B/U	13 (7x21)	.420	50	20	Silvered Copper	13¾	.....	.....	732Z0934	253.80	.....	.....
8238	11/U	18 (7x26)	.405	75	20.5	Tinned Copper	10¼	732-0924	20.80	.....	.....	732Z0925	111.30
8259	58A/U	20 (19x.007)	.195	50	30.8	Tinned Copper	3	732-0939	9.80	732-0940	23.70	732U0938	47.40
8240	58/U	20 (Solid)	.195	53.5	28.5	Bare Copper	3¼	732-0928	8.35	732-0926	20.70	732U0927	41.40
8262	58C/U	20 (19x.007)	.195	50	28.5	Tinned Copper	2¾	.....	.....	732-0941	26.55	732X0942	53.10
8263	59B/U	23 (Solid)	.242	75	20.5	Bare Copperweld	4	.....	.....	732-0942	28.90	732X0943	57.80
8241	59/U	22 (Solid)	.242	73	21.0	Bare Copperweld	4	732-0931	10.25	732X0929	23.90	732U0930	47.80
8254	62/U	22 (Solid)	.242	93	13.5	Bare Copperweld	4	732-0937	10.90	732X0935	27.40	732U0936	54.80
8216	174/U	26 (7x34)	.100	50	30.4	Bare Copperweld	1	732-0914	6.75	732-0915	16.80	732-0916	33.60

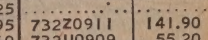
TEFLON—MIL-C-17D. All have silver coated copperweld conductors and one silver coated copper shield. Operate from —50° to +200°C ambient temperature. Extremely low loss. High voltage breakdown. Meet Navy drawing RE49B716.

Mfr's Type	RG No.	AWG (Stranding)	O.D. (In.)	Imp. Ohms	Cap pF/ft.	Jacket Type	Wt./100' Lbs.	Stock No.	100-Ft. Spool	Stock No.	500-Ft. Spool
83266	180B/U	30 (7x38)	.142	95	15	BROWN FEP	2¼	732-9102	46.70	732-9103	145.50
83265	178B/U	30 (7x38)	.072	50	29	BROWN FEP	¾	732-9100	20.50	732-9101	60.00
83270	196A/U	30 (7x38)	.076	50	29	WHITE TFE	¾	732-9106	24.90	732-9107	71.25
83269	188A/U	26 (7x.0067)	.106	50	29	WHITE TFE	1½	732-9104	33.40	732-9105	102.00

SPECIAL-PURPOSE LOW-LOSS COAXIAL CABLE. Low attenuation and low capacitance. Suitable for community TV cable systems. Stable electrical characteristics even with changes in temperature and frequency. Types 8214 and 8219 are very well-suited for Amateur Radio and Citizens Band antenna use. All types listed have black polyethylene jackets.

Mfr's Type	RG No.	AWG (Stranding)	Material	O.D.	Imp. Ohms	Cap. pF	Wt./100' Lbs.	Stock No.	100-Ft. Spool	Stock No.	500-Ft. Spool	Stock No.	1000' Spool
8214	8/U	11(7x19)	Copper	.403"	50	26	11¾	732-0912	26.20	732Z0913	77.25	.....	.....
8213	11/U	14(Solid)	Copper	.405"	75	17.3	9½	.....	.....	732U0910	70.95	732Z0911	141.90
8212	59/U	20(Solid)	Copperweld	.242"	75	17.3	3¾	.....	.....	732-0908	27.60	732U0909	55.20
8219	58/U	20(19x32)	Copper	.195"	50	26	3	732-0917	10.65	.....	.....	.....	.....
8221	59/U	22(Solid)	Copperweld	.242"	75	16.3	4½	732-0918	11.55	732U0919	26.00	732U0920	52.00

CATHODE-RAY-TUBE LEAD



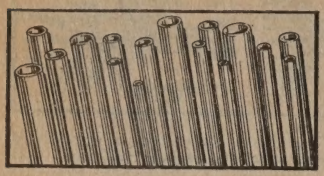
High-dielectric, corona-resistant, minimum-surface-leakage, CRT cables. Conductive polyethylene bonded to conductor to provide uniform voltage stress distribution, polyethylene insulated, vinyl jacket.

Mfr's Type	AWG (Stranding)	O.D.	Working Voltage	Wt./100' Lbs.	100-Ft. Std. Spool		500-Ft. Std. Spool	
					Stock No.	EACH	Stock No.	EACH
8866	18 (41x34)	.208"	40,000	2¾	732-6004	9.66	732-6005	27.90
8868	22 (7x30)	.150"	25,000	1¼	732-6006	5.40	732-6007	13.80
8869	22 (7x30)	.120"	17,000	1¼	732-6008	13.55	732-6009	11.35

ALPHA electronic WIRE

Tubing by Alpha

TEFLON EXTRUDED FLEXIBLE TUBING



- Natural Color
- Resists High Temperatures
- Nonflammable and Resistant to Moisture

Tubing with a high degree of resistance to fatigue and repetitive stresses. High temperature "Class C" thin, flexible insulation will not melt or flow as conventional thermoplastic materials. Spaghetti extruded from pure teflon TFE fluorocarbon resins—is free of contaminants, stresses and is of uniform density and color. Nonflammable; unharmed by soldering irons; moistureproof. Chemically i ert, with a coefficient of friction low than that of any other known soli Dielectric strength, 500-1000 V/m No variation of electrical properti from —67°C to +260°C, or 60 Hz 100 MHz. Meets MIL-I-22129C, AA 3653 B, MIL-I-3158, MIL-104-C. Availab in natural color only. *Rando lengths. Av. wt. per 100′ spool, 5 c

TFT-250 STANDARD-WALL TEFLON TUBING

Stock No.	AWG Size	Nominal Inside Dia.	Nominal Wall Thick.	100′ Spools, EACH 1	2-4	5-9	10-Up
708-0426	24	.022″	.012″	11.00	8.01	6.89	5.52
708-0425	22	.027″	.012″	12.19	8.98	7.62	6.09
708-0424	20	.034″	.016″	16.80	12.15	10.31	8.37
708-0423	18	.042″	.016″	19.70	14.68	12.50	9.8
708-0422	14	.066″	.016″	25.50	18.96	15.81	12.6
708-0421	12	.085″	.106″	30.79	22.02	18.25	15.2

TFT-200 THIN-WALL TEFLON TUBING

Stock No.	AWG Size	Nominal Inside Dia.	Nominal Wall Thick.	100′ Spools, EACH 1	2-4	5-9	10-Up
708-0420	30	.012″	.009″	10.11	6.62	5.95	5.34
708-0419	28	.015″	.009″	8.98	5.70	5.28	4.39
708-0418	26	.018″	.010″	8.15	5.60	5.03	3.99
708-0417	24	.022″	.010″	8.52	5.60	5.03	4.32
708-0416	22	.027″	.010″	9.74	7.12	6.08	4.84
708-0415	20	.034″	.012″	12.65	9.33	7.78	6.15
708-0414	19	.038″	.012″	13.60	9.70	8.34	6.66
708-0413	18	.042″	.012″	14.82	10.73	9.04	7.24
708-0412	17	.047″	.012″	16 15	11.46	9.79	7.92
708-0411	16	.053″	.012″	17.30	12.67	10.53	8.64
708-0410	15	.059″	.012″	17.82	12.79	10.83	8.80
708-0409	14	.066″	.012″	19.09	13.76	11.55	9.2
708-0408	13	.076″	.012″	21.55	15.62	12.67	10.5
708-0407	12	.085″	.012″	23.16	16.63	13.63	11.3
708-0406	11	.095″	.012″	25.60	18.61	15.08	12.5
708-0405	10	.106″	.012″	27.60	19.36	15.84	13.5
708-0404	9	.118″	.015″	39.30	23.34	20.94	19.0
708-0403	8	.133″	.015″	43.50	25.75	23.15	21.0
708-0402	7	.148″	.015″	47.50	27.99	25.30	22.9
708-0401	6	.166″	.015″	52.40	30.28	27.50	25.0
708-0400	5	.186″	.015″	59.00	33.93	30.88	28.1

ALPHLEX PVC-105 PLASTIC TUBING

Plastic tubing meets MIL-1-631D, ASTM-D876 and ASTM-D922 specifications. Extremely high tensile strength. (Type F, Form U, Grade C, Class 1, Category 1.) Designed for general electronic, aircraft, electrical use

Sizes 24 to 12. Have 0.016″ wall thickness, except sizes 24 and 22, 0.012″. Clear, black, red—specify. Wt. per 100′, 5 oz.

Stock No.	Size	Nom. I.D.	Per 100-Ft. Coil 1-4	5-9	10-Up
708C0316	24	.022″	2.43	2.01	1.80
708C0315	22	.027″	2.44	2.12	1.81
708C0314	20	.034″	2.49	2.16	1.85
708C0313	18	.042″	2.58	2.23	1.88
708C0312	16	.063″	2.72	2.35	1.96
708C0311	14	.066″	2.89	2.49	2.04
708C0310	12	.085″	3.07	2.64	2.16

Sizes 10 to 2. Size 10, .016″ wall thick.; all other sizes, .020″. Clear, black, red—specify. Av. shpg. wt. per 100 ft., 10 oz.

Stock No.	Size	Nom. I.D.	Per 100-Ft. Coil 1-4	5-9	10-Up
708C0309	10	.106″	3.27	2.81	2.35
708C0308	8	.133″	4.57	3.89	3.16
708C0307	6	.166″	5.19	4.41	3.52
708C0306	4	.208″	6.00	5.08	3.97
708C0305	2	.263″	6.91	5.84	4.50

Sizes 0 to 5/8″. Wall thicknesses, size 0 .020″; *.025″; †.030″. Clear or black—specify. Av. shpg. wt. per 100′ coil, 5 lbs.

Stock No.	Size	Nom. I.D.	Per 100-Ft. Coil 1-4	5-9	10-U
708C0304	0	.330″	7.98	6.73	5.1
708C0303	5/16″*	.312″	9.42	7.94	6.0
708C0302	3/8″*	.375″	10.81	9.09	6.9
708C0301	1/2″*	.500″	12.77	10.64	8.0
708C0300	5/8″†	.625″	18.38	15.30	11.7

PLASTIC-IMPREGNATED FIBER GLASS TUBING TYPE PIF-130

- Insulation Will Not Crack, Peel or Lose Its Dielectric Values
- High Chemical and Abrasion Resistance, Heat Stability
- For Continuous Operation at 130°C
- Meets MIL-I-3190B, Grade B

Toughest, most pliable of insulating materials, formulated to provide the maximum in electrical characteristics, chemical resistance, heat stability, abrasion resistance. Tubing is constructed from an inorganic fiber glass base sleeving coated with tough, flexible plastic insulation. Recommended for conditions requiring continuous operation at up to 130°C. Neither the fiber glass base sleeving nor the plastic base will support combustion. Conforms to MIL-I-3190B, Grade B. 100-ft. Coil. Av. wt., 2 lbs.

Stock No.	Gauge Size	Wall Thickness Max.	Min.	Approx. I.D.	EACH 1-4	5-Up
708-0211	24	.022″	.016″	.022″	6.65	3.90
708-0210	22	.022″	.016″	.027″	6.65	4.05
708-0209	20	.022″	.016″	.034″	6.78	4.15
708-0208	18	.022″	.016″	.042″	6.89	4.25
708-0207	16	.028″	.020″	.053″	7.10	4.40
708-0206	14	.028″	.020″	.066″	7.55	4.60
708-0205	12	.028″	.020″	.085″	7.77	4.90
708-0204	10	.028″	.020″	.106″	8.45	5.50
708-0203	8	.028″	.020″	.133″	9.45	6.05
708-0202	6	.028″	.020″	.166″	10.89	6.80
708-0201	4	.036″	.026″	.208″	12.00	8.20
708-0200	2	.036″	.026″	.234″	15.12	10.30

ZIP-31 PLASTIC ZIPPER-TUBING

Designed to harness, cover, and protect electrical cables. Zip to close or open. Fabricated from .020″ polyvinyl sheet of MIL-I-631D, Grade C materials. Rated 759 V/mil; tensile strength, 3810 PSI. Flexible from —86°C to +105°C. One slider with each 25′ of tubing. Order tubing ¼″ larger than total O.D. of wires to be covered. Available in black or clear—specify.

Stock No.	Inside Dia.	Wt., Lbs.	100-FT. COILS, EACH 1-4	5-9	10-Up
708C0500	1/2″	4	69.40	37.20	34.80
708C0501	5/8″	4½	70.55	37.80	35.40
708C0502	3/4″	5	72.00	38.40	36.00
708C0503	1″	6¼	74.55	39.60	37.20
708C0504	1¼″	6½	78.50	41.40	39.00
708C0505	1½″	7	82.50	43.20	40.80
708C0506	2″	10	88.00	45.60	43.20

708-0000. Type AB 295 Extra Metal Sliders. For above. 2 oz. Each .05

ELECTRONIC NYLON FLAT BRAIDED TAPE

Wide contact area with the insulation eliminates flow away from contact point. Flexible, easy to use. When knotted, will not slip, recommended for all types of harness work. Resistant to fungus, flame, acids, abrasions. High tensile strength. *Rubber-like resin, melting point above 190°F. †Micro-crystalline wax, melting point above 130°F. ‡Fungistatic synthetic rubber. §Thermoplastic synthetic resin, melting point above 350°F. 3/32″ wide, .014″ thick except LC-134 (1/16″x.010″). 500-yd. spools (LC-132, 500-yd. tube).

Mfr's Type	Finish	White Stock No.	White SPOOL	Black Stock No.	Black SPOOL
LC-132	GE*	708-0101	8.45	708-0102	9.14
LC-134	MW†	708-0103	5.41	708-0104	6.09
LC-136	MW†	708-0105	8.45	708-0106	9.14
LC-140	SR‡	708-0107	8.45	708-0108	9.14
LC-143	AM§	708-0109	8.45	708-0110	9.14

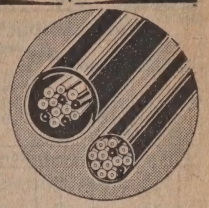
Highest Percentage of Orders Filled in the U.S.A.

Alphlex "Fit" Shrinkable Tubing

ALPHA electronic WIRE

FIT-105 FLEXIBLE TUBING

Min. I.D.	Recov. I.D.	Wall Thick.	Stock Number	Wt., Lbs.	Per 25' Coil	Stock Number	Wt., Lbs.	Per 100' Coil 1-4	Per 100' Coil 5-Up
.046″	.023″	.020″	708-0014	.1	3.04	708-0015	.1	8.45	7.05
.062″	.031″	.020″	708-0016	.1	3.26	708-0017	.3	9.00	7.45
.093″	.046″	.020″	708-0018	.1	3.73	708-0019	.5	10.30	8.55
.125″	.062″	.020″	708-0020	.2	4.09	708-0021	1.1	11.50	9.70
.187″	.093″	.025″	708-0022	.3	5.03	708-0023	1.4	14.00	11.80
.250″	.125″	.025″	708-0024	.4	6.30	708-0025	1.4	17.75	14.95
.375″	.187″	.030″	708-0026	.5	7.00	708-0027	2.0	19.60	16.45
.500″	.250″	.030″	708-0028	.8	7.92	708-0029	4.5	22.25	18.75
.750″	.375″	.035″	708-0030	1.3	10.63	708-0031	5.0	29.80	25.10
1.000″	.500″	.040″	708-0032	2.2	15.20	.....	.....	.....	.....
1.500″	.750″	.045″	708-0033	3.9	25.00	.....	.....	.....	.....
2.000″	1.000″	.050″	708-0034	5.6	36.80	.....	.....	.....	.....



Irradiated Polyvinylchloride (PVC) provides snug, flexible insulation. Excellent for insulation over splices. Supplied at "Min. I.D." size; shrinks to "Recov. I.D." size in only 7 seconds when heated to 325° F. **Black only.** Av. shpg. wt. per 100 ft., 1½ lbs. Inquire for larger quantities than those shown.

708-0036. FIT-105-MS-2 Assortment. Ten 6″ lengths each of four sizes from ⅜ thru 1″ (40 pieces). Wt., ½ lb. 9.21

708-0035. FIT-105-MS-1 Assortment. Ten 6″ lengths each of six sizes from ¾4 thru ¼″ (60 pieces). Wt., ½ lb. 4.61

4-FOOT LENGTHS (Av. shpg. wt., 1½ lbs.)

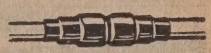
Stock No.	Size	Min. I.D.	Recov. I.D.*	Wall Thick.	25 LENGTHS/BOX 1-4	25 LENGTHS/BOX 5-9	25 LENGTHS/BOX 10-Up
708CX0038	¾4″	.050″	.023″	.016″	20.55	13.10	11.40
708CX0040	1⁄16″	.062″	.031″	.017″	21.50	13.80	12.00
708CX0042	3⁄32″	.093″	.046″	.020″	24.80	15.95	13.90
708CX0044	⅛″	.125″	.062″	.020″	26.58	17.00	14.85
708CX0046	3⁄16″	.191″	.089″	.020″	32.40	20.70	18.10
708CX0048	¼″	.250″	.125″	.025″	40.40	26.00	22.70
708CX0050	⅜″	.378″	.178″	.025″	45.00	28.85	25.15

Stock No.	Size	Min. I.D.	Recov. I.D.*	Wall Thick.	5 LENGTHS/BOX 1-4	5 LENGTHS/BOX 5-24	5 LENGTHS/BOX 25-Up
708CX0052	½″	.500″	.250″	.025″	10.22	6.55	5.71
708CX0054	¾″	.750″	.375″	.030″	13.65	8.74	7.62
708CX0056	1″	1.000″	.500″	.035″	19.10	12.23	10.66
708CX0058	1½″	1.500″	.750″	.040″	30.00	19.25	16.78
708CX0060	2″	2.000″	1.000″	.045″	41.45	26.58	23.17

Stock No.	Size	Min. I.D.	Recov. I.D.*	Wall Thick.	2 LENGTHS/BOX 1-12	2 LENGTHS/BOX 13-62	2 LENGTHS/BOX 63-Up
708CX0062	3″	3.000″	1.500″	.050″	26.30	16.86	14.69
708CX0064	4″	4.000″	2.000″	.055″	38.20	24.56	21.42

FIT-221 Assortments. 6″ lengths, assorted colors. Wt., ½ lb.
708-0065. MS-1. ¾4 thru 3⁄16″ (30 lengths) 4.61
708-0066. MS-2. ¼ thru ¾4″ (16 lengths) 9.21

FIT-221 SHRINKABLE TUBING



Replaces FIT-275. Shrinks (2:1) to *recovered inside diameter in 7 seconds. Polyolefin extruded tubing in an expanded form. Slips over irregularly shaped material. When temperature of approx. 275° F. is applied for 7 seconds, it returns to its predetermined size. **Available in black, red, and white—specify color when ordering.**

6-INCH LENGTHS (Av. shpg. wt., 4 oz.)

Stock No.	Size	Min. I.D.	Recov. I.D.*	Nom. Wall Thick.	6″ Lgths. Per Box	PER BOX
708C0037	¾4″	.050″	.023″	.016″	40	4.12
708C0039	1⁄16″	.062″	.031″	.017″	36	4.12
708C0041	3⁄32″	.093″	.046″	.020″	32	4.12
708C0043	⅛″	.125″	.062″	.020″	28	4.12
708C0045	3⁄16″	.191″	.089″	.020″	24	4.12
708C0047	¼″	.250″	.125″	.025″	20	4.12
708C0049	⅜″	.378″	.178″	.025″	16	4.12
708C0051	½″	.500″	.250″	.025″	14	4.12
708C0053	¾″	.750″	.375″	.030″	12	4.12
708C0055	1″	1.000″	.500″	.035″	8	4.12
708C0057	1½″	1.500″	.750″	.040″	5	4.12
708C0059	2″	2.000″	1.000″	.045″	3	4.12
708C0061	3″	3.000″	1.500″	.050″	2	4.12
708C0063	4″	4.000″	2.000″	.055″	1	4.12

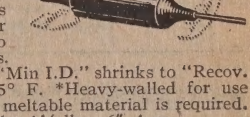
FIT-300 POLYOLEFIN MOISTUREPROOF TUBING

4-FOOT LENGTHS

Size	Color	Min. I.D.	Recov. I.D.	Wall Thick.	Stock No.	Lengths Per Pkg.	PER PKG.
⅛″	Brown	.125″	.023″	.038″	708X0068	25	40.80
3⁄16″	Gray	.060″	.012″	.043″	708X0070	25	49.80
¼″	White	.080″	.015″	.047″	708X0072	25	62.15
⅜″	Red	.375″	.135″	.050″	708X0074	25	69.25
½″	Blue	.500″	.195″	.055″	708X0076	5	20.40
¾″	Yellow	.750″	.313″	.065″	708X0078	5	31.50
1″	Blue	.300″	.050″	.100″*	708X0080	25	141.85

6-INCH LENGTHS

Stock No.	Lgths. Per Box	Per Box
708-0067	14	4.68
708-0069	12	4.68
708-0071	10	4.68
708-0073	8	4.68
708-0075	6	4.68
708-0077	4	4.68
708-0079	4	4.68



Moistureproof encapsulation of components, etc. Outer wall shrinks while inner wall melts to fill all voids. Supplied at "Min I.D." shrinks to "Recov. I.D." at 275° F. *Heavy-walled for use where much meltable material is required. Wt.: 4′ lengths, 1½ lbs.; 6″, 4 oz.

FIT-350 IRRADIATED KYNAR™ SHRINKABLE TUBING

4-FOOT LENGTHS

Size	Min. I.D.	Recov. I.D.	Recov. Wall Thickness	Stock No.	Lgths. Per Box	PER BOX
¾4″	.046″	.023″	.010″	708X0082	25	20.95
1⁄16″	.063″	.031″	.010″	708X0084	25	22.90
3⁄32″	.093″	.046″	.010″	708X0086	25	27.30
⅛″	.125″	.062″	.010″	708X0088	25	30.00
3⁄16″	.187″	.093″	.010″	708X0090	25	46.70
¼″	.250″	.125″	.012″	708X0092	25	58.55
⅜″	.375″	.187″	.012″	708X0094	25	77.20
½″	.500″	.250″	.012″	708X0096	5	29.35
¾″	.750″	.375″	.017″	708X0098	5	53.95
1″	1.000″	.500″	.019″	708X0100	5	99.20

6-INCH LENGTHS

Stock No.	Lgths. Per Box	PER BOX
708-0081	32	4.80
708-0083	28	4.80
708-0085	24	4.80
708-0087	20	4.80
708-0089	16	4.80
708-0091	12	4.80
708-0093	8	4.80
708-0095	4	4.80
708-0097	2	4.80
708-0099	1	4.80

Tough semi-rigid polyvinylidene fluoride that can be repeatedly flexed, bent, or twisted without losing its mechanical or electrical strength. Withstands continuous operating temperatures of —55° to +175° F. Supplied at "Min I.D." size; shrinks to "Recov. I.D." when heated to 347° F. 2:1 shrinkage ratio. Longitudinal shrinkage only 5%. Non-flammable, will never cold flow or melt. Clear only. Av. shpg. wt.: 6″ lengths, 4 oz.; 4′ lengths, 1 lb.

IRRADIATED POLYOLEFIN FIT-CAPS

Short lengths of semi-rigid tubing sealed on one end. Tight-fitting mechanical bond over terminations. Flame and abrasion resistant polyolefin. Supplied at "Min. I.D." size, shrinks (2:1) to "Recov. I.D." within 7 seconds when a temp. of between 275° and 300°F is applied. Forms a moisture-resistant seal over one or more wires. **Pkgs. of 100.** Wt., 6 oz.

Stock No.	Mfr's Type	Min. I.D.	Recov. I.D.	Wall Thick.	Nom. Length	Color	Per Pkg. of 100
708-0001	1	.063″	.025″	.016″	¾″	White	4.19
708-0002	2	.125″	.050″	.020″	1″	Red	5.25
708-0003	3	.250″	.100″	.025″	1¼″	Grey	7.09
708-0004	5	.350″	.175″	.035″	1⅓″	Brown	8.93
708-0005	4	.500″	.250″	.040″	1½″	Black	20.73

MOLDED FIT-CAPS

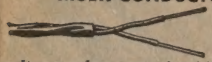
When heated, shrinks to form permanent encapsulations without molding, potting, use of special tools. Supplied at "Min. I.D." shrinks to "Recov. I.D." when heated to 275°F. Black. Pkg., 6 oz.

Stock No.	Mfr's Type	Min. I.D.	Recov. I.D.	Wall Thick.	Nom. Length	Per Pkg. of 25
708-0006	21	.16″	.08″	.04″	1.12″	9.90
708-0007	22	.25″	.12″	.05″	1.15″	11.97
708-0008	23	.36″	.18″	.06″	1.40″	15.68
708-0009	24	.50″	.25″	.07″	1.87″	20.63
708-0010	25	.75″	.37″	.08″	2.70″	30.53
708-0011	26	1.00″	.50″	.09″	3.50″	40.85
708-0012	27	1.50″	.75″	.10″	4.00″	53.65
708-0013	28	2.00″	1.00″	.11″	4.50″	66.00

SEE PAGE 365 FOR HEAT GUNS

Alpha Wire and Cable

MULTI-CONDUCTOR UNSHIELDED AUDIO CABLE



Tinned copper covered with color-coded polyvinylchloride insulation. For unbalanced intercoms, as low volt age relay control cable, computer, PA system cable. #22 gauge with 7x30 stranding. .010″ wall thick.: .020″ jacket. —20°C to +60°C. 200 V.

Mfr's Type	Cond.	Nom. O.D.	Lbs.	Stock No.	100′ Spool
1176	6	.185″	2.6	708-1100	8.36
1177	7	.190″	2.8	708-1101	9.41
1178	8	.200″	3.5	708-1102	9.86
1179	9	.225″	3.8	708-1103	10.91
1180	10	.235″	4.2	708-1104	10.80
1181	12	.255″	5.0	708-1105	12.15
1181/15	15	.280″	6.2	708-1106	20.55
1181/20	20	.310″	8.2	708-1107	29.46
1181/25	25	.340″	10.0	708-1108	31.50
1181/30	30	.365″	12.3	708-1109	68.27

SHIELDED MICROPHONE CABLE

Plastic Jacketed. Have stranded, tinned copper conductors with color-coded polyethylene insulation. With gray, polyvinylchloride jacket overall. Types 1702 and 1705 have .020″ jacket; Type 1710 has .025″ jacket; others .030″ jacket. Wt., 2 lbs.

WITH BRAIDED SHIELD

Mfr's Type	Conductor No.	Conductor Size	O.D.	100′ Spool Stock No.	100′ Spool EACH	1000′ Spool Stock No.	1000′ Spool EACH
1703	1	24	.145″	708-1602	4.68	.....	.....
1704	1	24	.190″	708-1603	6.11	.....	.....
1706	1	20	.175″	708-1606	9.21	.....	.....
1710	2	22	.230″	708-1608	8.73	708-1609	77.76
1712	2	20	.240″	708-1610	13.08	.....	.....

WITH SPIRAL WRAP SHIELD

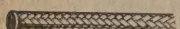
1702	1	26	.110″	708-1600	5.31	708-1601	42.12
1705	1	24	.110″	708-1604	6.00	708-1605	48.60
1709	2	24	.190″	708-1607	9.05	.....	.....

SHIELDED MULTI-CONDUCTOR CONTROL CABLES

Neoprene jacket overall. Stranded, tinned copper with color-coded rubber insulation. #18 gauge. Wall thickness, .020″. Cabled with fillers, cotton wrap, braided tinned copper shield. For outdoor usage in missile systems, ground support equipment, etc. Operating temperature, —20°C to +60°C. Av. wt., 12 lbs.

Mfr's Type	No. of Cond.	Jkt. Size	Nom. O.D.	100′ Spool Stock No.	100′ Spool EACH
1454	6	.035″	.370″	708-1405	97.61
1456	8	.035″	.420″	708-1406	128.39
1458	10	.035″	.480″	708-1407	157.22
1459	12	.065″	.555″	708-1408	215.63

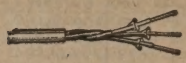
SHIELDING AND BONDING CABLE



Woven, tinned copper braid per MIL Spec. QQ-B-575. Shielding coverage, 95% or more.

Mfr's Type	Approx. I.D.	No. of Wires	AWG Equiv.	Cap., Amps	100′ Spools Stock No.	100′ Spools EACH
2170	13/64″	192x34	11	46	708-2100	25.50
2171	1/4″	384x36	10	53	708-2101	34.50
2171/1	9/32″	120x30	9	60	708-2102	36.00
2172	3/8″	384x36	10	53	708-2103	35.55
2173	7/16″	240x30	6	90	708-2104	58.65
2174	1/2″	528x36	9	62	708-2105	48.75
2175	9/16″	480x30	3	145	708-2106	90.00
2175/1	21/32″	768x30	1	190	708-2107	138.00

TYPE B PER MIL-W-16878D NYLON SHIELDED PLASTIC JACKET MULTI-CONDUCTOR CABLE



Each conductor is stranded tinned copp With color-coded .010″ polyvinylchloride sulation; covered with clear, .003″ ny (polymide) jacket. Conductors are cabl surrounded by braided tinned copper shield providing 90% cov age. Overall white polyvinylchloride jacket. Resistant to aci alkalis, oil, flame, moisture, solvents and fungus. Meets MIL-1678D specifications. Temperature rating: —55° C to +105° Rated 600 volts. Shpg. wt., 20 lbs.

Mfr's Type	No. of Cond.	Gauge (Strand)	100′ Spool Stock No.	100′ Spool EACH	1000′ Spool Stock No.	1000′ Spool EA
3210	1	24 (19x36)	708-3200	9.37	708-3201	88.
3211	2	24 (19x36)	708-3202	14.22	708U3203	132.
3212	3	24 (19x36)	708-3204	19.68	708U3205	187.
3220	1	22 (19x34)	708-3206	10.32	708X3207	93.
3221	2	22 (19x34)	708-3208	15.57	708U3209	145.
3222	3	22 (19x34)	708-3210	21.59	.....	.....
3230	1	20 (19x32)	708-3211	10.80	.....	.....
3231	2	20 (19x32)	708-3212	17.10	.....	.....
3232	3	20 (19x32)	708-3213	23.12	.....	.....

SHIELDED MICROPHONE CABLE

Neoprene-jacketed. Stranded, tinn copper conductors. Rubber insulat cotton wrapped; braided tinned-c per shield. Stranding #18, 41x34; #16, 65x34. Jacket, .035″. W thickness: 1449, .040″; 1450, 1451, 1452, .020″; 1450/16, .02

Stock No.	Mfr's Type	Cond. No.	Cond. Size	Wt., Lbs.	Nom. O.D.	PER 100′ Spo
708-1400	1449	1	18	3.7	.240″	21.5
708-1401	1450	2	18	5.4	.295″	28.3
708-1403	1451	3	18	6.7	.305″	52.4
708-1404	1452	4	18	8.1	.330″	64.1
708-1402	1450/16	2	16	8.7	.335″	54.5

SHIELDED MULTI-CONDUCTOR CONTROL CABLE

Chrome gray polyvinylchloride .035″ jacket overall. Stranded tinn copper; polyethylene insulation; braided shield. 600 volt operati voltage. #20 (26x34) gauge. Av. wt., per 100 ft., 8 lbs.

Mfr's Type	No. of Cond.	Wall Thk.	Nom. O.D.	100′ Spool Stock No.	100′ Spool EACH	1000′ Spool Stock No.	1000′ Spool EAC
1713	3	.014″	.250″	708-1611	11.16	.....	.....
1715	4	.014″	.260″	708-1612	13.56	.....	.....
1716	5	.014″	.275″	708-1613	14.69	.....	.....
1717	6	.014″	.300″	708-1614	30.90	708Z1616	297.8
1719	8	.014″	.330″	708-1617	39.00	708Z1618	384.9
1721	10	.014″	.375″	708-1619	48.39	708Z1620	473.5

Silver-plated copper braid manufactured per MIL Spec. QQ-B-575 Shielding coverage, 95% or more. Braid is self-supporting.

Mfr's Type	Approx. I.D.	No. of Wires	AWG Equiv.	Cap., Amps	100′ Spools Stock No.	100′ Spools EACH
2191	1/16″	48x36	19	11	708-2109	15.35
2193	7/64″	96x36	16	19	708-2111	27.48
2194	1/8″	120x36	15	25	708-2112	29.46
2195	5/32″	240x36	12	40	708-2113	55.86
2196	11/64″	168x36	14	32	708-2114	41.75
2197	13/64″	192x34	11	46	708-2115	78.47
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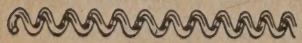
RETRACTILE NEOPRENE-JACKET POWER CORDS



High-quality multi-conductor power cord. Retracted lengths, 2 and 4 ft.; extend lengths, 12 and 25 ft. Recognized Unde the Component Program of Underwriter's Laboratories, Inc.

TWO-FOOT RETRACTED LENGTHS

Stock No.	Mfr's Type	Conds. No.	Conds. Size	A	V	Coil O.D.	EACH
708-1000	660/2	2	18	7	300	7/8″	5.72
708-1003	663/2	4	18	5.6	300	1 1/2″	9.38
708-1005	665/2	3	16	10	300	1 1/2″	10.11
708-1008	671/2	4	16	8	600	1 7/8″	15.42
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....

FOUR-FOOT RETRACTED LENGTHS

Stock No.	Mfr's Type	Conds. No.	Conds. Size	A	V	Coil O.D.	EACH
708-1001	660/4	2	18	7	300	7/8″	10.29
708-1002	662/4	3	18	7	300	1 1/2″	14.88
708-1004	664/4	2	16	10	300	1 1/2″	14.52
708-1006	666/4	4	16	8	300	1 5/8″	23.13
708-1007	670/4	3	16	10	600	1 7/8″	26.07
708-1011	760/4	3	18	7	300	1″	15.62

FLAT RIBBON CABLE MULTI-CONDUCTOR, PLASTIC INSULATION PER MIL-W-16878D, TYPE C

Stranded, tinned copper covered with color-coded, .016″ PVC insulation. Conductors bonded to form flat ribbon cable. Conductors fully color-coded and easily separated. #22 gauge with 7x30 stranding. Temperature rating: —55° C to +105° C. Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus. Supplied in 100′ spools only. Av. shpg. wt., 5 lbs.

Mfr's Type	No. of Cond.	Nom. O.D.	Stock No.	100′ Spoo
3504	4	.065″x.260″	708-3500	15.11
3508	8	.065″x.520″	708-3501	24.35
3512	12	.065″x.780″	708-3502	39.44
3516	16	.065″x1.040″	708-3503	53.96
3520	20	.065″x1.300″	708-3504	66.42

Depend on Allied Electronics for Complete Stocks, OEM Prices, Fast Service

Alpha Wire and Cable

TYPE MW UNCOVERED HOOK-UP WIRE

ilitary hook-up wire is solid or extra xible stranded tinned copper, color- ded medium wall polyvinylchloride sulation. Nominal wall thickness is .016". Temperature rating: 40° to +80°C. Voltage rating, 1000 V. Meets MIL-W-76B specifi- tions. Resistant to environmental and chemical abrasions such acids, oil, alkalies, flame, moisture and fungus. 1000' spools only. ailable in white, black, red, or green—specify.

Stock No.	Mfr's Type No.	Type Designation	Conductor Size	Conductor Strand	Nom. O.D.	Wt., 1000' Lbs.	PER SPOOL
08C1500	1550	MW-C 24(7)U	24	7/32	.059"	2.8	9.14
08C1501	1551	MW-C 22(7)U	22	7/30	.064"	3.6	10.71
08C1502	1553	MW-C 20(10)U	20	10/30	.073"	4.8	12.08
08C1503	1555	MW-C 18(16)U	18	16/30	.084"	7.3	15.78
08C1504	1557	MW-C 16(26)U	16	26/30	.095"	11.2	23.09
08C1505	1559	MW-C 14(41)U	14	41/30	.110"	16.1	36.15
08CX1506	1560	MW-C 12(65)U	12	65/30	.125"	24.9	50.93
08C1507	1561	MW-C 22(1)U	22	Solid	.060"	3.3	8.48
08C1508	1561/24	MW-C 24(1)U	24	Solid	.055"	2.5	7.50
08C1509	1563	MW-C 20(1)U	20	Solid	.066"	4.6	10.40
08C1510	1565	MW-C 18(1)U	18	Solid	.074"	6.9	13.23

TYPE B UNCOVERED HOOK-UP WIRE

tranded, tinned-copper, color-coded. .010" polyvinylchloride in- ılation. Temperature rating: —55° to +105°C. Rated 600V. Re- stant to acids, oil, alkalies, flame, moisture, fungus. Meets MIL- V-1678D. 1000' spools only. White, black or red—specify.

708C1800	1850	B-32	32	7/40	.028"	.6	12.47
708C1801	1851	B-30	30	7/38	.032"	.8	10.02
708C1802	1852	B-28	28	7/36	.034"	1.0	9.11
708C1803	1853	B-26	26	7/34	.038"	1.5	10.32
708C1804	1854	B-24	24	7/32	.043"	2.2	9.62
708C1805	1854/19	B-24	24	19/36	.043"	2.2	11.30
708C1806	1855	B-22	22	7/30	.050"	3.0	10.47
708C1807	1855/19	B-22	22	19/34	.050"	3.0	12.02
708C1808	1856	B-20	20	7/28	.058"	4.6	12.47
708C1809	1856/19	B-20	20	19/32	.058"	4.6	14.81
708C1810	1857	B-18	18	7/26	.068"	7.0	15.80
708C1811	1857/19	B-18	18	19/30	.068"	7.0	16.82
708C1812	1858/19	B-16	16	19/29	.077"	9.0	20.73
708C1813	1859/19	B-14	14	19/27	.091"	14.0	36.12

TYPE B PER MIL-W-16878D UNCOVERED PLASTIC PRE-BONDED TINNED COPPER CONDUCTOR

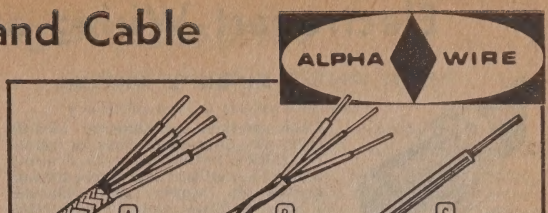
Each strand of conductor is double inned, then heat-bonded together. An deal construction where leads are to be ut and stripped for point-to-point wiring. Maintains flexibility of rdinary stranded wire, but reduces handling costs on production oldering jobs. With color-coded polyvinylchloride insulation; vall thickness, .010". Insulation meets requirements of MIL-W-6878D. Temperature rating: —55°C to +105°C. Rated at 600 olts. Resistant to such environmental and chemical abrasives as cids, alkalis, oil, flame, moisture, solvents and fungus. Available in hite, black and red—specify color.

Mfr's Type	Gauge (Strand)	Nom. O.D.	Wt., 100' Lbs.	100' Spool Stock No.	100' Spool EA.	1000' Spool Stock No.	1000' Spool EACH
154	24 (7x32)	.044"	.3	708C3100	3.84	708C3101	12.51
155	22 (7x30)	.051"	.4	708C3102	4.38	708C3103	15.75
156	20 (7x28)	.059"	.5	708C3104	5.00	708C3105	20.46
157	18 (7x26)	.070"	.7	708C3106	6.20	708C3107	28.83

TYPE ET MIL-W-16878D MINIATURE TEFLON WIRE

Single conductor stranded silver-plated copper with extruded TFE Teflon insulation. Comforms to all MIL-W-16878D specifications or plated copper wire. Temperature rating —65° C to +200°C. Voltage rating 300 volts. Resistant to chemical and environmental deterioration due to acid, alkalis, oil, flame, moisture, solvents and fungus. Color coded. Nominal wall thickness .010" Available in .00' spools only. Choice of white, black, red and green—specify color when ordering. Av. shpg. wt. per 100' spool, ½ lb.

Stock No.	Mfr's Type	Conductor Size	Conductor Strand	Nom. O.D.	100' Spool EACH
708CF2900	2852	28	7/36	.036"	8.90
708CF2901	2853	26	7/34	.040"	9.30
708CF2902	2854	24	19/36	.045"	10.56
708CF2903	2854/7	24	7/32	.044"	9.21
708CF2904	2855	22	19/34	.051"	11.73
708CF2905	2855/7	22	7/30	.050"	10.79
708CF2906	2856	20	19/32	.059"	14.97
708CF2907	2856/7	20	7/28	.058"	13.31
708CF2908	2857	18	19/30	.070"	17.40



MIL-W-16878D SHIELDED TEFLON CABLE

Each conductor stranded silver-plated copper, Type E with .010" extruded Teflon insulation per MIL specs. Rated at 600 volts. When shielded, a closely woven silver-plated copper shield is braided over the conductors. When braided, a Teflon impregnated fiberglass yarn is woven over the shield. Also with a sintered, wrapped white Teflon tape jacket fused over the shield. Temp., —65°C to +200°C. Numbers after / in Type No. are conductors; no / indicates 1 conductor. Av. shpg. wt., 1½ lbs. 100-Ft. Spool.

[A] BRAID OVER SHIELD

Stock No.	Mfr's Type	AWG	Outer Dimensions	100' SPOOL
708-2800	2811	24 (19x36)	.081"	27.38
708-2801	2811/2	24 (19x36)	.126"	37.94
708-2802	2811/3	24 (19x36)	.133"	55.10
708-2803	2814	22 (19x34)	.088"	28.41
708-2804	2814/2	22 (19x34)	.137"	41.24
708-2805	2814/3	22 (19x34)	.144"	60.99
708-2806	2817	20 (19x32)	.097"	30.41
708-2807	2817/2	20 (19x32)	.154"	46.08
708-2808	2817/3	20 (19x32)	.163"	68.09
708-2809	2819	18 (19x30)	.106"	41.06
708-2810	2819/2	18 (19x30)	.174"	62.19
708-2811	2819/3	18 (19x30)	.185"	81.60

[B] TEFLON TAPE WRAP OVER SHIELD

708-2812	2821	24 (19x36)	.095"	31.19
708-2813	2821/2	24 (19x36)	.140"	44.70
708-2814	2821/3	24 (19x36)	.147"	60.47
708-2815	2824	22 (19x34)	.102"	31.71
708-2816	2824/2	22 (19x34)	.154"	47.30
708-2817	2824/3	22 (19x34)	.162"	68.96
708-2818	2827	20 (19x32)	.110"	34.65
708-2819	2827/2	20 (19x32)	.170"	52.16
708-2820	2827/3	20 (19x32)	.175"	75.02
708-2821	2829	18 (19x30)	.120"	44.18
708-2822	2829/2	18 (19x30)	.190"	70.17
708-2823	2829/3	18 (19x30)	.219"	89.57

MIL-W-16878D TEFLON WIRE

Single conductor, stranded silver-plated copper. Extruded TFE Teflon insulation. Temp. rating, —65° to +200°C. Voltage rating: Type E, 600 volts; Type EE, 1000 volts. Nominal Wall Thickness: Type E, all are .010"; Type EE, *.014", †.017". Available in White, Black, Red, Green, Yellow, Brown, Orange. §Indicates available in White only, **Indicates White, Black, Red or Green only. ††Not available in brown or orange. Specify Color When Ordering. Resistant to acids, alkalis, oil, flame, moisture and solvents. Av. shpg. wt. per spool: 100', ½ lb.; 1000', 4 lbs. *F in Stock Number denotes Shipment F.O.B. Factory Elizabeth, New Jersey.*

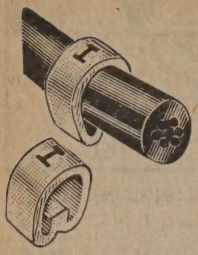
[C] TYPE E—EXTRUDED—600 VOLTS

Mfr's Type	AWG	O.D.	100' Spool Stock No.	100' Spool EACH	1000' Spool** Stock No.	1000' Spool** EACH
5850	32 (7x40)	.029"	708C5800	6.05	708C5801	22.94
5851	30 (7x38)	.032"	708C5802	6.05	708C5803	22.94
5852	28 (7x36)	.036"	708C5804	6.34	708C5805	24.17
5853	26 (7x34)	.040"	708C5806	6.85	708C5807	27.50
5854	24 (19x36)	.045"	708C5808	8.35	708C5809	36.99
5854/7	14 (7x32)	.044"	708C5810	7.25	708C5811	29.06
5855	22 (19x34)	.051"	708C5812	9.15	708C5813	40.19
5855/7	22 (7x30)	.050"	708C5814	8.35	708C5815	35.40
5856	20 (19x32)	.059"	708C5816	10.58	708C5817	48.06
5856/7	20 (7x28)	.058"	708C5818	9.95	708C5819	46.29
5857	18 (19x30)	.070"	708C5820	14.20	708C5821	68.88
5858	16 (19x29)	.077"	708C5822	17.30	708CF5823	86.48
5859††	14 (19x27)	.094"	708CF5824	21.20	708CF5825	140.33
5859/12§	12 (19x25)	.113"	708F5826	26.03	708F5827	165.36

[C] TYPE EE—EXTRUDED—1000 VOLTS

5874**	24 (19x36)	.055"	708C5828	10.85	708CF5829	50.91
5875**	22 (19x34)	.062"	708C5830	12.18	708CF5831	57.42
5876**	20 (19x32)	.070"	708C5832	11.12	708CF5833	71.66
5877**	18 (19x30)	.080"	708C5835	16.90	708CF5834	88.95
5878*§	16 (19x29)	.089"	708-5836	17.10	708F5837	111.44
5879*§	14 (19x27)	.106"	708-5838	24.50	708F5839	161.73
5879/12†§	12 (19x25)	.124"	708-5840	26.40	708F5841	174.23

Electrovert Wiring and Cable Accessories



SLIP-ON "Z" MARKERS

Cable markers permanently identify every wire or group or wires for instant recognition. Installs in seconds. Features flexible "accordion" type backs for easy installation, sturdy grip. Durable P.V.C. material. Comply with J.I.C., MIL-E-5400B (ASG), MIL-E-4158A (USAF). White with black marking. **Specify letter (A-Z) or numeral (0-9) desired when ordering.** Sold only in packages of 50. Order from table below. Shpg. wt. 6 oz.

Stock No.	Mfr's Type	AWG Size	For Cable Dia.	PER PKG. OF 50			
				1-49	50-99	100-249	250-Up
789C4082	Z22P	22	.045"-.065"	.69	.63	.58	.52
789C4081	Z20P	20	.066"-.085"	.69	.63	.58	.52
789C4080	Z18P	18	.086"-.115"	.69	.63	.58	.52
789C4079	Z16P	16	.110"-.135"	.69	.63	.58	.52
789C4078	Z14P	14	.130"-.160"	.69	.63	.58	.52
789C4077	Z12P	12	.150"-.175"	.69	.63	.58	.52

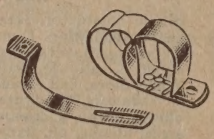
CLIP-ON "C" MARKERS

Designed for military, industrial and consumer applications. Can be used either before wiring, or after wiring and terminal connection has been completed. Constructed of rigid, durable PVC material for longest life. Use for single wire or cable assembly. One size fits a given range of cable diameters. **Specify letter (A-Z) or numeral (0-9) when ordering.** Order from table below. Shpg. wt. 6 oz. **Sold in Packages of 50 only.**

Stock No.	Mfr's Type	For Cable Dia.	PER PKG. OF 50			
			1-9	10-99	100-999	1000-Up
789C4037	C9P	.250"-.280"	1.35	1.20	1.05	1.00
789C4038	C10P	.280"-.315"	2.03	1.75	1.60	1.50
789C4039	C11P	.315"-.350"	2.07	1.80	1.65	1.55
789C4040	C12P	.350"-.400"	2.21	1.95	1.75	1.70
789C4041	C13P	.400"-.460"	2.34	2.10	1.85	1.75
789C4032	C14P	.460"-.510"	2.38	2.10	1.90	1.75
789C4043	C15P	.510"-.570"	2.68	2.35	2.10	1.95

ADJUSTABLE "P" CLIPS

Feature ratchet teeth for positive locking action under any conditions. Virgin nylon lightweight construction. Abrasion resistant. Tensile strength, 11,000 psi; melting point, 482-500°F-self extinguishing; endurance limit, 3000 psi-no failures to 2,000,000 cycles. Order from table below. Wt. 8 oz. **Sold in Multiples of 100 Only.**



Stock No.	Size No.	Bundle Dia. Min.-Max.	PER 100		
			1-24	25-99	100-Up
789-4019	AP-0	1/8"-3/16"	21.10	16.90	15.85
789-4020	AP-1	3/16"-1/4"	25.35	20.30	19.05
789-4021	AP-2	1/4"-3/8"	25.55	20.40	19.15
789-4022	AP-3	3/8"-9/16"	27.20	21.75	20.35
789-4023	AP-4	9/16"-7/8"	33.45	26.75	25.10
789-4024	AP-5	7/8"-1 3/16"	42.85	34.35	32.15
789-4025	AP-6	1 3/16"-1 1/2"	56.40	45.10	42.30
789-4026	AP-7	1 1/2"-1 3/4"	70.50	56.45	52.90
789-4027	AP-8	1 3/4"-2"	101.20	80.95	75.90

HIATT CABLE CLIPS

Fast cable installation without drilling or screwing. Push-fit on wire or cable for simple installation. Nails fixed in clips for easy attachment. In multiples of 1000 only. Wt. per 1000, 2 lbs.

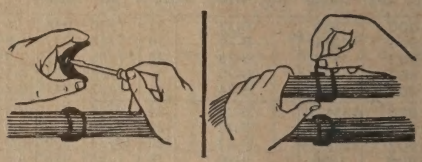
Stock No.	Mfr's Type	Inside Diameter	PER 1000	
			1-9	10-Up
789-4057	H-2	.10"	12.50	10.60
789-4058	H-3	.14"	12.85	10.90
789-4059	H-4	.16"	13.45	11.45
789-4060	H-5	.20"	15.35	13.05
789-4061	H-6	.24"	16.30	13.90
789-4062	H-7	.275"	16.90	14.40
789-4063	H-8	.31"	21.60	18.40
789-4064	H-9	.35"	22.90	19.50
789-4065	H-10	.40"	24.00	24.40
789-4066	H-11	.43"	24.60	20.90

ELECTRO-TY CABLE TIES

These cable ties offer maximum service heavy-duty applications. Manufactured meet MS17821 and MS18034 standards. C structed of virgin nylon for extremely lig weight and abrasion resistant service. F tures high tensile strength for long-last service under rugged conditions. Low abso tion rate assures resistance to deteriorat from elemental wear. Resists many comm solvents, oils, alkalies, etc. Available in si from 1/16" to 4" in diameter. Order from ta listed below. Av. shpg. wt. 12 oz. **Sold in M ples of 1000 Only.**

Stock No.	Mfr's Type	Bundle Dia. Min.-Max.	Mil. No.	PER 1000	
				1-4	5-Up
789-4045	EL-AM	1/16"-1"	4	14.50	13.5
789-4046	EL-BM	1/16"-1 5/16"	1	23.25	21.6
789-4047	EL-CM	1/16"-4 3/16"	2	48.90	44.0
789-4048	EL-DM	3/16"-4"	3	78.00	70.2

CRADLE CLIPS



Facilitates on-the-spot wiring changes without replacement or tools. Takes only five seconds per fixing point. Binders and cradles of durable nylon construction; clips of heavy-duty neoprene. Sturdy and secure design construction will withstand vibrations without any damage to wire insulation. Color: black. In sizes from 1/8" to 2" diameters. *With captive nut. **Cradle with captive clip. Av. shpg. wt. 2 lbs. **Available in Multiples of 1000 only.**

RECOMMENDED COMBINATIONS

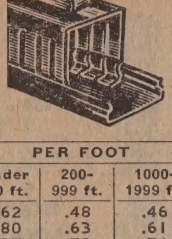
Diameter of Cable Form	Supported Wiring		Unsupported Wiring	
	Cradle	Clip	Binder	Clip
1/8"-5/16"	CO+NO			
1/4"-5/8"	C1	N1	B1	N1
1/2"-11/16"	C1	N3	B1	N5
11/16"-1 1/16"	C2	N3	B12	N3
15/16"-1 1/16"	C2	N5	B12	N5
1"-1 1/4"	C3	N3	B2	N3
1 1/4"-1 1/2"	C3	N5	B2	N5
1 1/2"-2"	C3	N7	B2	N7
Over 2"	Use combination of above sizes			

ORDERING INFORMATION

Stock No.	Mfr's Type	Description	PER 1000			
			1-4	5-9	10-14	15-Up
789-4044	CO-NO**	Cradle & Clip	77.70	73.85	69.95	66.05
789-4031	C1	Cradle	60.50	57.50	54.45	51.45
789-4033	C2	Cradle	68.20	64.80	61.40	57.95
789-4035	C3	Cradle	75.90	72.10	68.30	64.50
789-4032	C1-M*	Cradle	112.20	106.60	101.00	95.35
789-4034	C2-M*	Cradle	150.50	142.95	135.40	127.95
789-4036	C3-M*	Cradle	166.35	158.05	149.70	141.35
789-4028	B1	Binder	47.95	45.55	43.15	40.75
789-4030	B12	Binder	59.60	56.60	53.65	50.65
789-4029	B2	Binder	70.80	67.25	63.70	60.20
789-4072	N1	Clip	31.00	29.50	27.90	26.35
789-4073	N3	Clip	42.40	40.30	38.20	36.05
789-4074	N5	Clip	57.05	54.20	51.30	48.45
789-4075	N7	Clip	68.95	65.55	62.10	58.65

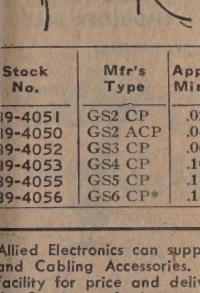
Electrovert Wiring Accessories

ELECTRO-DUCT



;h-impact vinyl duct won't peel, p, or crack even under adverse condi-ıs. Withstands temperatures of up to °F. Temporary adhesive mounting mits drilling and lining up mounting es with ease. CSA approved. In-des channel and cover. Standard gth, 6 feet. Sold in multiples of 6 feet y. Shpg. wt. 2 lbs. Order By the Foot.

Stock No.	Mfr's Type	Nominal W & H	Std. Ctn.	PER FOOT Under 200 ft.	200-999 ft.	1000-1999 ft.
9-4000	1010A-G	1x1″	96′	.62	.48	.46
9-4001	1020A-G	1x2″	90′	.80	.63	.61
9-4002	1030A-G	1x3″	60′	.97	.79	.76
9-4017	2030A-G	2x3″	36′	1.15	.92	.88



POLYETHYLENE GROMMET STRIPS

One strip only application to round, square, rectangular and oval holes. From 20 gauge to ¼″ thick. Meet MIL-C-17D, MIL-W-76B and MIL-C-915A specifications. Easy application; no special tools needed. Sold only in multiples as shown below. Order by the foot. Shpg. wt. 8 oz. *GS6 CP in 50-Foot Package Only.

Stock No.	Mfr's Type	Application Min. Max.	Pkg.*	PER PKG. 1-9	10-49	50-Up
9-4051	GS2 CP	.020-.039	100 ft.	4.40	3.95	3.75
9-4050	GS2 ACP	.040-.062	100 ft.	4.79	4.45	3.95
9-4052	GS3 CP	.063-.099	100 ft.	5.12	4.75	4.15
9-4053	GS4 CP	.100-.144	100 ft.	5.89	5.45	4.90
9-4055	GS5 CP	.145-.187	100 ft.	10.29	9.35	8.60
9-4056	GS6 CP*	.187-.250	50 ft.	14.85	13.20	11.20

Allied Electronics can supply the entire line of Electrovert Wiring and Cabling Accessories. Contact your nearest Allied Electronics facility for price and delivery information on items not shown in this Catalog or for large-production-quantity pricing.

STAFFEL MODULAR TERMINAL BLOCKS

- Insulating Body of Molded Melamine
- Captive Metal Parts and Screws Totally Enclosed
- Snap Easily into Mounting Rails for Fast Assembly

These modular terminal blocks feature compression molded Melamine insulators for outstanding electrical and mechanical properties. Pressure clamp connectors boasts silver-plated copper or brass current bar for excellent conductivity. All metal parts are totally enclosed in the insulating body, providing circuit protection as well as personal safety. Av. shpg. wt. 8 oz. Pkg. of 100 Only.

Stock No.	Mfr's Type	Description	PER 100
789-4011	1283	Terminal Block (Pressure Clamps)	29.80
789-4007	1179	End Plate	8.80
789-4008	1228	Assembly Rail 6′6″	300.00
789-4018	2061	Holding Clamp	9.45
789-4013	1823	Markers (slip on)	.85
789-4014	1905	Markers (snap on)	3.40

MICRO TERMINALS

Stock No.	Mfr's Type	Description	PER 100
789-4009	1281	Terminal Block (Pressure Clamp)	23.50
789-4010	1282	End Plate	6.50
789-4003	1173	Terminal Block (1 solder lug)	28.60
789-4004	1174	End Plates	6.50
789-4012	1623	Terminal Block (2 solder lugs)	20.70
789-4010	1282	End Plate	6.50
789-4005	1175	Assembly Rail 6″x6″	165.00
789-4007	1177	Holding Clamp	5.75

FLEXIBLE TERMINAL STRIPS

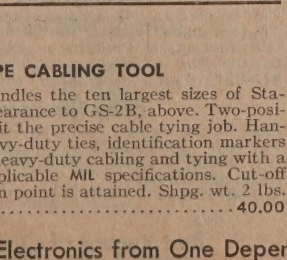
Flexible terminal strips especially designed for equipment such as household and domestic appliances. The flexible nature of the terminal strips allows conformation to curved and uneven surfaces. No drilling of mounting holes required. Pressure clamp connectors for strong, high conductive connections. Rated 20 Amps at 300 Volts. Conductors, up to A.W.G. #12. Strips may be cut with only a sharp knife. 12 poles maximum per strip. Av. shpg. wt. 8 oz.

Stock No.	Mfr's Type	Description	PER 100
789-4015	1949	12 Pole PVC Strip (W/Pressure Clamps)	105.50
789-4016	1950	Marking Strip	14.20

Wiring Accessories

PANDUIT

GS-2B GUN TYPE CABLING TOOL



Fast, Efficient Cabling System • Pre-set Strap Tension and Cutoff

ın-type cabling tool provides quick and efficient binding. Works ster than spot tieing, taping or other conventional methods. One justable clamp replaces a complete range of clamps. Uniform ap tension with any bundle. Direct feed with preset strap cutoff d controlled strap tension. Cut off occurs only when preset ten-ın is reached. Used to install standard and miniature Sta-strap ble ties, clamp and identification markers. Meets applicable L specifications. Shpg. wt. 1 lb.

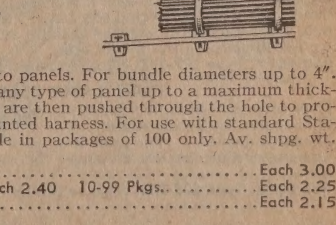
81-2000 ..... 19.00

GS4H GUN-TYPE CABLING TOOL

eavy-duty harnessing tool handles the ten largest sizes of Sta-rap cable ties. Similar in appearance to GS-2B, above. Two-posi-on knob can be adjusted to suit the precise cable tying job. Han-es standard to extra-long heavy-duty ties, identification markers d clamps. For fast, efficient heavy-duty cabling and tying with a inimum of effort. Meets applicable MIL specifications. Cut-off ccurs only when pre-set tension point is attained. Shpg. wt. 2 lbs.

81-2001 ..... 40.00

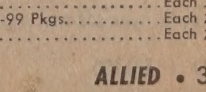
STA-STRAP® MARKER PLATES



For identifying wire bundles up to 4″ in diameter. All Nylon. Can marked with nylon marking pen. 100 per package.

Stock No.	Mfr's Type	Length	Wt. Per 100	PER PKG. OF 100 1-4	5-Up
881-3000	MP150C	1½″	.1	9.50	7.60
881-3001	MP175C	1¾″	.1	9.85	7.90
881-3002	MP200C	2″	.15	10.30	8.30
881-3003	MP250C	2½″	.15	11.25	9.00
881-3004	MP350C	3½″	.2	13.00	10.40

PM2H25C NYLON PUSH MOUNT

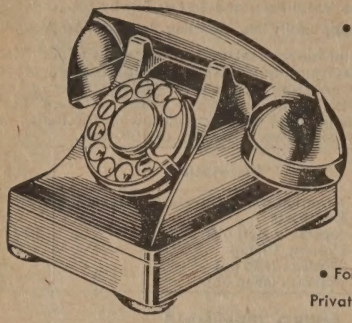


Use to mount harnesses to panels. For bundle diameters up to 4″. ¼″ holes are drilled into any type of panel up to a maximum thickness of ⅛″. Push mounts are then pushed through the hole to provide a neat, securely mounted harness. For use with standard Sta-Strap cable ties. Available in packages of 100 only. Av. shpg. wt. per 100, 0.1 lb.

881-4000. 1-4 Pkgs. ..... Each 3.00
5-9 Pkgs. ..... Each 2.40 10-99 Pkgs. ..... Each 2.25
100-Up Pkgs. ..... Each 2.15

Telephone, Accessories and Modules

STANDARD DIAL DESK TELEPHONE



- Factory Reconditioned
- Ready to Install
- Guaranteed

10.95

- For Intercoms, Extensions Private Phone Systems

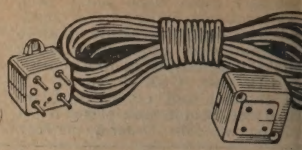
PROVIDES A LOW-COST EXTENSION PHONE

Desk telephone with standard ten-digit dial mechanism factory reconditioned for long, trouble-free service. Furnished in most standard styles for applications as intercoms, private internal phone systems, or as extension phone to already installed public phone service. All cords, dial mechanism and bell included, telephone is simple to install. Used with phone jacks and plugs (illustrated right), telephone may be transported from room to room to be always near at hand. Provides convenience at low cost in any application at home or office. Can be modified for experimental use as a digital command device and readback station. Phone body and handset constructed of rugged bakelite, with metal base. Styles may vary from that shown in illustration. **(Note: Use of telephone equipment not installed by a telephone company may be subject to local tariff.)**
910-7040. Type 279-371. Shpg. wt. 4 lbs.....10.95

30-FT. TELEPHONE EXTENSION CORD

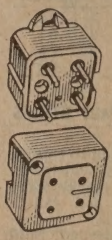
2.98

- Move Your Phone from Room to Room



Flexible 4-conductor cord, plug and standard telephone jack.
910-7065. Type 279-1261. Shpg. wt. 1¼ lbs.....

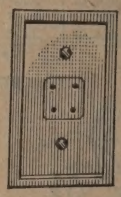
TELEPHONE JACKS, PLUGS



Mfr's Type 279-366. Telephone Plug. 4-conductor. ¼ lb.
910-7036.....1.25

Mfr's Type 279-367. Jack. 4-conductor. ¼ lb.
910-7037..1.40

TELEPHO WALL JA



For 2, 3, 4 systems. standard conduit b ¼ lb. Type 1507.
910-7080..

COILED PHONE CORDS

Type 278-361. 3-Conductor. 6-ft. ½ lb.
910-6931..1.29

15-Ft. Coiled Cord **5.95**

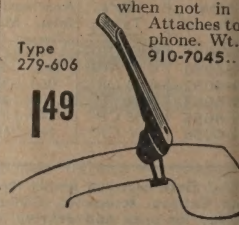
Type 278-1389. 4-Conductor. Stretches to 15 feet. ¼ lb.
910-6995..5.95

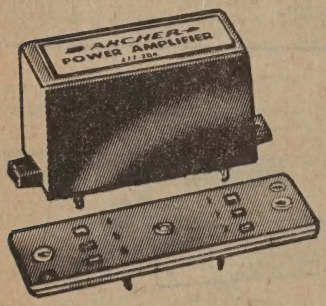
TELEPHONE SHOULDER REST

Folds out of when not in Attaches to phone. Wt.
910-7045..

Type 279-606

1.49





ARCHER® SOLID-STATE ELECTRONIC MODULES

EASY PROJECT CONSTRUCTION WITH "PLUG-IN" BLOCK

Completely Wired, Including the Socket the Module Plugs Into

2.49 Each

A completely new concept in semiconductor modules especially designed the hobbyist, experimenter, and the kit builder. The only module that p into a socket. Each module is permanently encapsulated. With a few additio easy-to-wire accessories such as batteries and speakers you can create a pra cal and enjoyable device. Each module is thoroughly checked at the factory reliable performance and each comes complete with easy to read detailed structions and a parts list. Very reliable and long lasting for your safety convenience. Good for many types of equipment. 100% solid state. Ove measurements: 1" high x 2 1/16" wide x 7/8" deep.

POWER AMPLIFIER

Capable of producing a power output of up to 300 milliwatts. Use with FM tuners, microphone preamplifier module (277-202) or phono preamplifier module (277-201). Frequency response, 40-12,000 Hz. Transformerless output.
910-6814. Type 277-204. Shpg. wt. 6 oz.....2.49

PHONO PREAMPLIFIER

Designed for use with hi-fi amplifiers that do not have enough gain to amplify the output of a magnetic cartridge. Output of 0.5 to 1 volt—power enough to drive most amplifiers to full output.
910-6811. Type 277-201. Shpg. wt. 6 oz.....2.49

WIRELESS CODE OSCILLATOR

Capable of producing a tone frequency through any AM broadcast band radio when connected to a battery and key. Produces a 400 Hz note which can be transmitted without any wire for a short distance. An aid to learning the Morse code.
910-6817. Type 277-207. Shpg. wt. 6 oz.....2.49

DUAL LAMP FLASHER

This versatile electronic flasher is capable of flashing 6-volt, 100 milliampere bulbs alternately. Use as emergency flasher for cars, planes or boats . . . for animated store displays. Ideal for model warning systems at RR crossings, for warning light outside darkroom.
910-6818. Type 277-208. Shpg. wt. 6 oz.....2.49

FM WIRELESS GUITAR AMPLIFIER

This unique module allows you to use your FM receiver for ampl ing any electrical string instrument without the use of bothersc connecting wires. Simply tune to a clear spot on the FM dial play your favorite music or newscast.
910-6813. Type 277-203. Shpg. wt. 6 oz.....2

FM WIRELESS MICROPHONE

Use or transmit your voice through any standard FM receiver wi out the use of wires. Just connect mike (crystal or ceramic) talk. Voice can be transmitted over short distances in your ho
910-6815. Type 277-205. Shpg. wt. 6 oz.....2

MICROPHONE PREAMPLIFIER

Can be used to raise a microphone's level of output. This ma the microphone suitable for use with most amplifiers or CB/a teur transmitters. Produces an output of .5 to 1 volt—power enou to drive most amplifiers or modulators to their full output.
910-6812. Type 277-202. Shpg. wt. 6 oz.....2

CODE PRACTICE OSCILLATOR

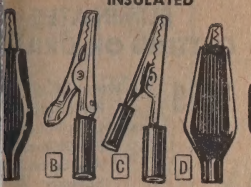
Ideal for practicing the international Morse code, for sending tw way code communications (by adding a second speaker and co key). Produces a clear note of 400 cycles. Educational and fun young and old alike.
910-6816. Type 277-206. Shpg. wt. 6 oz.....2

Best Record of Orders Filled in the Count

Clips, Phone Plugs, Test Leads, Accessories

ALLIGATOR CLIPS

INSULATED



69¢ Set of 10

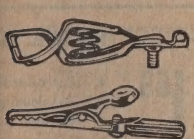
"Mini" Clips. Kit contains 3 black, 3 red, 2 green, 2 yellow, 3/16" opening. 1¼" g. Shpg. wt. 3 oz.
-6130. Type 270-378.....69¢

2¼" Clips. Excellent for use around shop or lab. Assorted colors. 5/16" jaw nings. Shpg. wt. ¼ lb.
-6135. Type 270-375.....79¢

2½" Clips. 5 black and 5 red insulated clips. Indicates DC polarity. Solder nection. All steel. Shpg. wt. ½ lb.
-6125. Type 270-347.....79¢

1⅝" Clips. Set of 12 (6 black, 6 red). Solder type, rubber insulators. 4 oz.
-6180. Type 270-1545.....99¢

UNINSULATED

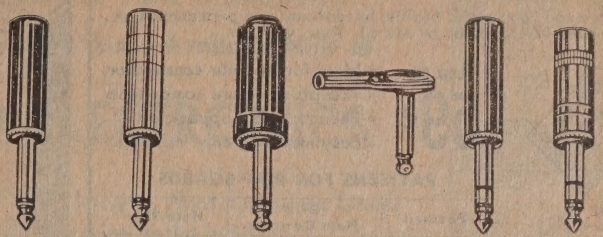


99¢

Set of 10. Claw type—all steel, heavy duty. Use in workshop or lab. 4 oz.
-6140. Type 270-377.....99¢

Set of 16. 2" clips—slim type. All steel. Complete with screw connection. 4 oz.
-6130. Type 270-348.....99¢

STANDARD ¼" PHONE PLUGS



2-CONDUCTOR

G Set of 3. Long, slim type. Black bakelite barrel. Nickel-plated parts, 2⅞" length. Barrel ½" diameter. Wt. 4 oz.
910-6570. Type 274-1536.....99¢

H Set of 2. Long, slim type. Shielded barrel. Barrel has ½" diameter. 2⅞" overall length. Shpg. wt. 4 oz.
910-6584. Type 274-1544.....99¢

J Set of 2. Double-barrel type. Ribbed black plastic barrel handle. Takes cord phone tip or tips. Shpg. wt. 5 oz.
910-6579. Type 274-1539.....79¢

K Set of 2. Flat right-angle type. Shielded. Ideal in applications where space is limited. Shpg. wt. 4 oz.
910-6515. Type 274-254.....99¢

3-CONDUCTOR

L Set of 3 Three-Circuit Type. Slim-line. For push-to-talk mikes, stereo headphones. Black bakelite barrel. 2⅞". 4 oz.
910-6505. Type 274-139.....1.39

M Shielded 3-Conductor Type. Solder-lug terminals. Length 2⅞". Barrel 1⅝". Nickel-plated. Shpg. wt. 4 oz.
910-6520. Type 274-285.....88¢

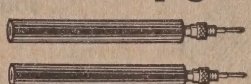
VEST POCKET "RESIST-O-GUIDE"

25¢

Rotary color discs quickly show ohms of RETMA coded transistors. Tolerance indicator. Shpg. wt. 2 oz.
910-6250. Type 271-1200.....25¢

5" SOLDERLESS TEST PRODS

79¢ Set of 2



Consists of 1 red, 1 black prod. ½" tip. 5¼" overall. Threaded type. Shpg. wt. ¼ lb.
910-6540. Type 274-720.....79¢

¼-LB. MAGNET WIRE

Easily Soldered

1.19

ar insulated copper wire.

ck No.	Type No.	Size	Ft.	EACH
-6903	278-003	22	93	1.19
-6904	278-004	24	150	1.19
-6905	278-005	26	240	1.19
-6906	278-006	28	378	1.19
-6907	278-007	30	600	1.19
-6911	278-011	32	953	1.19

FOUR 30" TEST LEAD CABLES

1.29

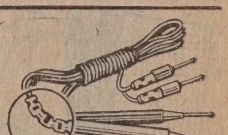
- 4 Colors
- Insulated Clips at Both Ends

Durable flexible cables in red, green, black and yellow. A basic need. ½ lb.
910-6901. Type 278-001.....1.29

TEST LEADS

99¢

- 60" Long



"Flexiprobes" have molded strain relief on probes to reduce wire breakage. 60" long.
910-6974. Type 278-740. ¼ lb.....99¢

50" LEADS WITH BANANA PLUGS

50" flexible plastic wire test leads with butyrate handles. Solderless brass tips with nickel-plating. Shpg. wt. ½ lb.
910-6980. Type 278-746.....1.59

HEAT SINKS

1.19 Set of 5

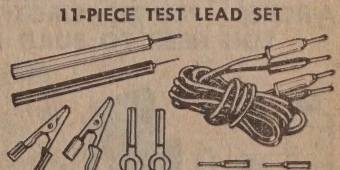
ws heat away from components while ering. 2½" aluminum with magnet base. and 2½" straight and bentjaws.
-6703. Type 276-001. ¼ lb.....1.19

JUMPER LEAD CLIPS

1.19 Set of 10

14" with min. alligator clip end. 6 oz.
910-6990. Type 278-1156.....1.19

11-PIECE TEST LEAD SET



1.98

Two 4½" prods (black and red); two black and red 6' leads with banana plugs; two heavy duty spade lugs; two phone tip plugs; two insulated clips; carrying case. 1 lb.
910-6120. Type 270-332.....1.98

TRANSISTOR REPLACEMENT GUIDE

- Over 8000 Transistor Substitutions

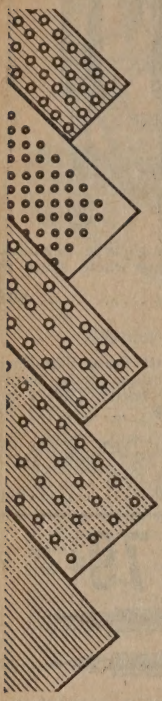
49¢

uick cross reference and replacement guide for general es of transistors used in such common consumer items as o, TV, solid-state recorders etc. Comprehensive listing Archer replacement transistors. Shpg. wt. 6 oz.
-5615. Publisher's Type 62-1015.....49¢

Perf-Boards, Perf-Boxes, Transformers, PC Kit

ARCHER® PERF-BOARDS

Phenolic and copper-clad boards; br eadboard and permanent type. 1/16" thickness. Can easily be saw ed. Shpg. wt. 1 lb.



Low as **59¢**

- Ideal for modular construction
- Accepts miniature components
- Phenolic and Copper-clad
- Easy mounting only 1/16" thick

PATTERNS FOR PERF-BOARDS

Pattern	Grid Hole Centers	Hole Size
A	.265x.265	3/32"
B	.187x.187	1/16"
G	.100x.200	1/16"

PREPUNCHED PERF-BOARDS

Stock No.	Mfr's Type	Pattern	Size	Price
910-6732	276-1582	A	3 5/8x6 7/8"	.59
910-6733	276-1583	A	6 7/8x9 3/4"	1.19
910-6710	276-1390	B	4 1/2x5 5/8"	.69
910-6711	276-1391	B	5 5/8x9"	.99
910-6712	276-1392*	G	4 1/2x5 5/8"	.69
910-6713	276-1393*	G	3 5/8x9"	.99

*Alternate Grid

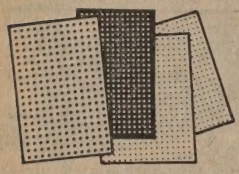
PREPUNCHED COPPER-CLAD

Stock No.	Mfr's Type	Pattern	Size	Price
910-6734	276-1584	A	3 5/8x6 7/8"	.89
910-6735	276-1585	A	6 7/8x9 3/4"	1.75

SOLID COPPER-CLAD

Stock No.	Mfr's Type	Size	Price
910-6736	276-1586	3 5/8x6 7/8"	.79
910-6730	276-1587	6 7/8x9 3/4"	1.59

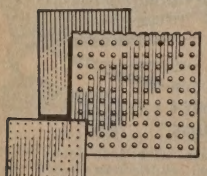
SET OF 10 PREPUNCHED PERF-BOARDS



$1.19 Set of 10

Hole sizes are 1/16" and 3/32"; straight and alternate grids. Sizes vary; 1 1/2"—3" square, rectangular. Shpg. wt. 1/2 lb.
910-6725. Type 276-1575.....1.19

ASSORTMENT OF 10 COPPER-CLAD PERF-BOARDS



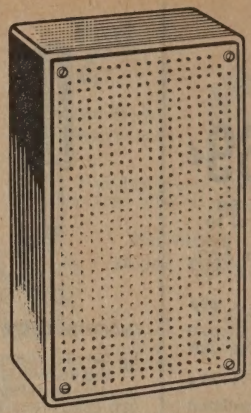
$1.39 Set of 10

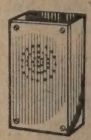
Ten assorted sizes of perforated and solid copper-clad perf-boards. All you have to do for a perfect printed circuit is install the components and then etch out the circuit. Board itself is phenolic. Shpg. wt. 11 oz.
910-6730. Type 276-1580.....1.39

ARCHER® PRINTED CIRCUIT KIT WITH ALL YOU NEED TO BUILD PC BOARDS

6.95

Kit contains everything you need to design and make PC boards. 2 printed circuit boards, resist ink pen, 6-oz. bottle of etchant, 2-oz. bottle of resist ink solvent, 1/16" drill bit. 7 1/8x5 1/8x2" plastic box.
910-6726. Type 276-1576. Shpg. wt. 2 lbs.....6.95





Back Side

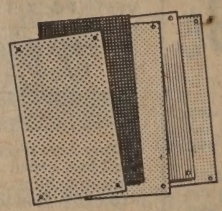
PERFBOX® ELIMINATES CUTTING OR DRILLI

$1.69

- With 3 1/2x6 Perfboard To
- 2 1/4" Speaker C Pre-Drilled fo Any Small PM Speaker

Removable perfboard front, makes component wiring easy. A dia. hole in side serves as outlet for speaker wire, line cord or har Rear pre-drilled for 2 1/4" or other PM speaker. Bakelite case 6 1/8x2". Perfboard hole dia. .062".
910-6105. Type 270-097. Shpg. wt. 1 1/2 lbs.....

EXPERIMENTER'S 5-PIECE PANEL SE

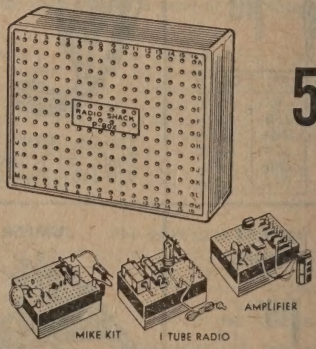


$1.69

- 3 Perfboards
- 1 Aluminum pa
- 1 Bakelite pan

Made especially for PERF-B above. 1/16" thick. Accepts miniature components and nectors. Size: 3 1/2x6". Hole 1/16". Shpg. wt. 1 1/2 lb.
910-6110. Type 270-100.....

RADIO SHACK EXPERIMENTER'S "P-BO

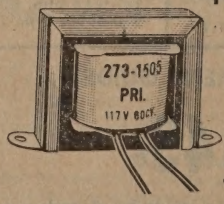


59¢

- Mount par without special cutting
- Removable transpar lid with hinge

Specially designed and gineered by Radio S using a new material w standing normal solde heat. Grey perforated base with 3/32" dia. h Size: 4 5/8x3 5/8x1 1/2". S wt. 1/4 lb. Type 270-105.
910-6115.....

FILAMENT TRANSFORME

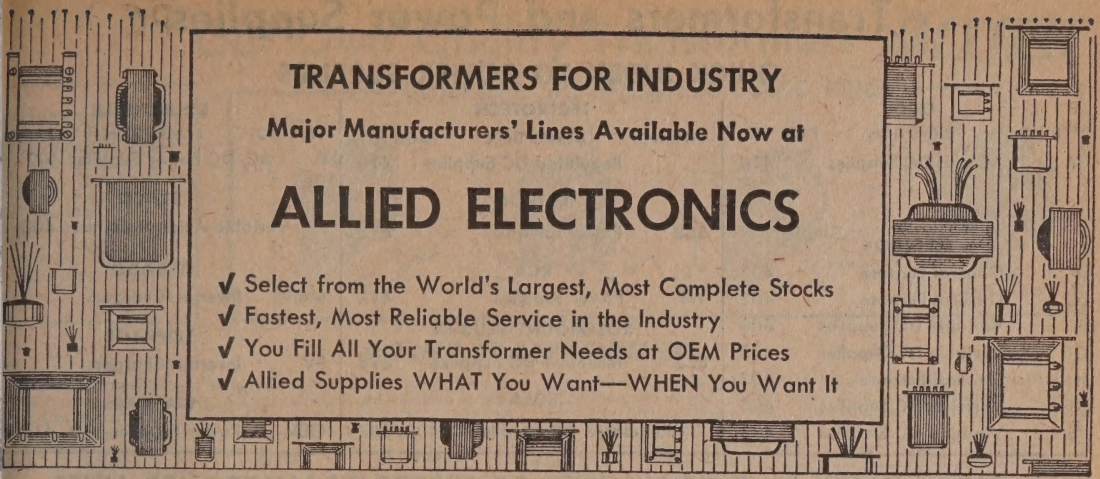


Low As **$1.29**

- For Replacements, Experiments, Conversions
- Color Coded Leads

117 V 60 Hz AC primaries. Seconda have 1.2-ampere capacity. Insulat breakdown voltage, 1500 volts. Co coded leads. Shpg. wt. 1 lb.

910-6420. Type 273-050. 6.3 V Secondary. 1 1/4x1 1/16x3 9/16".....1
910-6490. Type 273-1505. 12.6 V Center-Taped Secondary. Size, 2 3/8x1 1/2".....1
910-6480. Type 273-1480. 24 V Secondary. 2x1 1/16x3 3/16".....1



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- ✓ You Fill All Your Transformer Needs at OEM Prices
- ✓ Allied Supplies WHAT You Want—WHEN You Want It

There is an Allied transformer for every requirement—and you pay far less. Use the chart on this page to find the Allied replacement unit for the transformer you've been using, then order by Allied Stock No. Page references indicate where the Allied transformers are described, and where prices and specifications are shown. Allied transformers are built in the U.S.A., to our own demanding specifications. If you've never used an Allied transformer before, you'll be amazed at how much you save, with no sacrifice of reliability or quality.

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Transformers and Power Supplies

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KNIGHT®

(OEM Prices Apply to Any Quantity Ordered)
Allied Electronics is your exclusive distributor for Knight transformers. Built to Allied's own rigid standards of quality, stability and performance, they carry a one-full-year warranty against defects in workmanship.

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CHICAGO-STANCOR

(OEM Prices to any Quantity)

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J. W. MILLER

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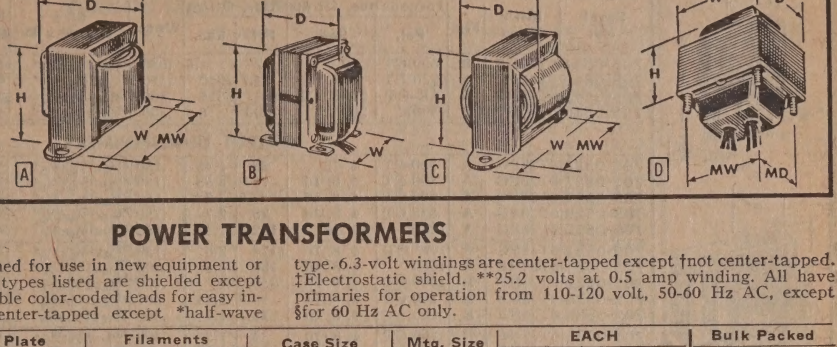
Allied supplies the complete line of every power supply, transformer and coil manufacturer listed in this section. Phone, wire or write the Allied facility nearest you for full information, price and delivery on types not shown.

Our Own Quality Transformers ALLIED

llied transformers are pecially built to Allied's igh standards for qual-y, stability and per-ormance. Quantities of 00 and up are shipped ulk-packed F.O.B. hicago, Illinois. Phone, ire or write Allied lectronics for pricing n quantities of 500 and ore.

COMPARE SPECIFICATIONS AND PRICES



POWER TRANSFORMERS

ality power transformers designed for use in new equipment or replacement applications. All types listed are shielded except se indicated by #. Have 8" flexible color-coded leads for easy in-lation. Plate windings are center-tapped except *half-wave type. 6.3-volt windings are center-tapped except †not center-tapped. ‡Electrostatic shield. **25.2 volts at 0.5 amp winding. All have primaries for operation from 110-120 volt, 50-60 Hz AC, except §for 60 Hz AC only.

Stock No.	Mfr's Type	Fig.	Plate		Filaments		Case Size HxWxD	Mtg. Size MWxMD	EACH			Bulk Packed	
			VCT	mA	5 V (Amps)	6.3V(Amps)			1-9	10-49	50-99	100-249	250-Up
5-0168	6K143HF	A‡	115*	15	.....	0.6†	1 11/16x2 13/16x1 3/4"	2 3/8"	6.80	6.05	5.65	4.50	4.19
5-0034	6K27VF	C#§	125*	15	.....	0.6†	2x2 3/8x1 5/8"	2"	3.30	2.93	2.69	1.64	1.49
5-0035	6K28HF	A#	125*	50	.....	2.0†	2 5/16x3 1/16x2 1/4"	3 1/8"	5.40	4.85	4.42	2.41	2.19
5-0171	6K146HB	D‡§	135*	200	.....	5.5	2 1/8x3 3/8x2 13/16"	2 13/16x2 1/4"	12.08	10.70	9.84	7.82	7.30
5-0137	6K111VG	B‡	230	40	.....	1.5	2 3/4x2 9/32x2 1/2"	1 3/4x1 5/8"	8.88	7.55	7.10	4.39	4.00
5-0001	6K1VF	C#§	250	25	.....	1.0†	2 3/8x2 7/8x1 7/8"	2 3/8"	3.94	3.50	3.22	1.90	1.73
5-0106	6K82VF	C#	380*	20	.....	.....	2 3/8x2 7/8x2 1/16"	2 3/8"	5.35	4.82	4.29	2.41	2.19
5-0156	6K131VG	B**	440	50	.....	0.6†	3 1/8x2 5/8x2 11/16"	2x1 11/16"	9.50	8.10	7.63	4.33	3.94
5-0066	6K49HB	D	460	50	.....	2.5†	1 3/4x3x2 1/2"	2 1/2x2"	7.11	6.05	5.69	4.60	4.29
5-0067	6K49VG	B	460	50	.....	2.5†	3 3/16x2 5/8x2 11/16"	2x1 3/4"	7.37	6.26	5.90	3.21	2.93
5-0002	6K2HB	D	480	40	2	2.0	1 13/16x3x2 1/2"	2 1/2x2"	9.60	8.15	7.69	3.86	3.51
5-0003	6K2VG	B	480	40	2	2.0	3 3/16x2 5/8x2 3/4"	2x1 11/16"	9.15	8.23	7.30	4.96	4.64
5-0068	6K50HB	D	480	55	2	2.0	1 3/4x3x2 1/2"	2 1/2x2"	9.42	8.00	7.53	3.74	3.41
5-0069	6K50VG	B	480	55	2	2.0	3 3/16x2 5/8x2 11/16"	2x1 3/4"	9.13	7.60	7.29	3.92	3.57
5-0070	6K51HB	D	480	70	.....	3.0†	1 7/8x3x2 1/2"	2 1/2x2"	8.93	7.59	7.14	3.56	3.24
5-0071	6K51VG	B	480	70	.....	3.0†	3 3/16x2 5/8x2 15/16"	2x1 7/8"	8.66	7.36	6.93	3.67	3.35
5-0113	6K88VG	B	500	40	.....	2.0	2 3/4x2 1/4x2 3/4"	1 25/32x1 7/8"	7.80	6.95	6.38	5.09	4.75
5-0074	6K53HB	D	500	70	2	2.5	2 1/8x3x2 1/2"	2 1/2x2"	10.34	8.50	8.25	4.16	3.79
5-0075	6K53VG	B	500	70	2	2.5	3 3/16x2 5/8x3 1/8"	2x2 1/8"	10.00	8.48	8.00	4.09	3.72
5-0079	6K55VG	B	520	90	.....	4.0†	3 9/16x2 15/16x3 3/16"	2 1/4x2 1/16"	9.93	8.43	7.94	4.04	3.68
5-0036	6K29HB	D	520	90	2	3.0	2 3/8x3 3/8x2 13/16"	2 13/16x2 1/4"	11.07	9.25	8.86	4.46	4.06
5-0037	6K29VG	B	520	90	2	3.0	3 5/8x3x3 1/2"	2 1/4x2 1/4"	9.93	8.94	7.94	4.46	4.06
5-0081	6K56VG	B	540	120	3	3.5	3 15/16x3 1/4x3 1/2"	2 1/2x2 1/4"	12.08	10.37	9.84	5.88	5.35
5-0167	6K142VG	B‡§	600	60	.....	2.7	3 1/8x2 5/8x2 11/16"	2x1 11/16"	9.03	7.66	7.22	5.76	5.38
5-0054	6K42HB	D	600	70	2	3.0	2 1/4x3x2 1/2"	2 1/2x2"	11.70	10.40	9.55	5.29	4.89
5-0055	6K42VG	B	600	70	2	3.0	3 3/16x2 5/8x3 1/4"	2x2 3/16"	14.72	12.50	11.78	5.29	4.89
5-0058	6K44HB	D	600	120	3	5.0	2 5/8x3 3/4x3 1/8"	3 1/8x2 1/2"	14.35	12.75	11.73	6.55	5.96
5-0059	6K44VG	B	600	120	3	5.0	3 15/16x3 1/4x3 7/8"	2 1/2x2 9/16"	14.35	12.75	11.73	6.55	5.96
5-0005	6K3VG	B	650	40	2	2.0	3 3/16x2 5/8x2 11/16"	2x1 11/16"	9.30	7.90	7.43	3.92	3.57
5-0006	6K4HB	D	650	70	3	3.5	2 7/8x3x2 1/2"	2 1/2x2"	7.81	6.95	6.38	3.54	3.25
5-0007	6K4VG	B	650	70	3	3.5	3 13/16x2 5/8x3 3/4"	2x2 3/4"	7.81	6.95	6.38	3.54	3.25
5-0060	6K45HB	D	650	150	3	5.0	3x3 3/4x3 1/8"	3 1/8x2 1/2"	16.54	14.05	13.23	6.65	6.05
5-0061	6K45VG	B	650	150	3	5.0	3 15/16x3 1/4x4 1/4"	2 1/2x3"	5.33	4.54	4.27	2.78	2.53
5-0157	6K132VG	B	650	150	3	5.0	3 7/8x3 1/4x3 13/16"	2 1/2x2 9/16"	14.82	12.59	11.85	7.22	6.57
5-0077	6K54VG	B	680	70	2	2.5	3 9/16x2 15/16x3 5/16"	2 1/4x2 3/16"	10.55	8.97	8.44	4.99	4.54
5-0008	6K5HB	D	700	90	3	3.5	2 1/2x3 3/8x2 13/16"	2 13/16x2 1/4"	14.54	12.35	11.63	5.43	5.13
5-0010	6K6HB	D	700	120	3	4.7	2 3/4x3 3/4x3 1/8"	3 1/8x2 1/2"	15.23	12.95	12.18	6.38	6.03
5-0011	6K6VG	B	700	120	3	4.7	3 15/16x3 1/4x3 15/16"	2 1/2x2 11/16"	14.95	12.70	11.96	5.82	5.30
5-0063	6K46VG	B	700	200	3	6.0	4 5/8x3 7/8x4"	3x2 13/16"	19.64	17.40	15.47	8.88	8.08
5-0012	6K7HB	D	750	150	3	5.0	3 1/16x3 3/4x3 1/8"	3 1/8x2 1/2"	18.09	15.37	14.47	7.47	6.79
5-0013	6K7VG	B	750	150	3	5.0	3 15/16x3 1/4x4 3/8"	2 1/2x3 1/16"	16.86	14.30	13.48	7.84	7.13
5-0117	6K91VG	B	750	175	3	8.0	4 1/4x3 1/2x4 3/8"	2 3/4x3 5/16"	20.20	17.99	16.50	9.20	8.37
5-0169	6K144VG	B‡	800	30	2	1.2†, 1.2†	3 1/8x2 5/8x3 3/16"	2x2 3/16"	14.60	12.94	11.89	6.56	5.97
5-0014	6K8HB	D	800	200	3	5.0	2 7/8x4 1/2x3 3/4"	3 3/4x3"	19.41	16.50	15.54	8.31	7.56
5-0015	6K8VG	B	800	200	3	5.0	4 5/8x3 7/8x4 1/16"	3x2 13/16"	18.46	15.67	14.76	8.44	7.68
5-0039	6K30VG	B	800	250	4	5.0	4 5/8x3 7/8x4 3/8"	3x3 5/16"	22.84	19.33	18.24	9.36	8.52
5-0170	6K145VG	B‡§	900	250	4	2, 4†	4 5/8x3 7/8x4 1/16"	3x3 9/16"	25.98	23.10	21.10	11.85	10.78
5-0041	6K31VG	B	1200	200	3	3†, 3†	4 5/8x3 7/8x4 1/4"	3x3 1/16"	22.19	18.84	17.75	9.89	9.00
5-0040	6K31HB	D	1200	200	3	3†, 3†	2 15/16x4 1/2x3 3/4"	3 3/4x3"	22.19	18.84	17.75	10.63	9.67
5-0155	6K130VG	B§	1840	250 ind. 200 cap.			4 5/8x3 7/8x5 1/16"	3x3 15/16"	28.82	24.36	23.07	10.96	9.98

TRANSISTOR POWER TRANSFORMERS

maries for 117 V, 60 Hz AC. *For bridge rectifier—identical dual plate supplies.

Stock No.	Mfr's Type	Fig.	Plate Supply		Size H x W x D	Mtg. Ctrs.	EACH			Bulk Packed	
			AC V	DC mA			1-9	10-49	50-99	100-249	250-Up
5-0158	6K133VG	B*	13 or 18	900	3 1/8x2 5/8x2 15/16"	2x1 15/16"	8.23	7.04	6.61	3.44	3.13
5-0154	6K129VG	B	80 CT	1200	3 1/2x2 15/16x3 9/16"	2 1/4x2 3/8"	11.07	9.40	8.86	5.56	5.05

TUBE CHECKER TRANSFORMER

ultiple-secondary type for use in tube testers. Primary: 60 Hz. 7.0/7.5/12/20/25/30/35/50/70/85/110/117. Mounting centers condary output volts: 1.1/1.4/1.5/2.0/2.5/3.0/3.3/4.0/5.0/6.3/ 3 9/16". With data sheet.

Stock No.	Mfr's Type	Fig.	Primary Input Volts	Size H x W x D	Mtg. Ctrs.	EACH			Bulk Packed	
						1-9	10-49	50-99	100-249	250-Up
5-0140	6K114HF	A	125/115/105	2 5/8x4x3 1/16"	3 9/16"	17.76	15.06	14.21	7.47	6.79

ALLIED Transistor and Line Transformers

TRANSISTOR TRANSFORMERS

INPUT TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Res., Ohms Pri.	Res., Ohms Sec.	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pac 100-249	Bulk Pac 2
705-0541	6T42HF	B	600 CT	10	42	.8	.050	1 3/16x1 5/8x3/4"	1 3/8"	3.70	3.15	2.96	1.80	1.
705-0542	6T44PC	A	30 CT	50K	14.7	4060	.150	2 1/32x1 3/16x9/16"	2 5/32"	4.89	4.15	3.91	2.36	2.
705-0543	6T45HF	B	1K CT	200K CT	123	1815	.300	1 3/16x1 5/8x3/4"	1 3/8"	5.68	4.73	4.54	2.13	1.
705-0546	6T49HF	B	500K	200 CT	7000	8.5	.300	1 3/16x1 5/8x3/4"	1 3/8"	6.80	5.78	5.44	2.77	2.

OUTPUT TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Res., Ohms Pri.	Res., Ohms Sec.	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 2
705-0526	6T27PC	A	350 CT	4, 12	38	1.45	.150	2 1/32x1 3/16x9/16"	2 5/32"	6.21	5.29	4.98	2.37	2.
705-0527	6T28PC	A	500 CT	4, 8, 16	75.3	3.55	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.43	4.61	4.34	2.32	2.
705-0528	6T29PC	A	600 CT	4, 8, 16	73.2	3.2	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.38	4.57	4.29	2.31	2.
705-0529	6T30PC	A	825 CT	4, 8, 16	75	2.7	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.68	4.83	4.54	2.31	2.
705-0530	6T31PC	A	1250	4, 12	132.5	1.4	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.68	4.83	4.54	2.24	2.
705-0532	6T33PC	A	10K CT	4, 8, 16	1174	2.6	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.72	4.87	4.58	2.46	2.
705-0521	6T22HF	B	1000	4, 8, 16	180	3.5	.200	1 3/16x1 5/8x3/4"	1 3/8"	6.92	5.88	5.53	3.09	2.
705-0522	6T23HF	B	2000 CT	4, 8, 16	250	4	.200	1 3/16x1 5/8x3/4"	1 3/8"	7.05	5.99	5.64	3.55	3.
705-0534	6T35HF	B	100 CT	4, 8, 16	10.9	1.45	.300	1 3/16x1 5/8x3/4"	1 3/8"	4.89	4.16	3.92	2.41	2.
705-0535	6T36HF	B	160	4, 8, 16	18.7	1.4	.300	1 3/16x1 5/8x3/4"	1 3/8"	5.68	4.83	4.54	2.14	1.
705-0536	6T37HF	B	400 CT	4, 8, 16	34	1.5	.300	1 3/16x1 5/8x3/4"	1 3/8"	4.69	3.99	3.75	2.24	2.
705-0537	6T38HF	B	500 CT	4, 8, 16	47	.85	.300	1 3/16x1 5/8x3/4"	1 3/8"	5.28	4.49	4.20	2.39	2.
705-0539	6T40HF	B	2500	4, 8, 16	172	1.15	.300	1 3/16x1 5/8x3/4"	1 3/8"	5.68	4.83	4.54	2.37	2.
705-0540	6T41HF	B	3000	4, 8, 16	192	1.2	.300	1 3/16x1 5/8x3/4"	1 3/8"	5.48	4.66	4.38	2.32	2.
705-0523	6T24HF	B	48 CT	8, 16	5	1.5	5	2x3 5/16x1 3/4"	2 13/16"	5.59	4.73	4.48	2.64	2.
705-0524	6T25HF	B	20 CT	8	.55	.35	10	1 7/16x2 3/16x1 3/4"	2"	3.44	2.96	2.78	1.61	1.
705-0548	6T51VF	B	48 CT	3.2, 8, 16	3.6	1.4	10	2 5/16x2 7/8x2"	2 3/8"	5.08	4.31	4.06	2.14	1.
705-0549	6T52VF	B	100 CT	3.2, 8, 16	6.6	1.5	10	2 5/16x2 7/8x2"	2 3/8"	4.93	4.20	3.94	2.13	1.

INTERSTAGE TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Res., Ohms Pri.	Res., Ohms Sec.	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 2
705-0508	6T8HF	B	500 CT	5K CT	37	250	1.0	1 7/16x2 3/8x1 3/8"	2"	4.49	4.81	3.61	2.42	2.
705-0510	6T10PC	A	500 CT	50	59.7	7.9	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.43	4.62	4.34	2.18	1.
705-0511	6T11PC	A	500 CT	50K	76.8	5135	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.15	4.39	4.13	2.37	2.
705-0544	6T46PC	A	1500	500 CT	104	46.5	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.68	4.83	4.55	2.21	2.
705-0513	6T13PC	A	5K CT	7500 CT	650	790	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.43	4.62	4.34	2.22	2.
705-0514	6T14PC	A	5K CT	10K CT	635	1100	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.68	4.83	4.55	2.33	2.
705-0515	6T15PC	A	5K CT	80K CT	573	5740	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.92	5.03	4.73	2.55	2.
705-0517	6T17PC	A	10K	2K CT	1200	257	.150	2 1/32x1 3/16x9/16"	2 5/32"	4.69	3.99	3.75	2.27	2.
705-0518	6T18PC	A	10K	3K CT	1200	385	.150	2 1/32x1 3/16x9/16"	2 5/32"	5.15	4.38	4.13	2.27	2.
705-0519	6T19PC	A	500 CT	150 CT	62	21.2	.150	2 1/32x1 3/16x9/16"	2 5/32"	4.76	4.05	3.82	2.26	2.
705-0552	6T55PC	A	20K	800 CT	1350	95	.150	2 1/32x1 3/16x5/8"	2 5/32"	4.58	3.89	3.76	1.76	1.
705-0506	6T6HF	B	100 CT	10 CT	4.3	.8	.250	1 1/4x2 1/16x1 3/8"	1 3/4"	3.48	2.96	2.78	1.48	1.
705-0507	6T7HF	B	100	1K CT	5.8	45	.250	1 7/16x2 3/8x1 3/8"	2"	2.89	2.46	2.31	1.53	1.
705-0520	6T20HF	B	100K	1500 CT	3250	143	.300	1 3/16x1 5/8x3/4"	1 3/8"	5.68	4.83	4.54	2.39	2.
705-0545	6T48HF	B	500 CT	500 CT	40	55	.300	1 3/16x1 5/8x3/4"	1 3/8"	5.56	4.73	4.44	2.18	1.

DRIVER TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Res., Ohms Pri.	Res., Ohms Sec.	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 2
705-0554	6T58HF	E	2000 CT	200 CT	748	120	.100	5/8x1 1/4x1/2"	1 1/16"	8.32	6.66	6.80	3.80	3.
705-0550	6T53HF	B	100	200 CT	6.5	15.5	.500	1 1/4x2 1/16x1 1/4"	1 3/4"	3.86	3.28	3.08	1.47	1.
705-0551	6T54HF	B	500 CT	200 CT	36.5	15.5	.500	1 1/4x2 1/16x1 1/4"	1 3/4"	3.97	3.39	3.18	1.58	1.
705-0503	6T3HF	B	100	100 CT	9	10.8	.500	1 11/16x2 13/16x1 3/8"	2 3/8"	3.70	3.15	2.96	1.57	1.
705-0505	6T5HF	B	20	36 CT	2	4	1.0	1 1/4x2 1/16x1 1/4"	1 3/4"	3.27	2.77	2.62	1.55	1.

STANDARD LINE-TO-VOICE-COIL TRANSFORMERS

‡Autoformer for connecting one or more speakers across 500-ohm line. *Pri/sec. imp. 500/.06 to 8, 1000/.12 to 1500/.18 to 24, 2000/.24 to 32, 2500/.30 to 40, 3000/.36 to 48. Av. shpg. wt., 1¼ lbs.

Stock No.	Mfr's Type	Fig.	Primary Impedance	Sec. Imp.	Audio Watts	Size HxWxD	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 25
705-0823	6W29HFL	C	500	4, 8	5	1 3/8x2 3/8x1 1/2"	2.81	2.40	2.24	1.12	1.
705-0824	6W30VHL	D	500	4, 6, 8, 15	25	2 3/8x2 7/8x1 7/8"	4.54	3.87	3.64	2.19	1.
705-0821	6W27HFL	C	2000/1500/1000/500	4, 8	8	1 5/8x2 13/16x1 5/8"	4.44	3.78	3.56	1.84	1.
705-0837	6W43HFL	C	2000/1500/1000/500	4, 8	4	1 3/8x2 3/8x1 1/2"	3.27	2.91	2.67	2.13	1.
705-0838	6W44HFL	C	2000/1500/1000/500	4, 8	12	2x3 1/4x1 7/8"	5.24	4.46	4.20	2.04	1.
705-0839	6W45VFL	D	3000/2000/1500/1000/500	4, 8, 16	10	2 3/8x2 7/8x1 7/8"	5.59	4.75	4.48	2.42	2.
705-0868	6W74VFL	D‡	*See impedance ranges above.		15	2 3/8x2 7/8x2"	6.57	5.57	5.25	2.85	2.

CONSTANT-VOLTAGE LINE TRANSFORMERS

70.7-VOLT LINE-TO-VOICE-COIL TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Watt Taps	Sec. Imp. Ohms	Max. Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 250
705-0801	6W2HFL	C	5, 2.5, 1.25, .62, .31	4, 8	5	1 3/8x2 3/8x1 1/2"	2"	4.50	3.82	3.60	1.57	1.
705-0822	6W28VFL	D	8, 4, 2, 1, 0.5	4, 8, 16	8	2x2 3/8x1 5/8"	2"	4.40	3.97	3.53	2.20	2.
705-0802	6W4HFL	C	10, 5, 2.5, 1.25, .62	4, 8, 16	10	1 5/8x2 13/16x1 5/8"	2 3/8"	4.62	4.10	3.77	2.10	1.
705-0803	6W5VFL	D	18, 9, 4.5, 2.25, 1.12, .56	4, 8, 16	18	2 3/8x2 7/8x1 7/8"	2 3/8"	5.68	5.05	4.64	2.63	2.
705-0804	6W6HFL	C	24, 12, 6, 3, 1.5, .75	4, 8, 16	24	2 1/4x3 11/16x2 1/4"	3 1/8"	6.90	6.14	5.65	3.14	2.
705-0835	6W41HFL	C	2, 1, .5	4, 8	2	1 3/16x2 1/16x1 1/4"	1 3/4"	4.06	3.38	3.24	3.28	2.
705-0840	6W46VFL	D	16, 8, 4, 2, 1, 0.5	4, 8, 16	16	2 3/4x3 1/8x2 1/4"	2 13/16"	6.96	5.92	5.58	3.31	3.

HIGH-FIDELITY 70.7-VOLT LINE-TO-VOICE-COIL TRANSFORMER

Stock No.	Mfr's Type	Fig.	Watt Taps	Sec. Imp. Ohms	Max. Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 250
705-0836	6W42HFL	C	5, 2.5, 1.25, .625, .31	4, 8, 16	5	1 5/8x2 13/16x1 5/8"	2 3/8"	4.89	4.40	3.91	2.30	2.

25-VOLT LINE-TO-VOICE-COIL TRANSFORMERS

Stock No.	Mfr's Type	Fig.	Watt Taps	Sec. Imp. Ohms	Max. Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 250
705-0831	6W37HFL	C	2, 1, 0.5	4, 8	2	1 3/16x2 1/16x1 1/4"	1 3/4"	3.74	3.19	3.01	1.58	1.
705-0832	6W38HFL	C	5, 2.5, 1.25, 0.625, 0.31	4, 8	5	1 5/8x2 13/16x1 5/8"	2 3/8"	4.26	3.62	3.41	1.93	1.
705-0833	6W39HFL	C	10, 5, 2.5, 1.25, 0.625	4, 8, 16	10	2 1/4x3 11/16x2"	3 1/8"	5.35	4.38	3.92	2.98	2.
705-0834	6W40HFL	C	18, 9, 4.5, 2.25, 1.12	4, 8, 16	18	2 5/8x4x2 1/4"	3 9/16"	7.18	6.39	5.88	2.78	2.

ALLIED Filament, Control, Output Transformers

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FILAMENT TRANSFORMERS

ality transformers for continuous operation. Pri- ries for 115-125 volts 50-60 Hz (except §6.3 V). pe with ** has tapped primary to produce lower voltages. Types with * have primary tap for 107-volt operation. Types with ‡ have an electrostatic shield. † multiple secondary—one winding center-tapped.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Insul., rms V	Size HxWxD	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
5-3712	6K117HF	A	2.5	1.5	2500	1 11/16x2 13/16x1 9/16"	2 3/8"	4.38	3.89	3.53	2.86	2.66
5-0110	6K86HF	A	2.5 CT	3.0	1500	1 11/16x2 13/16x1 7/8"	2 3/8"	4.04	3.59	3.30	2.66	2.48
5-0064	6K47VF	B	2.5 CT	5.0	5000	2 3/4x3 1/8x2 1/8"	2 13/16"	6.44	5.74	5.15	4.27	3.97
5-0146	6K121VF	B*	2.5 CT	10.0	7500	3 1/8x3 9/16x3"	3 1/8"	6.95	6.25	5.57	3.99	3.72
5-0043	6K33VG	C	2.5 CT	10.0	2500	3 3/16x2 5/8x2 11/16"	2x11 1/16"	7.60	6.85	6.08	4.87	4.55
5-0111	6K87HF	A	2.5 CT	10.0	3000	2 3/8x3 3/4x2 3/8"	3 1/8"	6.70	5.97	5.49	4.37	4.08
5-0108	6K84VBR	D	2.5 CT	10.0	10,000	3 3/8x2 7/8x2 1/2"	2 1/4x1 7/8"	9.67	8.70	7.74	6.70	6.25
5-0049	6K39HF	A	5.0 CT	3.0	2500	2x3 1/4x2"	2 13/16"	4.93	4.44	3.94	2.23	2.08
5-0018	6K11HF	A	5.0 CT	6.0	2500	2 3/8x3 5/8x2 1/4"	3 1/8"	7.55	6.80	6.03	4.92	4.50
5-0094	6K70VBR	D	5.0 CT	10.0	2500	3 1/8x2 1/2x3"	2x3 3/8"	8.10	7.29	6.43	5.28	4.92
5-0145	6K120VBR	D	5.0 CT	15.0	2500	3x2 1/2x3"	2x2 1/4"	9.84	8.87	7.96	6.40	5.99
5-0086	6K62VBR	D	5.0 CT	21.0	2500	3 3/4x3 1/8x3 1/4"	2 1/2x2 1/4"	15.53	14.32	12.55	8.50	7.93
5-0109	6K85VG	C	5.0 CT	30.0	2500	4 5/8x3 3/4x4"	3x2 7/8"	17.29	15.58	13.83	11.76	10.97
5-0042	6K32HF	A	6.3 CT	0.6	1500	1 3/8x2 3/8x1 5/8"	2"	3.71	3.38	2.97	2.41	2.26
5-0016	6K9HF	A	6.3 CT	1.0	1500	1 5/8x2 13/16x1 3/4"	2 3/8"	3.04	2.74	2.43	1.75	1.64
5-0045	6K35HF	A	6.3 CT	1.2	3000	1 5/8x2 13/16x1 7/8"	2 3/8"	3.04	2.74	2.43	1.75	1.66
5-0107	6K83HF	A	6.3	1.2	5000	2x3 1/4x1 7/8"	2 13/16"	4.60	4.15	3.68	3.00	2.89
5-0153	6K128HF	A§	6.3	1.2	5000	2x3 1/4x1 15/16"	2 13/16"	4.89	4.44	3.94	2.96	2.76
5-0161	6K136VG	C	(4) 6.3†	1.75	1500	3 1/8x2 5/8x3 1/16"	2x2 1/8"	11.19	9.95	9.14	7.20	6.77
5-0017	6K10HF	A	6.3 CT	3.0	2500	2x3 1/4x2 3/8"	2 13/16"	3.04	2.74	2.43	2.51	2.33
5-0095	6K71VBR	D‡	6.3 CT	3.0	2500	3 1/8x2 1/2x2 3/8"	2x1 3/4"	7.00	6.30	5.61	4.05	3.78
5-0149	6K124VF	B*	6.3	3.0	7000	3 1/8x3 9/16x2 3/4"	3 1/8"	7.40	6.67	5.93	4.83	4.50
5-0082	6K57VG	C‡*	6.3 CT	4.0	2500	3 3/16x2 5/8x2 11/16"	2x11 1/16"	8.30	7.57	6.63	5.50	5.03
5-0115	6K90VG	C	6.3 CT	6.0	1500	3 1/8x2 5/8x2 3/4"	2x1 3/4"	9.33	8.40	7.55	6.21	5.80
5-0032	6K26VF	B	6.3 CT	6.0	2000	3 1/8x3 9/16x2 1/2"	3 1/8"	7.10	6.38	5.67	3.35	3.13
5-0033	6K26VBR	D	6.3 CT	6.0	2500	3x2 1/2x2 1/4"	2x2"	8.33	7.49	6.67	5.22	5.06
5-0044	6K34VBR	D*	6.3 CT	10.0	2500	3 3/8x2 13/16x2 7/8"	2 1/4x2 1/8"	11.69	10.51	9.34	6.88	6.42
5-0120	6K93VG	C	6.3 CT	20.0	2000	3 7/8x3 5/16x4 1/8"	2 1/2x3"	13.40	12.05	10.70	8.73	8.14
5-0096	6K72VBR	D‡*	6.3 CT	20.0	2500	4 5/8x3 3/4x2 7/8"	3x2 3/8"	13.40	12.05	10.70	8.73	8.14
5-0097	6K73VBR	D‡	7.5 CT	4.0	2500	3 1/8x2 1/2x2 11/16"	2x2 1/8"	9.48	8.54	7.59	4.66	4.34
5-0098	6K74VBR	D‡	7.5 CT	8.0	2500	3 3/4x3 1/8x2 7/8"	2 1/2x2 1/4"	10.90	9.83	8.74	7.10	6.63
5-0099	6K75VBR	D‡	10.0 CT	4.0	2000	3 3/8x2 13/16x2 3/4"	2 1/4x2 1/8"	9.65	8.70	7.73	5.19	4.85
5-0147	6K122VBR	D‡*	10.0 CT	5.0	2000	3x2 1/2x4 3/4"	2x2 1/8"	8.89	7.98	7.10	4.46	4.14
5-0100	6K76VBR	D‡	10.0 CT	8.0	2500	3 3/4x3 1/8x3"	2 1/2x2 3/8"	10.51	9.38	8.35	6.79	6.34
5-0148	6K123VG	C	10.0 CT	10.0	2000	3 7/8x3 1/4x3 3/4"	2 1/2x2 1/2"	13.54	12.19	10.81	8.23	7.67
5-0141	6K115VG	C‡*	11.0 CT	10.0	2500	4 5/8x3 7/8x3 11/16"	3x2 7/16"	13.54	12.19	10.81	8.83	8.24
5-0159	6K134VBR	D**	12-11-10 CT	11.0	3000	4 1/8x3 7/16x3 1/8"	2 3/4x2 1/2"	19.80	17.60	16.18	12.89	12.00
5-0121	6K94HF	A	12.6 CT	1.5	1500	2x3 1/4x2"	2 13/16"	4.68	4.23	3.84	3.05	2.85
5-0046	6K36HF	A	12.6 CT	2.0	1500	2x3 1/4x2 1/4"	2 13/16"	4.68	4.23	3.84	3.05	2.85
5-0122	6K95HF	A	12.6 CT	2.5	1500	2 1/4x3 5/8x2 1/4"	3 1/8"	5.15	4.64	4.13	3.35	3.13
5-0136	6K110HF	A	12.6 CT	3.0	1500	2 5/16x3 11/16x2 3/8"	3 1/8"	5.15	4.64	4.13	3.35	3.13
5-0139	6K113HF	A	24.0 CT	1.0	1500	2x3 1/4x2"	2 13/16"	5.86	5.22	4.79	3.80	3.54
5-0047	6K37HF	A	25.2	1.0	1500	2x3 1/4x2 1/8"	2 13/16"	4.13	3.72	3.31	2.70	2.52
5-0123	6K96HF	A	25.2 CT	2.0	1500	2 5/8x4x2 3/8"	3 9/16"	6.36	5.72	5.08	4.04	3.82
5-0065	6K48HF	A	26.5 CT	0.6	3000	2x3 1/4x2"	2 13/16"	4.34	3.86	3.55	2.82	2.63
5-0114	6K89HF	A	26.8 CT	1.0	1500	2x3 1/4x2 1/8"	2 13/16"	5.29	4.70	4.32	3.42	3.20

CONTROL TRANSFORMERS

utomation types for high-speed automatic equipment. dapted to relays, pilot lamps, solenoids, small motors, c. Also use in high current, low voltage power supplies. Secondaries have two identical windings for series or parallel operation. Primaries operate from either 115 or 230 V, 50-60 Hz AC.

Stock No.	Mfr's Type	Fig.	Parallel Sec. Volts	Parallel Sec. Amps	Series Sec. Volts	Series Sec. Amps	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
5-0101	6K77VFL	G	6	2	12	1	2 3/8x2 7/8x1 3/4"	2 3/8"	5.40	4.85	4.32	2.66	2.48
5-0102	6K78VFL	G	6	4	12	2	2 3/4x3 1/8x2"	2 13/16"	6.34	5.71	5.07	4.13	3.86
5-0103	6K79VFL	G	12	4	24	2	3 1/8x3 5/8x2 1/4"	3 1/8"	7.53	6.77	6.03	4.02	3.76
5-0104	6K80VBR	D	12	8	24	4	3 3/8x2 7/8x3"	2 1/4x2 3/8"	12.28	11.07	9.83	6.37	5.93
5-0144	6K119VBR	D	12	16	24	8	4 1/8x3 7/16x3 7/8"	2 3/4x3"	21.60	19.65	17.56	11.21	10.47

OSCILLOSCOPE POWER TRANSFORMERS

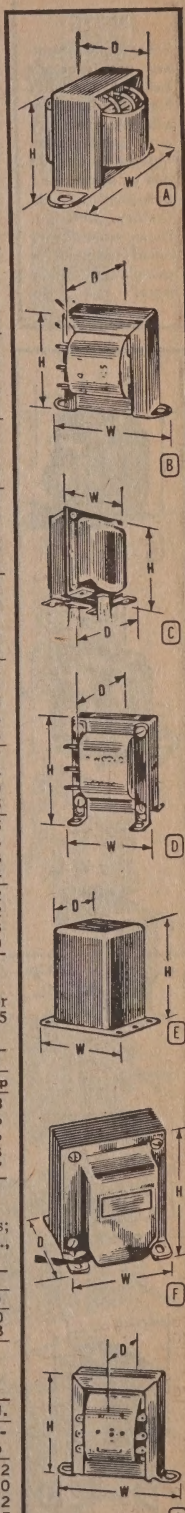
or use with 2X2A rectifiers in half-wave power sup- ies. All require primary input voltage of 117 volts,) Hz AC, except *117 volts, 50-60 Hz AC. Units are multi-output types; have 2, 3 or 4 secondaries; secondary outputs are shown in table below. Shpg. wts., lbs.: †1.8: §5; ‡6.4.

Stock No.	Mfr's Type	Fig.	Plate Supply AC Volts	Plate Supply DC mA	Rect. Volts	Rect. Amps	Other Secondary Outputs	Size HxWxD	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
5-0152	6K127VG	F§	1800*	2.0	2.5	1.8	2.5v @ 2.2A; 6.3v @ .6A	3 1/4x3 1/4x3 9/16"	18.93	17.04	15.15	9.43	8.80
5-0151	6K126VG	F‡	2400	5.0	2.5	1.8	2.5v @ 2.0A	4 1/4x3 9/16x3 13/16"	18.60	16.74	14.88	12.25	11.33

FIXED-IMPEDANCE OUTPUT TRANSFORMERS

ush-pull plates to voice coil. Av. shpg. wt., 2 lbs.

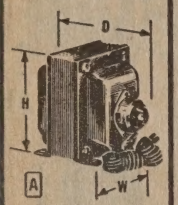
Stock No.	Mfr's Type	Fig.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Audio Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pkd. 100-249	Bulk Pkd. 250-Up
5-0847	6W53HF	A	4000 CT	32, 16, 8	7½	2 1/4x3 11/16x2 1/4"	3 1/8"	7.28	6.51	5.80	4.74	4.42
5-0843	6W49VG	C	6600 CT	500,250,16,8,4	35	3 15/16x3 1/4x3 1/2"	2 1/2x2 1/4"	11.97	10.78	9.57	8.58	8.00
5-0867	6W73HF	A	10,000 CT	8, 4, 2	5	1 11/16x2 13/16x1 3/4"	2 3/8"	4.52	4.06	3.62	2.70	2.52
5-0864	6W70VG	C	10,000/7000 CT	500, 15, 8, 4	25	3 1/8x2 5/8x2 5/8"	2x11 1/16"	9.93	8.94	7.94	6.38	5.95
5-0844	6W50HF	A	25,000 CT	4	5	1 3/8x2 3/8x1 3/8"	2"	3.41	3.07	2.75	2.09	1.96

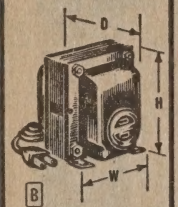


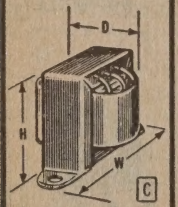
ALLIED General-Purpose Transformers

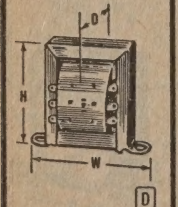
NOTE

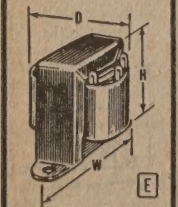
These transformers are specially built to Allied's high standards for quality, stability and performance. Quantities of 100 and up are shipped bulk-packed F.O.B. factory, Chicago. Phone, write or wire Allied Electronics for quantities of 500 or more.











VARIABLE-VOLTAGE AND ISOLATION TRANSFORMERS

Isolate equipment from power line. Primaries operate from various 50-60 Hz input voltages (see table below); secondaries deliver 115 VAC output, except *105-1 125 VAC. With 6-ft. cord and plug.

Stock No.	Mfr's Type	Fig.	Input Volts	VA Output	Size H x W x D	Mtg. Ctrs. W x D	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pac 100-249	Bulk Pac 250-
705-0023	6K16VCS	A	90-100-120-200-230-250	150	4⅝x3⅞x5½"	3x3⅛"	9¼	25.30	22.50	20.67	16.40	15
705-0083	6K58VCS	A	105-115-125	100	4⅝x3⅞x4¾"	3x2⅜"	7½	19.90	17.68	16.25	12.60	11
705-0105	6K81VCP	B	117	350	5½x4⅝x5¾"	3½x3⅞"	16	37.05	33.35	29.64	24.00	22

ISOLATION TRANSFORMERS

Reduce shock hazard, protect equipment. 6-ft. cord, plug and receptacle, except Fig. C type. 115 VAC outp

Stock No.	Mfr's Type	Fig.	Input Volts	VA Output	Size H x W x D	Mtg. Ctrs. W x D	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 250-
705-0138	6K112HF	C	115	35	2⅝x3 1/16x2¼"	3⅛"	1¾	6.92	6.15	5.65	4.50	4.
705-0165	6K140HF	C	115/230	50	2⅝x3 1/16x2⅛"	3⅛"	2	9.70	8.63	7.93	6.31	5.
705-0048	6K38VCP	B	115	50	3⅝x3x3⅜"	2¼x1⅞"	3¾	11.26	10.14	9.01	7.11	6.
705-0025	6K18VCP	B	115	100	4⅜x3⅝x4"	2¾x2¾"	6½	19.30	17.16	15.78	12.58	11.
705-0164	6K139VCP	B	115	150	3⅞x3¼x4 7/16"	2½x2 15/16"	7¼	21.80	19.39	17.80	14.19	13.
705-0026	6K19VCP	B	115	250	4⅝x3⅞x4⅝"	3x3⅜"	10	33.73	30.00	27.60	22.00	20.

230-TO-115 VOLT STEP-DOWN AUTOTRANSFORMERS

Well-built units to reduce 220-250 volts, 50-60 Hz AC to 110-125 volts. Black enamel finish. With 8-ft. cord and plug, except Fig. C types. Female outlet case, except Fig. C types.

Stock No.	Mfr's Type	Fig.	Input Volts	VA Output	Size H x W x D	Mtg. Ctrs. W x D	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 250-
705-0092	6K68HF	C	230	20	2x3¼x2"	2 13/16"	1¼	4.57	4.06	3.73	2.98	2.
705-0093	6K69HF	C	230	40	2 5/16x3⅝x2⅛"	3⅛"	1¾	5.93	5.28	4.85	3.87	3.
705-0019	6K12VCP	B	230	80	3⅝x3x3¼"	2¼x1⅞"	3¼	11.07	9.96	8.86	7.14	6.
705-0029	6K22VCP	B	230	100	3½x2⅞x3⅜"	2¼x2"	4	15.08	13.58	12.07	8.40	7.
705-0020	6K13VCP	B	230	150	4x3⅜x3⅝"	2½x2¼"	4¾	14.14	12.73	11.31	9.03	8.
705-0021	6K14VCP	B	230	250	4⅝x3⅞x4¼"	3x2 13/16"	7¾	18.22	16.39	14.57	11.83	11.
705-0022	6K15VCP	B	230	500	4⅝x3⅞x4¾"	3x3 5/16"	10	22.96	20.66	18.37	14.64	13.
705-0030	6K24VCP	B	230	750	5½x4⅝x5"	3½x3¼"	13¾	31.52	28.00	25.79	20.50	19.
705-0027	6K20VCP	B	230	1000	5½x4⅝x5¼"	3½x3½"	14¾	39.19	34.84	32.00	25.50	23.
705-0031	6K25VCP	B	230	1500	6x4½x5⅝"	3 7/16x3 9/16"	19	46.10	41.04	37.73	30.04	28.
705-0028	6K21VCP	B	230	2000	6x4½x6⅜"	3 7/16x4⅜"	25	52.50	46.60	42.84	33.98	31.

115-TO-230 VOLT STEP-UP AUTOTRANSFORMERS

For operation of 230-V appliances from 110-125 V 50-60 Hz AC. With 8-ft. cord and AC outlet.

Stock No.	Mfr's Type	Fig.	Output Volts	VA Output	Size H x W x D	Mtg. Ctrs. W x D	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 250-
705-0124	6K97VCP	B	230	80	3⅝x3x3¼"	2¼x1⅞"	3¼	11.00	9.78	8.99	7.14	6.
705-0084	6K60VCP	B	230	150	4x3⅜x3⅝"	2½x2¼"	4¾	13.83	12.32	11.30	9.02	8.
705-0125	6K98VCP	B	230	500	4⅝x3⅞x4¾"	3x3 5/16"	10¼	25.01	22.22	20.24	16.27	15.

MINIATURE INTERCOM AND TRANSCEIVER TRANSFORMERS

Direct replacements for original manufacturer's units in many intercoms and transceivers. *Transceiver input, mike or plate to grid; 5 watts. †Intercom input voice coil to grid. §Matches low-impedance line to vo coil; 3 watts. All are standard single plate to voice c outputs. Av. shpg. wt., ½ lb.

Stock No.	Mfr's Type	Fig.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packe 100-249	Bulk Packe 250-
705-0848	6W54HF	C	*200/5000	60,000	1⅝x2⅞x1⅝"	2⅜"	5.44	4.91	4.36	2.63	2.3
705-0849	6W55HF	C	†4	25,000	1⅜x2⅜x1½"	2"	3.59	3.13	2.87	2.04	1.9
705-0850	6W56HL	E	§45/50	3-4, 6-8	1⅜x2⅜x1⅜"	2"	2.78	2.50	2.23	1.81	1.6

C 1-WATT AUDIO INPUT TRANSFORMER FOR LINE OR MIKE TO GRID

Stock No.	Mfr's Type	Impéd., Ohms Pri.	Impéd., Ohms Sec.	Response (±3dB) Hz	Size H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packe 100-249	Bulk Packe 250-
705-0870	6W77HF	400 CT	195K	200-10,000	1¼x2 1/16x1¼"	½	4.50	4.00	3.67	2.93	2.7

UNIVERSAL AUDIO OUTPUT TRANSFORMERS

For replacement or production use in audio output circuits. Six secondary taps match plates to speaker voice coil. Center-tapped primary for push-pull, except * single-ended output. Av. shpg. wt., ¾ lb.

Stock No.	Mfr's Type	Fig.	Primary Ohms	Watts	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packe 100-249	Bulk Packe 250-
705-0811	6W14HFL	E	2000-14,000	4	1⅜x2⅜x1½"	2"	5.38	3.96	3.51	2.81	2.6
705-0812	6W15HFL	E	2000-14,000	8	1⅝x2⅞x1⅝"	2⅜"	4.84	4.36	3.88	2.48	2.3
705-0813	6W16VFL	D	2000-14,000	18	2⅜x2⅞x2"	2⅜"	6.90	6.22	5.53	3.55	3.3
705-0854	6W60HFL	E	6000-10,000	8	2x3¼x2 3/16"	2 1/16"	4.95	4.46	3.97	3.18	2.9
705-0830	6W36HFL	E	*7000-10,000	4	1⅜x2⅜x1⅜"	2"	3.39	3.05	2.71	1.52	1.4

C INTERSTAGE AUDIO TRANSFORMERS

Maximum DC permissible in primary is 10 mA except ‡30 mA. Single plate to P-P grid except Type marked with *, single plate to single grid, †single or push-p plate to push-pull grids. #To ½-secondary. Av., ¾

Stock No.	Mfr's Type	Impedance, Ohms Primary	Impedance, Ohms Secondary	Turns Ratio	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packe 100-249	Bulk Packe 250-
705-0805	6W8HF	*7000-20K	.....	1:3	1⅜x2⅜x1⅜"	2"	3.61	3.26	2.90	2.31	2.1
705-0855	6W61HF	10,000	40,000 CT	1:2	1⅜x2⅜x1½"	2"	4.14	3.72	3.31	2.65	2.4
705-0856	6W62HF	†10,000 CT	90,000 CT	1:3	1⅝x2⅞x1½"	2⅜"	4.53	4.07	3.63	2.95	2.7
705-0862	6W68HF	‡10,000	10,000 CT	1:1	1⅝x2⅞x1⅝"	2⅜"	3.89	3.50	3.12	2.18	2.0
705-0863	6W69HF	‡10,000	.....	#3:1	1⅝x2⅞x1⅝"	2⅜"	3.65	3.28	2.92	2.34	2.1

Let Allied Electronics Fill All Your Transformer Needs at OEM Pric

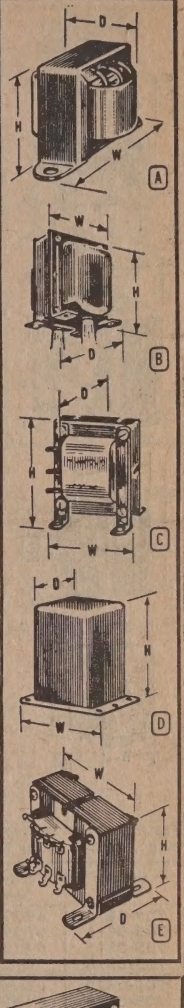
Transformers and Chokes

ALLIED

FILTER CHOKES

d at 10V, 60 Hz with max. DC in winding. All %, +50% tol. 1500-V rms insulation, except †2000 V, *3000 V. ‡Amperes. §Tapped for 8 H @ 150 mA or 4 H @ 200 mA.

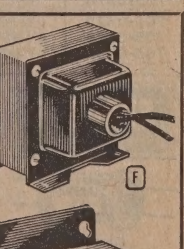
Stock No.	Mfr's Type	Fig.	Henries	mA	Ohms	Size H x W x D	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
1143	6X42HBR	E	.005	22.5‡	.03	3¾x4½x4 13/16"	3¾x3½"	21.39	19.20	17.09	10.87	9.85
1142	6X41HBR	E	.01	8.0‡	.15	3⅛x3¾x3⅛"	3⅛x2¼"	10.75	9.67	8.60	5.84	5.32
1131	6X31HBR	E	.01	12.5‡	.11	3½x4⅛x3"	3⅜x2⅜"	12.63	11.39	10.13	6.08	5.53
1130	6X30HBR	E	.025	4‡	.425	2⅞x3⅜x2¾"	2¾x2⅛"	9.74	8.76	7.78	4.84	4.40
1129	6X29HBR	E	.035	2‡	.75	2⅜x2⅝x2½"	2⅛x2"	5.66	5.09	4.53	2.42	2.20
1132	6X32HBR	C	.08/.02	2.5/5.0‡	.61/.155	3 13/16x3⅜x3 11/16"	2½x3 1/16"	14.00	12.64	11.21	7.60	6.92
1133	6X33VBR	C	.3/.075	1.0/2.0‡	3/.75	3½x2⅞x3 3/16"	2¼x2 11/16"	10.09	9.08	8.05	4.98	4.54
1134	6X34HF	A	.32	600	10	2x3¼x2¼"	2 13/16"	3.88	3.49	3.10	2.03	1.85
1135	6X35HF	A	.70	290	30	1 11/16x2 13/16x1½"	2⅜"	3.05	2.75	2.42	1.05	.96
1111	6X11HF	A	1.0†	300	40	2¼x3 11/16x2"	3⅛"	4.40	3.97	3.52	1.94	1.76
1122	6X22HF	A	1.5*	10	95	1 3/16x2 1/8x1¼"	1¾"	2.42	2.18	1.94	1.05	.96
1109	6X9HF	A	1.5	200	60	1⅝x2 13/16x1⅝"	2⅜"	3.12	2.81	2.50	1.24	1.13
1145	6X44HF	A	2.0	15	70	1¼x2 3/16x1¼"	1¾"	2.55	2.30	2.04	1.17	1.06
1119	6X19HF	A	2.0	200	65	2¼x3 11/16x2"	3⅛"	3.85	3.47	3.08	1.75	1.58
1117	6X17HF	A	2.3	150	60	2x3¼x1¾"	2 13/16"	4.29	3.86	3.43	2.62	2.46
1124	6X24HF	A	2.5†	130	100	2x3¼x1¾"	2 13/16"	3.94	3.55	3.16	2.24	2.05
1118	6X18HF	A	3†	150	97	2¼x3 11/16x2"	3⅛"	3.73	3.36	2.98	1.74	1.58
1107	6X7HF	A	3.5	50	200	1⅝x2 13/16x1½"	2⅜"	2.88	2.59	2.30	1.84	1.70
1128	6X28HF	D	5.0	100	300	2⅝x2¼x2¾"	1½x2⅜"	6.70	6.03	5.35	3.38	3.15
1146	6X45HF	A	5.0	65	330	1⅝x2 13/16x1 7/16"	2⅜"	3.48	3.10	2.84	2.25	2.10
1105	6X5HF	A	5.5	50	330	1⅜x2⅜x1¼"	2"	2.34	2.11	1.99	1.48	1.38
1136	6X36HF	A	6.0	200	150	2⅝x4x2¼"	3 9/16"	5.70	5.08	4.66	3.71	3.46
1106	6X6HF	A	7.0	50	550	1⅜x2⅜x1⅜"	2"	3.20	2.88	2.56	1.31	1.22
1115	6X15HF	A	8.0	85	260	2x3¼x2"	2 13/16"	3.31	2.99	2.66	2.32	2.16
1103	6X3HF	A	8.5	50	400	1⅝x2 13/16x1⅜"	2⅜"	3.27	2.94	2.62	1.23	1.15
1144	6X43HF	A	9.0	125	250	2 5/16x3 11/16x1 15/16"	3⅛"	4.84	4.36	3.88	3.09	2.88
1138	6X37VG	B	10.0†	200	150	3½x2 15/16x3½"	2¼x2⅜"	9.94	8.94	7.95	4.89	4.46
1139	6X38HF	A	10.0	90	270	2x3¼x2"	2 13/16"	4.04	3.59	3.31	2.63	2.45
1104	6X4HF	A	10.5	110	220	2⅝x4x2⅛"	3 9/16"	4.89	4.39	3.90	2.47	2.25
1121	6X21VG	B	12.0*§	100	145	3x2⅝x2 11/16"	2x1¾"	7.55	6.80	6.03	4.50	4.20
1101	6X1HF	A	16.0	50	550	2x3¼x1⅝"	2 13/16"	3.86	3.47	3.08	1.46	1.33
1113	6X13HF	A	20.0	15	900	1⅝x2 13/16x1½"	2⅜"	3.56	3.20	2.85	1.47	1.34
1125	6X25HF	A	35.0	15	1600	1⅜x2⅜x1¼"	2"	2.42	2.18	1.94	1.13	1.03
1120	6X20HF	A	350.0*	5	5500	2x3¼x1¾"	2 13/16"	4.74	4.26	3.79	3.18	2.94



STANDARD OUTPUT TRANSFORMERS

lo output transformers for coupling single output tube to speaker. Av. shpg. wt., ¾ lb.

Stock No.	Mfr's Type	Fig.	Primary Impedance	Sec. Imp.	Audio Watts	Size HxWxD	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
0807	6W10HF	A	5000 @ 40 mA	3.2	3	1¼x2 1/8x1⅝"	2.98	2.68	2.38	1.24	1.13
0808	6W11HF	A	2500 @ 50 mA	3.2	3	1¼x2 1/8x1⅜"	3.27	2.95	2.62	1.34	1.19
0810	6W13HF	A	2000 @ 50 mA	3.2	5	1⅜x2⅜x1⅜"	2.30	2.06	1.84	.99	.90
0827	6W33HF	A	2000 @ 50 mA	3.2	3	1¼x2 1/8x1¼"	2.57	2.32	2.06	.94	.86
0828	6W34HF	A	2000 @ 60 mA	4	5	1⅜x2⅜x1⅜"	3.28	2.95	2.62	1.31	1.19
0829	6W35HF	A	5000 @ 40 mA	4	5	1⅜x2⅜x1⅝"	2.29	2.06	1.84	1.03	.93
0842	6W48VF	C	5000 @ 40 mA	6-8	10	2⅜x2⅞x1⅞"	3.73	3.36	2.92	1.79	1.62
0845	6W51HF	A	7000 @ 30 mA	4	5	1⅜x2⅜x1⅜"	2.47	2.23	1.97	1.19	1.09
0846	6W52HF	A	10000 @ 30 mA	4	5	1⅜x2⅜x1⅜"	2.64	2.38	2.11	1.03	.93
0841	6W47HF	A	25000 @ 5 mA	4	5	1⅜x2⅜x1⅜"	2.66	2.40	2.12	1.26	1.15



U. L. RECOGNIZED■ CONTROL TRANSFORMERS

120-volt or low-voltage 24-volt line. 50/60 Hz ation. 240/480-volt primaries must be series ected for 480-volt operation; parallel con- ed for 240-volt operation. 277-volt primaries for use with 480-volt, 3-phase, 4-wire source with 1 primary lead to source and other to neutral wire. *Mounts to standard conduit box. **Contact Allied Electronics for larger quantity prices.**

PRIMARY, 120 V—SECONDARY, 24 V

Stock No.	Mfr's Type	Fig.	VA Rating	Size, H x W x D	Mtg. Ctr's W x D	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
0172	6K147	G	50	4 5/32x4 5/32x4	*	11.97	10.63	9.78	7.75	7.23
0173	6K148	F	100	3½x3¾x4¼	3¼x1 13/16	16.05	14.29	13.12	10.45	9.75
0174	6K149	F	150	3½x3¾x5	3¼x2⅜	16.63	14.79	13.59	10.80	10.09
0175	6K150	H	250	4x4½x4⅞	3¾x3⅜	24.92	22.11	20.34	16.19	15.10

PRIMARY, 277 V—SECONDARY, 24 V

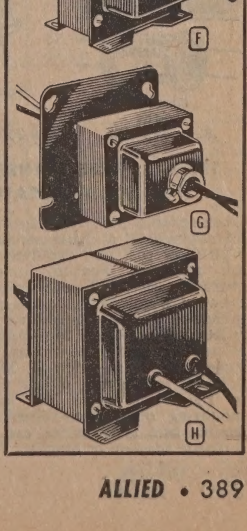
0176	6K151	G	50	4 5/32x4 5/32x4	*	12.05	10.70	9.84	7.83	7.30
0177	6K152	F	100	3½x3¾x4¼	3¼x1 13/16	16.20	14.42	13.25	10.55	9.84

PRIMARY, 480/240 V—SECONDARY, 24 V

0180	6K155	G	50	4 5/32x4 5/32x4	*	12.64	11.25	10.33	8.20	7.66
0181	6K156	F	100	3½x3¾x4¼	3¼x1 13/16	17.05	15.15	13.93	11.08	10.33
0182	6K157	F	150	3½x3¾x5	3¼x2⅜	17.70	15.75	14.50	11.53	10.76
0183	6K158	H	250	4x4½x4⅞	3¾x3⅜	26.52	23.60	20.65	17.25	16.10

PRIMARY, 277 V—SECONDARY, 120 V

0184	6K159	G	50	4 5/32x4 5/32x4	*	12.14	10.79	9.91	7.89	7.37
0185	6K160	F	100	3½x3¾x4¼	3¼x1 13/16	16.35	14.55	13.36	10.62	9.93
0186	6K161	F	150	3½x3¾x5	3¼x2⅜	16.90	15.00	13.80	10.99	10.25
0187	6K162	H	250	4x4½x4⅞	3¾x3⅜	25.40	23.10	20.76	16.55	15.45



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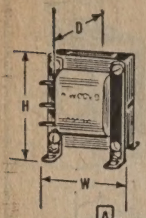
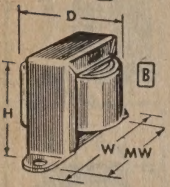
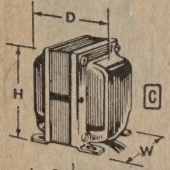
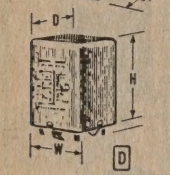
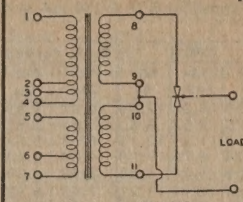




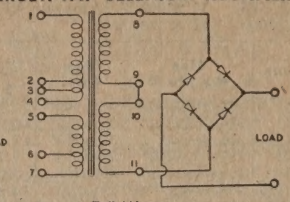




MULTI-TAP SELENIUM RECTIFIER TRANSFORMERS



Full Wave Center-Tapped



Full Wave Bridge-Type

A Well-built transformers designed f full wave center-tapped or bridge-ty circuits with standard rectifiers. Allow variety of combinations using taps on bo windings, plus "aiding" or "bucking" acti of extra winding. Permit numerous outp voltages in addition to those shown in t table below. Ideal for experimental desi engineering. 117 V, 50-60 Hz primari Supplied complete with winding arrang ment and terminal numbering diagrams f easy wiring. †Resistive or inductive loa *Capacitive load.

Stock No.	Mfr's Type	Rect. Ckt.	Range of AC Volts	Max. DC Output V†	Max. DC Output A*†	Max. DC Output V*	Size HxWxD	Mtg. Centers WxD	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	Bulk Pack 25 U
705-0087	6K36VBR	CT	11.5-29.5	11	2	13.6	3x2½						
		Bridge	11.0-28.5	23	1.25	30.0	x2¾"	2x2⅛"	9.35	8.03	7.56	4.16	3.
705-0088	6K64VBR	CT	12.0-29.6	11	4	14.5	3⅜x						
		Bridge	12.0-29.6	24	2	33.0	2⅞x3"	2¼x2⅜"	11.93	10.13	9.50	4.73	4.
705-0089	6K65VBR	CT	11.5-29.0	12	8	14.5	3¾x						
		Bridge	11.5-29.0	24	4	32.2	3⅛x3½"	2½x2⅞"	16.00	13.59	12.82	6.13	5.
705-0090	6K66VBR	CT	12.0-29.5	11.5	12	14.2	4⅛x3½						
		Bridge	12.0-29.5	24	6	32.0	x3⅞"	2¾x3¼"	21.79	17.70	16.68	8.80	8.
705-0091	6K67VBR	CT	12.0-29.0	11	15	14.5	4⅝x						
		Bridge	12.0-29.0	23	8	32.0	3¾x5"	3x3¾"	30.00	25.48	24.00	11.04	10.

LOW-VOLTAGE RECTIFIER TRANSFORMERS

Primary, 115 V, except †110-120. *Tapped primary for lower voltages.

Stock No.	Mfr's Type	Fig.	Secondary Volts	Secondary Amps	Case Size HxWxD	Mtg. Ctrs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pac 100-249	2
705-0126	6K100HF	B*	10/20CT/40CT	.035	1 7/16x2 3/8x1 3/8"	2"	5.23	4.71	4.18	3.19	
705-0127	6K101HF	B*	10/20CT/40CT	.100	1 11/16x2 13/16x1 5/8"	2⅜"	5.23	4.71	4.18	3.19	
705-0128	6K102HF	B*	10/20CT/40CT	.300	2 5/16x3 11/16x2"	3⅛"	5.23	4.71	4.18	3.19	
705-0129	6K103HF	B*	10/20CT/40CT	.750	2 5/8x4x2 3/8"	3 9/16"	8.96	7.98	7.33	5.84	
705-0130	6K104VG	C*	10/20CT/40CT	1.0	3 1/8x2 5/8x3 1/8"	2x2¼"	13.35	11.87	10.90	8.65	
705-0131	6K105VBR	A	0/17/18	3.0	3 1/8x2 9/16x2 7/8"	2x2⅜"	9.85	8.71	8.05	6.59	
705-0132	6K106VBR	A	0/17/18	6.0	3 13/16x3 3/16x3 1/4"	2½x2⅝"	16.62	14.49	12.88	8.66	
705-0133	6K107VBR	A	0/6.5/13/19.5/26	3.0	3½x2 7/8x2⅜"	2¼x2⅛"	10.70	9.50	8.73	6.95	
705-0134	6K108VBR	A	0/24/27/30/33/36	3.0	3 13/16x3 3/16x3 1/4"	2½x2⅝"	15.65	13.93	12.80	10.20	
705-0135	6K109VBR	A†	0/24/27/30/33/36	8.0	4⅝x3 13/16x3 7/8"	3x3¼"	24.29	21.60	19.85	15.82	

HIGH-FIDELITY OUTPUT TRANSFORMERS

Feature screen taps for ultra-linear operation over entire frequency range, except those with †. Response, 15-35,000 Hz, except *20-20,000 Hz. Rated watts are over full frequency range. All hav 8, and 16-ohm outputs, except ‡8 and 16 ohms only.

Stock No.	Mfr's Type	Fig.	Watts	P-P Imp.	mA	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-49	EACH 50-99	Bulk Pack 100-249	250
705-0814	6W17PS	D	12	8000	60	3¾x3x3¼"	3½	15.27	13.59	12.23	9.83	9
705-0816	6W20VG	C	12	8000	60	3⅛x2⅝x2¾"	2½	13.00	11.58	10.63	8.46	8
705-0815	6W19HF	B	18*	8000†	65	2⅝x4x2½"	2¼	11.26	9.13	8.39	6.61	6
705-0818	6W22VG	C	24	6600	75	3⅞x3¼x3⅞"	6	21.94	19.50	17.92	14.29	13
705-0820	6W24VG	C	30*	6600	100	3⅞x3¼x4"	6	22.88	20.37	18.70	14.87	14
705-0859	6W65VG	C‡	50*	5000†	150	4¼x3½x4"	7	19.10	17.19	15.25	13.23	12
705-0860	6W66VG	C‡	50*	6600†	125	4¼x3½x4"	7¼	23.92	21.50	19.13	14.18	13

Flexible Leads .828x.593" Dia.

Rigid Leads .800x.968x.775"

RIGID LEAD TYPES

Stock No.	Mfr's Type	Turns Ratio	Min. Lp µH	Max. Ll µH	Max. Cc pF	EACH 1-14	15-49	50-99	100-249	250-499	500
925-9020	11Z-2000	1:1	200	3	800	3.68	2.89	1.89	1.37	1.26	1.
925-9021	11Z-2001	1:1	1000	12	2000	3.85	3.03	1.98	1.43	1.32	1.
925-9023	11Z-2003	2:1	1000	10	1300	4.73	3.71	2.43	1.76	1.62	1.
925-9024	11Z-2004	5:1	5000	1500	400	4.20	3.30	2.16	1.56	1.44	1.
925-9030	11Z-2100	1:1:1	200	3	800	4.38	3.44	2.25	1.63	1.50	1.
925-9031	11Z-2101	1:1:1	1000	12	1400	4.55	3.58	2.34	1.69	1.56	1.
925-9033	11Z-2103	2:1:1	1000	15	1300	5.43	4.26	2.79	2.02	1.86	1.

TRIGATE PULSE TRANSFORMERS FOR SCR APPLICATIONS

Ultra-reliable pulse transformers designed for commercial and industrial applications where low cost and excellent performance are required. Feature balanced pulse characteristics, efficient energy transfer between windings, fast pulse rise-time and increased current capabilities to prevent SCR di/dt failure. Minimum saturation allows increased pulse widths. Temperature range: —40° to +105° C. Maximum line voltage: 1600 Vrms, 60 Hz AC. Available in rigid lead types for self-supporting mounting on printed circuit boards, or flexible lead types which are mounted by a plastic snap-on or bracket. Wt., 1 oz.

FLEXIBLE LEAD TYPES

Stock No.	Mfr's Type	Turns Ratio	Min. Lp µH	Max. Ll µH	Max. Cc pF	EACH 1-14	15-49	50-99	100-249	250-499	500
925-9012	11Z-12	1:1	200	3	800	2.10	1.65	1.08	.78	.72	.
925-9013	11Z-13	1:1:1	200	3	800	2.45	1.93	1.26	.91	.84	.
925-9014	11Z-14	2:1	1000	10	1300	2.98	2.39	1.53	1.11	1.02	.
925-9015	11Z-15	2:1:1	1000	15	1300	3.33	2.61	1.71	1.24	1.14	1.
925-9016	11Z-16	5:1	5000	1500	400	3.15	2.48	1.62	1.17	1.08	.

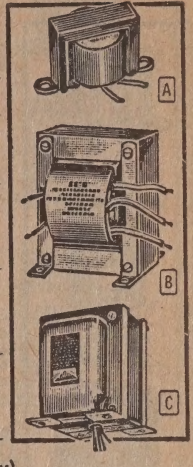
Make Allied your headquarters for all your transformer needs. Fast reliable servic at OEM prices, and one-order handling are just a few of the benefits you receive

Triad Transformers

FILAMENT, ISOLATION, RECTIFIER POWER, AND STEP-DOWN TRANSFORMERS

SINGLE-SECONDARY FILAMENT TRANSFORMERS

115 volt, 50-60 Hz AC primary except *60 Hz operation only.



Stock No.	Mfr's Type	Fig.	Secondary Volts	Secondary Amps	Insul. rms V	Size HxWxD	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
4-0701	F-1X*	A	2.5CT	3	1500	1 11/16 x 2 13/16 x 1 7/8"	3/4	4.90	3.67	3.30	3.06	2.87
4-0703	F-3X*	A	2.5CT	10	3000	2 1/4 x 3 13/16 x 2 1/4"	1 3/4	6.88	5.15	4.63	4.30	4.04
4-0707	F-7X	A	5CT	3	1500	1 15/16 x 3 1/4 x 2"	1 1/4	5.52	4.14	3.72	3.45	3.24
4-0711	F-11U	B	5.2CT	24	1500	3 13/16 x 3 3/4 x 3 7/8"	6 3/4	14.48	10.86	9.77	9.09	8.54
4-0713	F-13X	A	6.3	.6	1500	1 3/8 x 2 3/8 x 1 3/8"	1/2	3.32	2.40	2.16	2.01	1.89
4-0714	F-14X*	A	6.3CT	1.2	2500	1 11/16 x 2 13/16 x 1 5/8"	3/4	4.38	3.28	2.95	2.74	2.57
4-0716	F-16X	A	6.3CT	3	2500	1 15/16 x 3 1/4 x 2"	1 1/4	5.06	3.89	3.50	3.25	3.05
4-0718	F-18A	C	6.3CT	6	1500	3 3/16 x 2 5/8 x 2 5/8"	2 1/2	9.30	6.97	6.27	5.83	5.48
4-0719	F-18X	A	6.3CT	6	1500	2 19/32 x 4 x 2 1/4"	2 1/4	8.12	6.09	5.48	5.09	4.78
4-0721	F-21A	C	6.3CT	10	1500	3 9/16 x 3 x 3 1/4"	3 1/2	11.80	8.91	8.01	7.44	6.99
4-0722	F-22A	C	6.3CT	20	2000	4 x 3 1/4 x 4 3/16"	7	16.50	12.37	11.13	10.35	9.72
4-0723	F-23U	B	10CT	7	1500	3 1/2 x 2 7/8 x 2 15/16"	4	11.72	8.79	7.91	7.35	6.90
4-0728	F-28U	B	7.5CT-6.3CT	25	3000	4 5/8 x 3 13/16 x 3 5/8"	7 1/2	26.18	19.63	17.66	16.42	15.43
4-0729	F-29U	B	12CT-11CT-10CT	11	3000	4 3/8 x 3 1/2 x 3 3/8"	6 1/2	18.78	14.08	12.67	11.78	11.07
4-0725	F-25X	A	12.6CT	1.5	1500	1 15/16 x 3 1/4 x 2"	1 1/4	5.18	3.88	3.49	3.24	3.04
4-0726	F-26X*	A	12.6CT	2.5	1500	2 9/32 x 3 13/16 x 2 3/8"	2 1/4	5.72	4.28	3.85	3.58	3.36
4-0740	F-40X*	A	26.8CT	1	1500	1 15/16 x 3 1/4 x 2"	1 1/4	4.46	3.34	3.00	2.79	2.62
4-0741	F-41X*	A	25.2CT	2	1500	2 5/8 x 4 1/16 x 2 1/2"	2 1/4	6.64	4.97	4.47	4.15	3.90
4-0745	F-45X*	A	24CT	1	1500	1 15/16 x 3 1/4 x 2"	1 1/4	4.52	3.39	3.05	2.84	2.67

MULTIPLE-SECONDARY FILAMENT TRANSFORMERS (115-Volt, 50-60 Hz AC Primary)

Windings may be connected in series to obtain their combined voltage—when properly phased, current will be equal to current of lowest winding—or connected in parallel to obtain combined current. F-83A has tapped primary, 105-115-125 volt, 60 Hz operation only.

Stock No.	Mfr's Type	Fig.	Secondaries Volts	Secondaries Amperes	Insul. rms V	Size HxWxD	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
4-0734	F-34A	C	6.3CT/6.3/6.3/6.3	1.75/1.75/1.75/1.75	1500	3 3/16 x 2 21/32 x 3"	3 1/4	11.42	8.57	7.71	7.17	6.73
4-0736	F-36A	C	6.3CT/6.3/6.3/6.3	3.5/3.5/3.5/3.5	1500	3 7/8 x 3 9/32 x 3 1/2"	5	13.66	10.25	9.23	8.58	8.07
4-0742	F-42A	C	12.6CT/12.6	2.5/2.5	1500	3 1 9/32 x 2 21/32 x 3 1/8"	3 3/4	9.76	7.31	6.57	6.11	5.74
4-0783	F-83A	C	12.6CT/12.6	5/5	2500	3 7/8 x 3 9/32 x 3 3/4"	6	16.20	12.15	10.93	10.16	9.55

ISOLATION TRANSFORMERS

Types N-68X and N-471A have split primaries; N-73A and N-74A, split secondaries. For 50-60 Hz AC operation.

Stock No.	Mfr's Type	Fig.	Output VA	Primary Volts	Secondary V ±5%	Secondary A	Size HxWxD	Mtg. Ctrs.	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
4-2551	N-51X	A	35	115	115	.3	2 9/32 x 3 11/16 x 2 1/8"	3 1/8"	1 3/4	6.54	4.90	4.41	4.10	3.85
4-2568	N-68X	A	50	115/230	115	.435	2 9/32 x 3 11/16 x 2 1/8"	3 1/8"	1 3/4	8.12	6.09	5.48	5.09	4.78
4-2553	N-53M	C	85	115	115	.74	3 19/32 x 2 31/32 x 3 5/8"	2 1/4 x 2 3/8"	4 1/2	16.94	12.70	11.43	10.62	9.98
4-2554	N-54M	C	150	115	115	1.3	3 7/8 x 3 9/32 x 4 1/4"	2 1/2 x 3"	6 3/4	19.58	14.68	13.21	12.28	11.54
4X2559	N-59M	C	1000	115	115	8.7	5 5/16 x 4 1/2 x 8"	3 1/2 x 6 7/8"	34	72.40	54.32	48.89	45.47	42.74
4-2573	N-73A	C	150	115	115/230	.65	3 7/8 x 3 9/32 x 4"	2 1/2 x 3"	7	14.90	11.17	10.05	9.34	8.77
4-2574	N-74A	C	150	115	57.5/115	1.3	3 7/8 x 3 9/32 x 4"	2 1/2 x 3"	7	15.40	11.54	10.38	9.65	9.07
4-2571	N-471A	C	300	220/440	115	2.6	4 5/8 x 3 15/16 x 4 1/2"	3 x 3 3/8"	10 1/4	22.34	16.95	15.07	14.01	13.16

RECTIFIER POWER TRANSFORMERS

UNIVERSAL RECTIFIER POWER TRANSFORMER (115-Volt, 60-Hz Primary)

Type F-80U has two identical windings.

Stock No.	Mfr's Type	Fig.	Secondary Volts	Secondary Amps	Size HxWxD	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
54-0747	F-47U	B	17/18	3	3 1/8 x 2 9/16 x 3"	3 1/4	12.02	9.01	8.10	7.53	7.07
54-0748	F-48U	B	17/18	6	3 13/16 x 3 3/16 x 3 3/16"	5 1/2	14.78	11.08	9.97	9.27	8.71
54-0749	F-49U	B	36/36	3/3	4 5/8 x 3 13/16 x 3 3/4"	9 3/4	21.84	16.38	14.74	13.71	12.89
54-0760	F-60U	B	6.5/13/19.5/26	3	3 1/2 x 2 7/8 x 2 11/16"	3 1/2	10.14	7.60	6.84	6.36	5.97
54-0761	F-61U	B	24/27/30/33/36	3	3 13/16 x 3 3/16 x 3 1/4"	6	15.36	11.52	10.36	9.63	9.05
54-0765	F-65U	B	140/150/160	.75	3 13/16 x 3 3/16 x 3 3/8"	6	15.02	15.02	10.12	9.41	8.84
54-0767	F-67U	B	24/27/30/33/36	8	4 5/8 x 3 13/16 x 4 3/8"	10 3/4	29.52	29.52	19.92	18.52	17.40
54-0779	F-79U	B	24/26/28/30	15	3 13/16 x 4 5/8 x 5 1/2"	18 1/2	41.26	41.26	27.84	25.89	24.33
54X0780	F-80U	B	12/13.5/15/16.5/18	20	5 3/8 x 4 7/16 x 5 1/2"	26	63.92	63.92	43.16	40.14	37.73

LOW-VOLTAGE RECTIFIER TRANSFORMERS (Transistor Drive Voltage)

All types have 115 volt primaries, tapped to produce lower voltages.

Stock No.	Mfr's Type	Fig.	Secondary Volts	Secondary Amps	Size HxWxD	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
54-0790	F-90X	A	10/20CT/40CT	.1	1 5/16 x 2 13/16 x 1 5/8"	3/4	5.20	3.89	3.50	3.25	3.05
54-0791	F-91X	A	10/20CT/40CT	.3	2 9/32 x 3 11/16 x 2"	1 1/2	6.14	4.60	4.14	3.85	3.61
54-0792	F-92A	C	10/20CT/40CT	1	3 3/32 x 2 31/32 x 3"	3 3/4	10.20	7.65	6.88	6.39	6.00
54-0793	F-93X	A	10/20CT/40CT	.75	2 19/32 x 4 x 2 1/4"	2 1/2	7.56	5.67	5.10	4.74	4.45
54-0794	F-94X	A	10/20CT/40CT	.035	1 3/8 x 2 3/8 x 1 3/8"	1/2	5.12	3.84	8.45	3.20	3.00

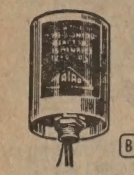
"N SERIES" STEP-DOWN AUTOFORMERS (50-60 Hz)

Stock No.	Mfr's Type	Fig.	Output VA	Primary Volts	Secondary V ±5%	Secondary A	Size HxWxD	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
54-2501	N-1X	A	50	230	115	0.435	2 9/32 x 3 11/16 x 2"	1 1/2	5.66	4.24	3.81	3.54	3.32
54-2534	N-34X	A	150	0-95-105-115-125-135	115	1.3	2 19/32 x 4 x 2 1/4"	2 1/2	8.62	6.46	5.81	5.40	5.07

CALL, WRITE, OR WIRE YOUR NEAREST ALLIED FACILITY FOR PRICES ON QUANTITIES OF 250 AND UP

Triad Transformers

A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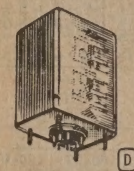
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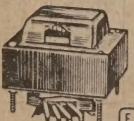
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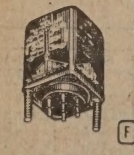
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AUDIO INPUT TRANSFORMERS (Line or Mike to Grid) Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Application	Primary Impedance	Response Hz ±3dB	Mtg. Ctrs.	EACH 1-9	10-24	25-49	50-99	100-
954-0003	A-3X	A	Mike or line to grid	400 CT	200-10,000	1¾"	3.98	2.99	2.69	2.50	2.
954-0004	A-4X	A	Line to single grid	500CT/333/200CT /125/67.5CT/50	100-20,000	1¾"	4.98	3.74	3.34	3.13	2.

INTERSTAGE TRANSFORMERS (Plate to Grid) Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Watts Out.	Application	Imp. (Ohms) Pri.	Sec.	Mtg. Ctrs.	EACH 1-9	10-24	25-49	50-99	100-
954-0031	A-31X	A	3	Plate to sgl. or P-P grids	10K	90kCT	2"	5.38	4.03	3.62	3.36	3.
954-0033	A-33X	A	6	Plate to sgl. or P-P grids	10K	90kCT	2 13/16"	5.82	4.36	3.92	3.65	3.

LOW-POWER AUDIO TRANSFORMERS *40-15,000 Hz. †Static shields. ‡Split primary and secondary. 5

Stock No.	Mfr's Type	Fig.	mW Output	Application	Impedance (Ohms) Pri.	Sec.	EACH 1-9	10-24	25-49	50-99	1
954-0009	A-9J†	B	1	Line or mike to grid	600/250/50	85k	14.42	10.80	9.72	9.03	8
954-0010	A-10J†	B	1	Balanced line, mike to grid	600CT/150	60k	13.59	10.17	9.15	8.50	7
954-0012	A-12J†	B	10	Balanced line, mike to grid	600CT/150	60k	14.34	10.73	9.65	8.97	8
954-0066	A-66J*	B	100	Plate to line	15k	600/250/50	10.38	7.78	7.00	6.51	6
954-0067	A-67J‡†	B	50	Balanced line to balanced line	600CT/150	600CT/150	16.20	12.15	10.93	10.16	9

DRIVER TRANSFORMERS

*Transistor type, used in Delco 50- and 100-watt solid-state amplifiers; min. pri. inductance, 3.5 H. Av. wt., 2

Stock No.	Mfr's Type	Fig.	mW Output	Application	Impedance (Ohms) Pri.	Sec.	EACH 1-9	10-24	25-49	50-99	1
954-0089	A-89A	C	15	Univ. P-P plates to AB or B grids	4k/8k	4.4k/8.8k	10.26	7.70	6.93	6.44	6.
954-4060	TY160X*	A	3-5	Class AB, P-P. Turns ratio, 6:1:1	45(DC Pri)	3.6, ea.(DC sec.)	7.54	5.65	5.08	4.72	4.

HERMETICALLY SEALED LOW-LEVEL AUDIO OUTPUT (Mixing, Matching, Bridging) Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	mW Out.	Application	Impedance (Ohms) Primary	Secondary	EACH 1-9	10-24	25-49	50-99	100-
954-0952	HS-52	D	400	P-P plates to line	20kCT/5k	600/250/150/62.5	31.52	23.64	21.28	19.79	18.

HERMETICALLY SEALED MINIATURE AUDIO TRANSFORMER

Feature layer-wound coils of microscopically fine wire Static shield. Shpg wt., 2 oz.

954-2002	JAF-2	F	1	Line or mike to grid	600/250/50	250k	18.40	13.80	12.42	11.55	10.

"R SERIES" COMBINED PLATE AND FILAMENT TRANSFORMERS

Fig. C except R-82B, Fig. E. Primary, 115 V, 60 Hz. †Transistor type used in Delco 100-W amplifier. §Amps.

Stock No.	Mfr's Type	Plate (CT) Volts	mA	Filaments (*CT) V	A	V	A	Size	Wt. Lbs.	EACH 1-9	10-24	25-49	50-99	100-
954-3006	R-6A	480	50	5	2	6.3*	2	3 1/8x2 5/8x2 5/8"	2.7	10.60	7.49	6.74	6.26	5.8
954-3008	R-8A	500	75	5	2	6.3*	2.5	3 1/8x2 5/8x3 1/8"	2.7	11.42	8.56	7.70	7.16	6.7
954-3010	R-10A	525	90	5	2	6.3*	5	3 1/2x3x3 5/8"	4.5	13.32	9.99	8.99	8.36	7.8
954-3004	R-4A	500	40	.....		6.3*	2	2 3/4x2 3/8x2 3/4"	1.7	8.78	6.58	5.92	5.50	5.1
954-3012	R-12A	550	110	5	2	6.3*	5	3 7/8x3 1/4x3 1/4"	4.5	12.72	9.54	8.58	7.97	7.4
954-3007	R-7A	600	50	5	2	6.3*	2	3 3/16x2 5/8x2 5/8"	2.7	9.86	7.40	6.66	6.19	5.8
954-3005	R-5A	600	65	.....		6.3*	2.7	3 1/8x2 5/8x2 5/8"	2.7	10.26	7.69	6.92	6.43	6.0
954-3009	R-9A	600	75	5	2	6.3*	3	3 9/16x3x3 1/4"	3.5	12.18	9.13	8.22	7.64	7.1
954-3011	R-11A	700	90	5	3	6.3*	3.5	3 9/16x3x3 7/8"	4.2	14.22	10.66	9.59	8.91	8.3
954-3020	R-20A	700	200	5	3	6.3*	8	4 1/4x3 5/8x4 3/8"	9.2	21.06	15.79	14.21	13.21	12.4
954-3072	R-72A	800	140	5	3	6.3*	4	4 1/4x3 19/32x3 5/8"	5.7	14.64	10.98	9.88	9.19	8.6
954-3024	R-24A	800	300	5	6	6.3*	6	4 5/8x3 15/16x4 1/2"	14.0	25.54	19.16	17.24	16.03	15.0
954X3025	R-25A	800	500	5	6	6.3/6.3*	3/7	5 5/16x4 1/2x5 5/8"	19.0	39.76	29.83	26.85	24.97	23.4
954-3071	R-71A	900	250	5	4	6.3*/6.3	2/4	4 5/8x4x5*	12.0	25.34	19.01	17.11	15.91	14.9
954-3082	R-82B†	70	3.5§	.....		.....		4 1/2x3 3/4x3 3/4"	8.3	20.14	16.00	14.40	13.39	12.5

"R SERIES" REGULATED POWER-SUPPLY TRANSFORMERS

Primary, 115 volts, 60 Hz. †For CRT's. Shpg. wt. (lbs.): R-26A, 12; R-43C, 3.5.

Stock No.	Mfr's Type	Fig.	Plate (*CT) Volts	mA	Filaments (*CT) V	A	V	A	Size	EACH 1-9	10-24	25-49	50-99	100-
954-3043	R-43C†	E	1600	3	2.5-5-6.3	1	2.5-5-6.3	3	2 3/8x3 1/16x2 9/16"	14.98	11.24	10.12	9.41	8.8

"R SERIES" TRANSFORMERS FOR PREAMPS, VTVM'S, ETC.

Primary, 115 V, 60 Hz. §Independent windings. Av. shpg. wt., 2 lbs.

954-3068	R-68A	C	800*	30	5	2	6.3§/6.3§	1.2/1.2	3 1/2x2 21/32x3 1/8"	11.72	8.79	7.91	7.36	6.9
954-3002	R-2C	E	135	15	.....	.....	6.3	0.9	1 3/4x1 7/8x1 3/16"	8.38	6.28	5.65	5.25	4.9
954-3023	R-23B	E	250*	22	.....	.....	6.3/15.5/12.6	.81/.6/.6	1 7/8x2 5/8x2 5/16"	8.52	6.39	5.75	5.34	5.0
954-3003	R-3A	C	500*	20	.....	.....	6.3*	2	2 25/32x2 11/32x2 1/2"	8.20	6.15	5.54	5.15	4.8
954-3029	R-29A	C	230*	40	.....	.....	6.3*	1.5	2 25/32x2 11/32x2 5/8"	7.82	5.86	5.27	4.90	4.6
954-3030	R-30X	A	135	50	.....	.....	6.3	1.5	2 9/32x3 3/4x2 1/4"	6.52	5.64	5.07	4.71	4.4
954-3054	R-54X	A	115	15	.....	.....	6.3	0.6	2 13/16x1 5/8x1 5/8"	3.74	2.80	2.52	2.34	2.1
954-3056	R-56A	C	130	20	.....	.....	15/22.5/30	.6/.6/.6	2 25/32x2 11/32x2 3/4"	8.64	6.48	5.83	5.42	5.0
954-3073	R-73B	E	135	200	.....	.....	6.3*	5.5	2 1/8x3 3/8x2 13/16"	10.36	7.78	7.00	6.51	6.1

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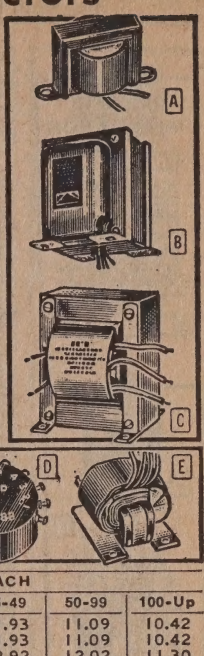
Triad Reactors, Transformers and Inductors

C SERIES SMOOTHING FILTER REACTORS

thing filters with inductance tolerance of —20%, %. Transformer types C-47U and C-48U have split windings. High performance, longevity, and superior precision design techniques.



ck o.	Mfr's Type	Fig.	DC mA	Ind. H	Res. (Ohms)	Test Volts	Size H x W x D	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
0102	C-2X	A	15	2	70	1500	1 3/16 x 2 1/16 x 1 1/4"	.21	2.86	2.14	1.92	1.78	1.67
0101	C-1X	A	20	15	1000	1000	1 3/16 x 2 1/16 x 1 1/4"	.21	3.24	2.43	2.18	2.02	1.89
0103	C-3X	A	50	10	500	1500	1 5/8 x 2 1 3/16 x 1 1/2"	.6	3.80	2.85	2.56	2.38	2.23
0106	C-6X	A	65	5	330	1500	1 5/8 x 2 1 3/16 x 1 1/2"	.6	3.78	2.83	2.54	2.36	2.21
0105	C-5X	A	75	12	390	1000	1 15/16 x 3 5/16 x 1 3/4"	1	4.54	3.40	3.06	2.84	2.66
0107	C-7X	A	90	10	270	1000	1 15/16 x 3 5/16 x 2"	1.3	4.80	3.60	3.24	3.01	2.82
0110	C-10X	A	125	9	250	1000	2 9/32 x 3 1 1/16 x 2"	1.6	5.70	4.27	3.84	3.57	3.35
0127	C-27X	A	290	0.7	30	1500	1 5/8 x 2 1 3/16 x 1 1/2"	.75	3.46	2.59	2.33	2.16	2.03
0117	C-17X	A	300	1.5	40	1500	2 9/32 x 3 1 1/16 x 2"	1.6	4.52	3.39	3.05	2.84	2.67
0119	C-19A	B	300	10	105	3000	4 1/4 x 3 1 9/32 x 4 1/8"	7.75	14.76	11.07	9.96	9.26	8.70
0120	C-20A	B	400	6	60	3000	4 5/8 x 3 1 5/16 x 4 1/2"	10.5	16.38	12.29	11.06	10.29	9.67
0140	C-40X	A	600	0.32	10	1500	1 15/16 x 3 5/16 x 2"	1.3	4.34	3.25	2.92	2.71	2.54
0147	C-47U	C	1A/2A	.3/.075	3/.75	1500	3 1/2 x 2 7/8 x 3 3/16"	4.6	10.04	7.53	6.77	6.29	5.11
0148	C-48U	C	2.5A/5A	.08/.02	.61/.155	1500	3 13/16 x 3 3/16 x 3 9/16"	6.75	12.60	9.45	8.50	7.90	7.42

EPOXY-MOLDED TOROIDAL TRANSISTOR DC TO DC SUPPLY TRANSFORMERS

o DC transformers (Fig. D) are hermetical- led, small in size, mount with a single bolt rmit ready stacking. Usable in common er or common collector circuits. Exceed MIL-T-27B, Grade 5, Class R. All transformers including DC to AC (Figs. C, E; see second table below), permit current conversion in small volume at high efficiency.

tock No.	Mfr's Type	DC Input Volts	DC Output Volts	DC mA	Size (Dia. x Ht.)	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
-4078	TY-78	12.6	250/125	100	1 3/4 x 1 1/16"	.35	17.66	13.25	11.93	11.09	10.42
-4079	TY-79	12.6	300/150	200	1 3/4 x 1"	.35	17.66	13.25	11.93	11.09	10.42
-4080	TY-80	12.6	325/162.5	150	1 3/4 x 1"	.35	19.12	14.35	12.92	12.02	11.30
-4081	TY-81	12.6	375/187.5	200	2 x 1"	.50	18.11	13.67	12.30	11.44	10.75
-4082	TY-82	12.6	450/225	150	2 x 1"	.50	17.66	13.25	11.93	11.09	10.42
-4083	TY-83	12.6	500/250	250	2 3/4 x 1 3/8"	.85	25.40	19.05	17.15	15.95	14.99
-4084	TY-84	12.6	600/300	200	2 3/4 x 1 3/8"	1.0	25.88	19.41	17.47	16.25	15.28
-4088	TY-88	28.0	250/125	80	1 5/16 x 9/16"	.25	15.62	11.72	10.55	9.81	9.22
-4089	TY-89	28.0	300/150	100	1 3/4 x 1 1/16"	.35	15.38	11.54	10.39	9.66	9.08
-4099	TY-99	6.0	300/150	100	1 3/4 x 1"	.35	18.12	13.59	12.23	11.37	10.69

TRANSISTOR DC TO AC POWER SUPPLY TRANSFORMERS (See Description Above)

tock No.	Mfr's Type	Fig.	DC Input Volts	AC Output Volts	Hz	Watts	Size H x W x D	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	100-Up
-4068	TY-468	E	28	110/115/125	400	60	1 7/8 x 2 1/4 x 2"	.5	16.02	12.02	10.82	10.06	9.46
-4062	TY-462	E	12	110/115/125	400	60	1 7/8 x 2 1/4 x 2"	.5	19.96	14.98	13.48	12.54	11.79
-4075	TY-75A	C	12	110/115/125	60	115	3 7/16 x 3 9/32 x 3 1/2"	5.0	19.84	14.89	13.40	12.46	11.71
-4076	TY-76A	C	12	110/115/125	60	60	3 3/32 x 2 2 1/32 x 2 5/8"	3.0	12.80	9.60	8.64	8.04	7.56

EC SERIES EPOXY-MOLDED TOROIDAL INDUCTORS

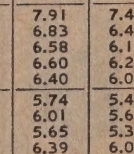
ock lo.	Mfr's Type	L (mH)	Approx. Ohms	DC mA for 5% L Drop	EACH 1-9	10-24	25-49	50-99	100-Up
0420	EC-020A	20	1.85	116	7.52	5.64	5.08	4.72	4.44
0430	EC-030A	30	2.85	95	7.10	5.33	4.80	4.46	4.19
0450	EC-050A	50	5.50	74	7.66	5.74	5.17	4.81	4.52
0460	EC-100A	100	13.00	52	8.30	6.23	5.61	5.22	4.91
0465	EC-200A	200	23.00	37	8.06	6.05	5.45	5.07	4.77
0467	EC-300A	300	35.00	30	8.34	6.26	5.63	5.24	4.93
0468	EC-500A	500	72.00	23	8.32	6.24	5.62	5.23	4.92
0470	EC-1000A	1000	134.00	16.5	8.70	6.53	5.88	5.47	5.14

Encapsulated per MIL-T-27B Gold-plated fixed terminals. Highly resistant to shock and vibration. High Q and high measure of stability with level and temperature variations. The cores, of powdered nickel-alloy, are wound with low distributed capacitance and resistance—each coil providing inductance tolerance of ±2%. Size, 23/32" high; 1 5/16" diameter. Av. wt., 2 oz.

"RED SPEC" SP SERIES MIL-T-27B MINIATURE TRANSISTOR TRANSFORMERS

ineered to MIL-T-27B. Specially designed use in all transistorized and printed circuit lications. Each unit weighs only 1/10th of ounce! All have solid epoxy-molded cases. vide top performance from 100 Hz to 100 . 105-volt DC operating voltage. High- ngth nickel-alloy leads (.020" diameter) inate need for stripping or tinning. Spaced on standard 1/10" grid centers to fit printed circuit boards. Decals permanently affixed giving type, usage, lead numbers and connection data. When mounted on printed circuit board, separator plate leaves viewing area under transformer for lead inspection. *Dry hydrogen annealed Trialloy deep-drawn .020" case for 20-45 db magnetic shielding. Av. wt., .2 oz.

SP SPECS
H = .485
W = .410
D = .310
L = .75

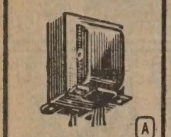


tock No.	Mfr's Type	MIL-T-27B Designation	Primary Impedance	Secondary Impedance	mW	Application	EACH 1-9	10-24	25-49	50-99	100-Up
-3204	SP-4	TF5SX16ZZ	200,000 CT	1000 CT	10	Input	12.60	9.45	8.51	7.91	7.44
-3213	SP-13	TF5SX13ZZ	25,000/20,000	1000/800CT	40	Interstage	10.88	8.16	7.34	6.83	6.42
-3220	SP-20	TF5SX13ZZ	10,000 CT	1200 CT	50	Driver	10.46	7.85	7.07	6.58	6.19
-3221	SP-21	TF5SX13ZZ	10,000 CT	2000 CT	50	Driver	10.52	7.89	7.10	6.60	6.20
-3229	SP-29	TF5SX13ZZ	10,000 CT	500 CT	50	Driver	10.18	7.64	6.88	6.40	6.02
-3250	SP-50	TF5SX17ZZ	500 CT	600	50	Output	9.14	6.86	6.17	5.74	5.40
-3252	SP-52	TF5SX13ZZ	1500 CT	600	50	Output	9.58	7.18	6.46	6.01	5.65
-3265	SP-65	TF5SX13ZZ	8000 CT	3.2	50	Output	9.00	6.75	6.08	5.65	5.31
-3266	SP-66	TF5SX13ZZ	10,000 CT	10,000 CT	50	Output Isolation	10.18	7.63	6.87	6.39	6.00
-3267	SP-67	TF5SX17ZZ	600 CT	600 CT	50	Output Isolation	9.06	6.80	6.12	5.69	5.35
-3210	SP-310	.....	*Magnetic shielding case			.....	1.12	.80	.76	.70	.67

Filter Chokes and Transformers

ORDERING INFORMATION

Chokes and transformers in quantities of 100 to 499 are shipped bulk packed. Phone, write, or wire Allied Electronics for lowest prices on quantities of 500 or more.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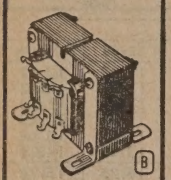
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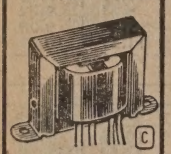
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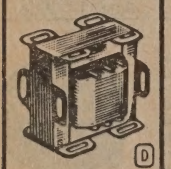
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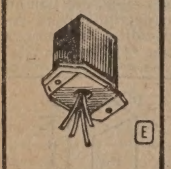
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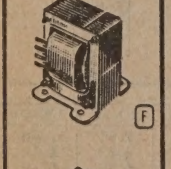
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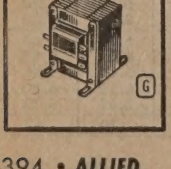

G

FILTER CHOKES

All ratings are with maximum DC in winding. Rated at 1500 volts rms, except *2000, ‡2500, †3000. Filter chokes listed in table below are designed for both input and smoothing use. C2690 and C2691 hav windings; first rating is series operation and s rating parallel.

Stock No.	Mfr's Type	Fig.	H	mA	DC Res. Ohms	Size H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PA 100-249	
928-0046	C1001†	C	10.5	110	225	2⅝x4x2⅛"	2¼	5.44	4.54	4.28	4.03	2.60	
928-0047	C1002	C	15.0	75	400	2⅜x3¾x2¼"	1¼	4.24	3.53	3.33	3.14	2.00	
928-0048	C1003	C	16.0	50	580	2x3¼x1⅝"	1	4.30	3.58	3.38	3.18	1.54	
928-0049	C1355	D	8.0	75	290	2x2⅜x1⅝"	1	4.52	4.19	3.77	3.56	1.75	
928-0051	C1411†	A	4.5	200	80	3½x2 13/16x4½"	3½	10.26	8.54	8.07	7.59	4.50	
928-0052	C1412†	A	4.0	250	60	3½x2 13/16x3⅝"	4½	12.14	10.72	9.55	8.99	4.75	
928-0053	C1515	C	20.0	15	900	1⅝x2⅜x1⅜"	1	3.96	3.30	3.12	2.94	1.55	
928-0054	C1706	C	4.5	50	300	1⅜x2⅜x1¼"	¾	2.62	2.18	2.06	1.94	1.04	
928-0055	C1707	C	7.0	50	550	1⅜x2⅜x1¼"	¾	3.56	2.97	2.81	2.64	1.09	
928-0056	C1708	C	13.0	65	500	2x3¼x1¼"	1	3.88	3.23	3.05	2.87	1.61	
928-0057	C1709	C	8.0	85	250	2x3¼x1⅞"	1¾	3.70	3.08	2.91	2.74	1.69	
928-0058	C1710	C	7.0	150	200	2⅝x4x2"	2¼	6.10	5.09	4.80	4.52	2.69	
928-0059	C1721†	F	8.5	200	120	3 7/16x2 13/16x3⅛"	4½	14.04	11.70	11.05	10.40	6.35	
928-0060	C1722†	F	8.0	300	80	4 9/16x3¾x3⅛"	7½	14.66	13.50	12.33	11.60	7.19	
928-0061	C2303*	C	2.5	130	100	2x3¼x1⅝"	1	4.40	3.66	3.46	3.26	1.54	
928-0062	C2304	C	2.3	150	60	2x3¼x1¾"	1	4.80	3.99	3.77	3.54	1.55	
928-0063	C2305	E	5.0	100	300	2 11/16x2 11/16x2¼"	1½	7.46	6.22	5.87	5.53	3.81	
928-0064	C2318	C	12.0	30	400	1⅜x2⅜x1⅜"	½	2.88	2.40	2.27	2.14	1.28	
928-0065	C2325	C	2.0	200	60	2⅜x3¾x1⅞"	2	4.30	3.58	3.38	3.18	1.84	
928-0066	C2326	C	1.0	300	43	2⅜x3¾x2"	2¾	4.92	4.10	3.87	3.64	2.04	
928-0067	C2327	C	1.5	200	85	1⅝x2⅞x1½"	¾	3.48	2.90	2.74	2.58	1.31	
928-0068	C2328	C	.8	375	25	2⅜x3¾x1⅞"	1½	5.94	4.95	4.68	4.40	2.41	
928-0069	C2334	C	2.8	300	60	2⅝x4x2⅛"	2½	8.08	6.72	6.35	5.98	2.56	
928-0070	C2685	B	.035	2A	.75	2 5/16x2⅛x2 5/8"	2	6.30	5.26	4.96	4.67	2.55	
928-0071	C2686	B	.025	4A	.425	2⅞x2 5/8x3 3/8"	3½	10.84	9.04	8.53	8.03	5.10	
928-0072	C2687	B	.010	8A	.15	3 3/16x3x3¾"	5½	11.98	9.98	9.43	8.87	6.15	
928-0073	C2688	B	.010	12½A	.11	3½x4⅛x2⅞"	6	14.10	11.75	11.10	10.45	6.40	
928-0074	C2689	B	.005	22½A	.03	3 13/16x4½x4⅜"	12	23.80	19.83	18.73	17.62	11.41	
928-0075	C2690	F	.3/.075	1.0/2.0	3/.75	3 7/16x2 13/16x3"	5	11.24	9.37	8.85	8.33	5.25	
928-0076	C2691	F	08/.02	2.5/5A	.6/.15	3 13/16x3 1/8x3½"	7	15.64	13.03	12.31	11.58	8.00	
928-0077	C2704	C	9.0	125	250	2⅜x3¾x1⅞"	1¾	5.40	4.50	4.25	4.00	2.51	
928-0078	C2705‡	A	10.0	200	150	3½x2 13/16x3 9/16"	4½	11.08	9.23	8.72	8.21	6.16	
928-0079	C2707	C	2.0	15	70	1¼x2⅛x1⅛"	¼	2.84	2.37	2.24	2.10	1.23	
928-0080	C2708	C	0.32	600	10	2x3¼x1⅝"	1¼	4.32	3.60	3.40	3.20	2.14	

A HIGH-FIDELITY OUTPUT TRANSFORMERS

Quality construction for dependable long-term use. Convenient mounting size, just 4 5/16x3 9/16x4¼".

Stock No.	Mfr's Type (P-P)	Pri. Ohms (P-P)	Sec. Ohms	Pri. mA	Max. Watts	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PAC 100-249	
928-0029	A8053	5000	8, 16	150	50	6½	21.28	17.73	16.75	15.76	10.88	
928-0030	A8056	6600	8, 16	125	50	6½	26.64	22.20	20.97	19.74	13.63	

FIXED-IMPEDANCE OUTPUT TRANSFORMERS

Mfr's. Types A3311 and A3800 are Fig. A; the others are Fig. C, The single-ended transformers are matched to voice coil, while the push-pull transformers are matched to voice coil and/or line. All transformers are made from high-quality materials and provide exce power handling capabilities and frequency resp See table below for complete specifications. *Push transformers, while the others are singled-ended.

Stock No.	Mfr's Type	Primary Imp. (Ohms)	Secondary Impedance (Ohms)	Watts	Size (In.) H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PAC 100-249	
928-0002	A3309	5000	3-4	3	1¼x2⅛x1⅜	½	3.22	2.76	2.61	2.46	1.31	
928-0003	A3311*	10K CT	500/15/8/4	25	3½x2 13/16x3¼	3½	11.14	9.28	8.76	8.25	4.40	
928-0004	A3328	4000	3.5	3	1¼x2⅛x1⅛	½	2.42	2.02	1.90	1.79	1.14	
928-0005	A3332	2000	3.2	3	1¼x2⅛x1¼	½	2.86	2.39	2.25	2.12	.99	
928-0006	A3800*	5000 CT	500/250/15/8/4	30	3½x2 13/16x3¼	4	11.18	9.31	8.79	8.27	4.81	
928-0017	A3877	5000	4	5	1⅜x2⅜x1⅜	½	2.56	2.13	2.01	1.90	1.08	
928-0018	A3879	10,000	4	5	1⅜x2⅜x1⅜	½	2.94	2.45	2.31	2.18	1.08	

G RECTIFIER TRANSFORMERS

Multi-tap transformers for low-voltage, high-current power supplies with full-wave center-tapped or bridge rectifier circuits. Have tapped primary and additional tapped winding, permitting a wide range of ou voltages. Primaries operate from 117 volts, 50-60 AC. With wiring charts.

Stock No.	Type RT-	Range of AC Volts	Max. DC Output Load Resistive	Max. DC Output Load Capacitive	Size (In.) H x W x D	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	BULK PACK 100-249	
928-8001	201	11.7-29.4	11.2V @ 2.0A	13.8V @ 2.0A								
		11.1-28.5	23.0V @ 1.25A	30.0V @ 1.25A	3⅛x2½x2⅜	2½	10.52	8.77	8.28	7.79	4.38	
928-8002	202	12.0-29.8	11.1V @ 4.0A	14.7V @ 4.0A								
		12.0-29.8	24 3V @ 2.0A	33.0V @ 2.0A	3 7/16x2 13/16x2¾	4	13.30	11.08	10.46	9.85	4.99	
928-8003	204	11.7-29.2	12.0V @ 8.0A	14.5V @ 8.0A								
		11.6-29.2	24.0V @ 4.0A	32.4V @ 4.0A	3 13/16x3 1/8x3½	6¼	17.84	14.86	14.03	13.21	6.45	
928-8004	206	12.0-29.7	11.5V @ 12.0A	14.4V @ 12.0A								
		12.0-29.7	24.0V @ 6.0A	32.0V @ 6.0A	4 3/16x3 3/16x4	9¼	23.20	19.34	18.27	17.19	9.31	
928-8005	208	12.1-29.2	11.4V @ 15.0A	14.8V @ 15.0A								
		12.1-29.2	23.7V @ 8.0A	32.5V @ 8.0A	4 9/16x3¾x5	12½	33.46	27.87	26.32	24.78	11.63	
928-8012	2012	12.2-29.0	11.4V @ 22.5A	14.3V @ 22.5A								
		12.2-29.0	23.5V @ 12.0A	33.0V @ 12.0A	5 5/16x4 3/8x5 7/8	20½	49.56	41.30	39.01	36.71	20.25	

Transformers

ESSEX Stancor products — STANCOR

SINGLE-SECONDARY FILAMENT TRANSFORMERS

nent transformers that provide voltages and cur- for heating a wide variety of receiving and trans- ng tubes. All are center-tapped, except Types P4026, P6469, P8190 and P6462, not tapped. All operate from 117 V, 50-60 Hz AC. *Indicates units with 107-V primary tap for low line voltage conditions.

ock o.	Mfr's Type	Fig.	Volts	Amps	Size H x W x D	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	BULK PACKED 100-249	250-Up
2012	P4026	B	2.5	1.5	1 5/8 x 2 7/8 x 1 5/8"	1	4.88	4.07	3.84	3.62	1.88	1.71
2065	P6133	D	2.5	5.0	2 3/4 x 3 1/8 x 2 1/4"	1 1/2	7.18	5.98	5.64	5.31	2.66	2.42
3019	P6454*	D	2.5	10.0	3 1/8 x 3 5/8 x 2 1/2"	2 1/2	7.74	6.45	6.09	5.74	2.80	2.55
2006	P3060	A	2.5	10.0	3 7/16 x 2 13/16 x 2 5/8"	2 1/2	10.10	8.42	7.96	7.49	4.16	3.79
3029	P6467	B	5.0	3.0	2 x 3 1/4 x 2 1/8"	1 1/2	5.50	4.58	4.33	4.07	2.15	1.96
3020	P6455*	D	5.0	6.0	2 3/4 x 3 1/8 x 2 1/8"	2	6.82	5.69	5.37	5.06	3.09	2.51
2067	P6135	A	5.0	10.0	3 1/8 x 2 1/2 x 2 3/4"	2	9.02	7.52	7.11	6.69	3.75	3.41
3018	P6433	A	5.0	15.0	3 1/8 x 2 1/2 x 2 3/4"	3	10.98	9.14	8.64	8.13	5.19	4.72
3030	P6468*	H	5.0	30.0	4 1/4 x 3 7/16 x 3 7/8"	6.3	20.98	17.48	16.51	15.54	9.63	8.76
3041	P6492	C	5.0	30.0	4 11/16 x 3 3/4 x 4"	7 1/2	19.28	16.07	15.17	14.28	9.85	8.96
3027	P6465	B	6.3	.6	1 3/8 x 2 3/8 x 1 1/2"	1/2	3.36	2.79	2.64	2.48	1.39	1.26
2066	P6134	B	6.3	1.2	1 5/8 x 2 1/8 x 1 7/8"	1	3.38	2.83	2.67	2.51	1.49	1.36
3080	P8190	B	6.3	1.2	2 x 3 1/4 x 1 7/8"	1	5.14	4.28	4.04	3.80	2.19	1.99
3028	P6466	B	6.3	3.0	2 x 3 1/4 x 2 1/8"	1 1/2	5.04	4.20	3.97	3.74	2.18	1.98
2020	P5014	A	6.3	3.0	3 1/8 x 2 1/2 x 2"	2	7.80	6.50	6.14	5.78	3.16	2.88
3025	P6462*	D	6.3	3.0	3 1/8 x 3 5/8 x 2 3/8"	2	8.26	6.88	6.49	6.11	3.93	3.58
3021	P6456*	B	6.3	6.0	2 3/8 x 3 3/4 x 2 3/8"	2	7.90	6.58	6.21	5.85	2.68	2.44
2010	P3064	A	6.3	6.0	3 1/8 x 2 1/2 x 2 3/8"	2 1/2	9.28	7.73	7.30	6.87	3.04	2.77
2080	P6308*	A	6.3	10.0	3 7/16 x 2 13/16 x 2 5/8"	3 1/2	13.00	10.84	10.23	9.63	4.63	4.21
2081	P6309*	A	6.3	20.0	4 9/16 x 3 3/4 x 3 3/8"	6 3/4	14.94	12.45	11.76	11.06	6.88	6.26
2021	P5015	A	7.5	4.0	3 1/8 x 2 1/2 x 2 1/4"	3	10.58	8.81	8.32	7.83	3.25	2.96
2022	P5016	A	10.0	4.0	3 7/16 x 2 13/16 x 2 1/2"	3 1/4	10.78	8.77	8.47	7.98	4.21	3.83
3022	P6458*	A	10.0	5.0	3 1/16 x 2 1/2 x 2 1/2"	3	9.90	8.24	7.79	7.33	3.23	2.94
2070	P6139	A	10.0	8.0	3 13/16 x 3 1/8 x 3"	5	11.62	9.68	9.15	8.61	5.19	4.72
3024	P6461	C	10.0	10.0	3 7/8 x 3 1/4 x 3 9/16"	5	15.10	12.58	11.88	11.18	7.09	6.45
2003	P3020*	C	11.0	10.0	4 11/16 x 3 3/4 x 3 5/8"	7 3/4	15.10	12.58	11.88	11.18	7.29	6.63
3060	P8130	B	12.6	2.0	2 x 3 1/4 x 2 1/8"	1 1/2	5.22	4.36	4.11	3.87	2.38	2.17
4017	P8358	B	12.6	3.0	2 3/8 x 3 3/4 x 2 1/4"	1 3/4	5.74	4.79	4.52	4.26	2.83	2.58
3031	P6469	B	25.2	1.0	2 x 3 1/4 x 2 1/8"	1 1/2	4.62	3.84	3.63	3.42	2.18	1.98
4016	P8357	B	25.2	2.0	2 5/8 x 4 x 2 1/4"	2 1/4	7.08	5.90	5.58	5.25	3.64	3.31

A

B

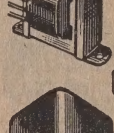
C

D

C POWER TRANSFORMERS FOR CAPACITOR-REACTOR INPUT FILTERS

acitor input rating is for intermittent duty: 200 mA; †160 mA. *For reactor input. All have primaries for 117 s, 60 Hz AC.

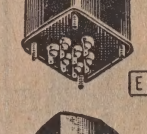
tock No.	Mfr's Type	Plate VCT	Plate mA*	Size H x W x D	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	BULK PACKED 100-249	250-Up
-5050	PC-8301†	830	200	3 7/16 x 3 1/8 x 3 1/2"	4 3/4	15.92	13.28	12.54	11.80	8.14	7.41
-5055	PC-8304	1500	265	4 11/16 x 3 3/4 x 4 7/8"	11 1/2	26.78	22.31	21.07	19.83	13.69	12.46
-5056	PC-8305	1840	250	4 11/16 x 3 3/4 x 5"	12	32.10	26.75	25.26	23.78	16.41	14.93


E

E FULL-FREQUENCY-RANGE AUDIO TRANSFORMER

ponse: ±2 dB, 30-20,000 Hz. Maximum operating level: +7 dB. 2x1 1/2x1 1/2". Shpg. wt., 10 oz.

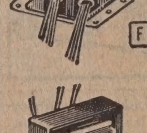
tock No.	Mfr's Type	Appli-cation	Primary Impedance	Secondary Impedance	EACH 1-9	10-24	25-49	50-99	BULK PACKED 100-249	250-Up
-9030	WF30	Mixing	50, 125/150, 200, 250, 333, 500/600	50, 125/150, 200, 250, 333, 500/600	24.22	20.18	19.06	17.94	13.63	12.40


F

F POWER TRANSFORMER FOR CHOKE INPUT FILTERS

mary input, 117 volts, 50-60 Hz AC.

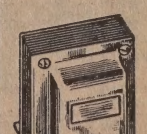
tock No.	Mfr's Type	Plate VCT	Plate mA*	Size H x W x D	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	BULK PACKED 100-249	250-Up
-5090	PCR-105	900	105	4 5/16 x 4 7/16 x 3 1 1/16"	6 1/2	26.84	22.37	21.12	19.88	13.73	12.49


G

G TUBE CHECKER TRANSFORMER

ltiple-secondary type transformer for use in tube ters. Primary: 125/115/105 volts 60 Hz. Secondary output volts: 1.1/1.4/1.5/2.0/2.5/3.0/3.3/4.0/5.0/6.3/7.0/7.5/12/20/25/30/35/50/70/85/110/117. 3 3/16" mtg. ct.

Stock No.	Mfr's Type	Size	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	BULK PACKED 100-249	250-Up
928-2000	P-1834-3	2 5/8 x 4 x 2 1/2"	2 1/2	19.78	16.84	15.56	14.65	7.86	7.15


H

H OSCILLOSCOPE POWER TRANSFORMERS

r 2X2 rectifiers in conventional half-wave high-volt- e supplies. Primary voltage 117 V 60 Hz, except (*) 60 Hz. P-8150 Secondaries (2): 1550 V AC at 1.5 mA; V AC at 1.75 amps. P-8151 Secondaries (3): 2400 V AC at 5 mA; 2.5 V AC at 2 amps; 2.5 V AC at 2 amps. P-8178 Secondaries (4); 1800 V AC at 2 mA; 2.5 V AC at 1.8 amps; 2.5 V at 2.2 amps; 6.3 V at 0.6 amps. Type P-8150 not illustrated.

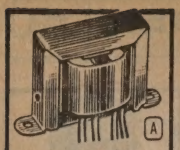
Stock No.	Mfr's Type	Size H x W x D	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	BULK PACKED 100-249	250-Up
928-3061	P-8150	3 1/16 x 3 x 2 1/2"	2	14.36	11.97	11.31	10.64	5.95	5.41
928-3062	P-8151	4 5/16 x 3 9/16 x 3 7/8"	6 1/2	20.72	17.26	16.30	15.34	10.60	9.65
928-3077	*P-8178	3 7/8 x 3 3/4 x 3 1/4"	5	21.08	17.57	16.59	15.62	10.78	9.81

J

J POWER TRANSFORMER FOR CAPACITOR INPUT FILTERS

mpound-sealed construction.

Stock No.	Mfr's Type	Plate VCT	Plate mA*	Size H x W x D	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	BULK PACKED 100-249	250-Up
8-5085	PCC-105	690	105	4 5/16 x 4 7/16 x 3 1 1/16"	6 1/2	26.54	22.11	20.88	19.66	13.56	12.34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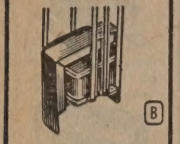
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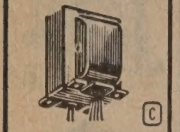
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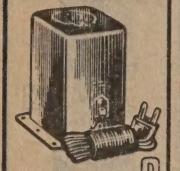
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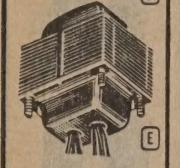
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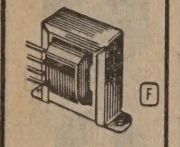
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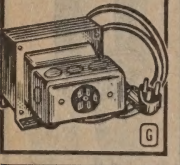
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ESSEX Stancor products — Transformers

TRANSISTOR TRANSFORMERS

Designed for transistor applications, but also excellent wherever low-power transformers are needed. †Maximum primary DC. *Watts. Shpg. wt., 3 oz., except TA-11, 2¾ lbs.; TA-58, ½ lb.

A INPUT TRANSFORMERS

Stock No.	Mfr's Type	Pri. Imp.	Sec. Imp.	† mA	Pri. Res.	Sec. Res.	*W	Size H x W x D	EACH 1-9	10-24	25-49	50-99	BULK PAC 100-249	2
928-8147	TA-47	1K CT	200K CT	....	123	1815	.300	13/16x15/8x3/4"	6.32	5.27	4.98	4.69	2.24	1

OUTPUT TRANSFORMERS

All types are Fig. A except TA-21, which is Fig. B.

928-8111	TA-11	48 CT	8/16	275	5	1.5	5	2x3¼x1⅞"	6.24	5.19	4.90	4.62	2.78	2
928-8112	TA-12	20 CT	8	500	.55	.35	10	1⅜x2⅜x1⅝"	3.98	3.23	3.05	2.87	1.69	1
928-8121	TA-21	500 CT	4/8/16	....	75.3	3.55	.150	2½x1⅜x5/8"	6.06	5.04	4.76	4.48	2.44	2
928-8139	TA-39	100 CT	4/8/16	....	10.9	1.45	.300	13/16x15/8x3/4"	5.46	4.55	4.29	4.04	2.48	2
928-8142	TA-42	500 CT	4/8/16	....	47	.85	.300	13/16x15/8x3/4"	5.90	4.91	4.63	4.36	2.31	2
928-8143	TA-43	700 CT	4/8/16	....	77	1.15	.300	13/16x15/8x3/4"	6.60	5.49	5.19	4.88	2.51	2

A DRIVER TRANSFORMERS

928-8107	TA-7	100	100 CT	100	12	12	.5	15/8x27/8x15/8"	4.12	3.44	3.25	3.06	1.65	1
928-8158	TA-58	100	200 CT	200	6.5	15.5	.5	1¼x2⅛x1¼"	4.30	3.58	3.38	3.18	1.54	1
928-8159	TA-59	500 CT	200 CT	50	36.5	15.5	.5	1¼x2⅛x1⅜"	4.42	3.69	3.49	3.28	1.66	1

B INTERSTAGE TRANSFORMERS

928-8131	TA-31	5K CT	10K CT	....	635	825	.150	2½x1 3/16x5/8"	6.32	5.27	4.98	4.69	2.33	2
928-8134	TA-34	10K	200 CT	....	1200	33.4	.150	2½x1 3/16x5/8"	6.10	5.09	4.80	4.52	2.63	2
928-8135	TA-35	10K	2K CT	....	1200	257	.150	2½x1 3/16x5/8"	5.22	4.36	4.11	3.87	2.34	2
928-8138	TA-38	500 CT	150 CT	....	62	21.2	.150	2½x1 3/16x5/8"	5.32	4.43	4.18	3.94	2.38	2

C POWER TRANSFORMERS

Small, efficient transformers for 117 volt, 60 Hz AC. All types are Fig. C except TP-2 and TP-3, which are Fig. A. Type TP-1 is for a bridge rectifier. All have identical dual-plate supplies. *Tapped primary.

Stock No.	Mfr's Type	Plate Supply AC V	Plate Supply DC mA	Wt., Lbs.	Size H x W x D	EACH 1-9	10-24	25-49	50-99	BULK PAC 100-249	250
928-8201	TP-1	13 or 18	900	2¾	3⅛x2½x3"	9.22	7.69	7.26	6.83	3.29	2
928-8202	TP-2	10/10 CT/40 CT	100	¾	1⅝x2⅞x1⅞"	5.94	4.95	4.68	4.40	3.29	2
928-8203	TP-3	10/20 CT/40 CT	300	1½	2⅜x3¼x2⅛"	7.94	6.62	6.26	5.89	3.29	2
928-8204	*TP-4	10/20 CT/40 CT	1000	3¼	3⅛x2½x3⅛"	13.34	11.11	10.49	9.87	3.29	2

D ISOLATION TRANSFORMERS

Electrostatic shield for complete line isolation. Switch for 3 primary V—125, 115, 105. On 115 V line, secondaries are 105, 115 and 125 V. 8' cord; standard receptacle on secondary. For 50-60 Hz.

Stock No.	Mfr's Type	Watts	Size H x W x D	Mtg. Ctrs.	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	BULK PAC 100-249	250
928-0140	IS-50	50	4 11/16x4 7/16x3 11/16"	2¾x3⅞"	5	29.94	24.95	23.56	22.18	15.31	13
928-0141	IS-100	100	5 5/16x5¼x4 9/16"	2½x4¾"	8½	41.06	34.22	32.32	30.42	20.99	19
928-0142	IS-150	150	6 1/16x5 7/8x5 5/16"	3½x5⅜"	12½	45.52	37.92	35.81	33.70	23.28	21
928-0143	IS-250	250	6 1/16x5 7/8x5 5/16"	3½x5⅜"	18¼	50.78	42.30	39.95	37.60	25.96	23

PLATE-FILAMENT POWER TRANSFORMERS

CT 6.3 volt filament windings except *for 6AX5, 6X4, 6X5 tubes or with selenium rectifiers. †½ wave. Primaries, 117 V 60 Hz. ‡For AC powered photoflash circuits 105/115/125 V primary, no center tap.

Stock No.	Mfr's Type	Fig.	Plate VCT	Plate mA	Filaments V @ A	Filaments V @ A	Size H x W x D	Wt., Lbs.	EACH 1-9	10-24	25-49	50-99	BULK PACK 100-249	250
928-7215	*PS-8415	F	†125	15	.....	6.3 @ .6	2x2⅜x1⅜"	¾	3.92	3.28	3.09	2.91	1.73	1.
928-5000	*PA-8421	A	†125	50	.....	6.3 @ 2	2¼x3¾x2⅛"	1½	6.14	5.12	4.84	4.55	2.54	2.
928-7216	*PS-8416	F	250	25	.....	6.3 @ 1	2 5/16x2⅞x1¾"	1	5.02	4.19	3.96	3.73	2.00	1.
928-3013	†P-6425	F	380	20	.....	.....	2 5/16x2 15/16x2"	1½	5.96	4.97	4.69	4.42	2.54	2.
928-5076	*PC-8418	C	460	50	.....	6.3 @ 2.5	3⅛x2½x2 5/8"	2¼	8.22	6.85	6.47	6.09	3.31	3.
928-5060	PC-8401	C	470	40	5 @ 2	6.3 @ 2	3⅛x2½x2 5/8"	2¼	10.18	8.49	8.02	7.54	3.85	3.
928-5061	PC-8402	C	480	55	5 @ 2	6.3 @ 2	3⅛x2½x2¾"	2½	10.16	8.47	8.00	7.53	4.13	3.
928-5075	*PC-8417	C	440	50	6.3 @ 0.6	25.2 @ 0.5	3⅛x2½x2 5/8"	2¼	10.62	8.84	8.35	7.86	4.56	4.
928-5077	*PC-8419	C	480	70	.....	6.3 @ 3	3⅛x2½x2⅞"	2¾	9.66	8.05	7.60	7.15	3.88	3.
928-5063	PC-8404	C	520	90	5 @ 2	6.3 @ 3	3½x2 13/16x3⅛"	4	12.14	10.12	9.55	8.99	4.88	4.
928-5064	PC-8405	C	540	120	5 @ 3	6.3 @ 3.5	3⅞x3⅛x3½"	5	13.46	11.21	10.59	9.97	6.06	5.
928-2090	*P-6358	C	600	65	.....	6.3 @ 2.7	3⅛x2½x2½"	3	10.06	8.38	7.91	7.45	4.38	3.
928-5066	PC-8407	C	650	55	5 @ 2	6.3 @ 2	3⅛x2½x3⅛"	3¼	10.40	8.66	8.18	7.70	4.13	3.
928-5068	PC-8409	C	700	90	5 @ 2	6.3 @ 3	3½x2 13/16x3 5/8"	4½	14.20	11.84	11.18	10.52	6.44	5.
928-5069	PC-8410	C	720	120	5 @ 3	6.3 @ 3.5	3⅞x3⅛x3¾"	5½	16.64	13.87	13.10	12.33	6.13	5.
928-5079	PC-8422	C	650	150	5 @ 3	6.3 @ 5	3⅞x3⅛x3⅞"	6	16.50	13.75	12.99	12.22	7.60	6.
928-6223	PM-8423	E	650	90	5 @ 2	6.3 @ 3.5	3x2⅜x2 13/16"	4	12.32	10.27	9.70	9.13	5.31	4.

G AIR CONDITIONER TRANSFORMERS

Type PSU-2000. For ½ to 1-hp motors (½ to 1-ton units). 2.3 kVA. Converts 208-volt unit to 230-volt line; 230-volt unit to 208-volt line. With line cord, polarized plug, receptacle. 3½x6½x3¾".

928-8190. Shpg. wt. 9 lbs. 1-9 ..... Each 28.54
10-24 Each 23.78 25-49 ... Each 22.46 50-99 ... Each 21.14
Bulk Packed. 100-249 ... Each 14.59 250-Up ..... Each 13.28

Type PSU-3000. Similar to above, but for 1- to 2-hp motors (1 to 2-ton units). 3 kVA. 4x6x4½". Shpg. wt., 10 lbs.

928-8195. 1-9 ..... Each 36.10 10-24 ..... Each 30.09
25-49 ..... Each 28.42 50-99 ..... Each 26.74
Bulk Packed. 100-249 ... Each 18.46 250-Up ..... Each 16.80

A INTERSTAGE TRANSFORMERS

For use in a wide variety of circuits requiring dependable performance and stable operation. Single plate to single grid. Maximum primary DC rating of 10 mA. Turns ratio, 1:3 for primary to secondary. For 7000 to 20,000 ohm plate impedances. Not center tapped. Core size, ½x½". 2-inch mounting centers. Overall size 1⅜x2⅜x1½". Shpg. wt., ½ lb.

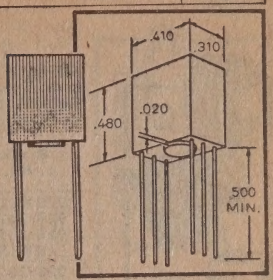
Stock No.	Mfr's Type	Pri. Imp.	EACH 1-9	10-24	25-49	50-99	BULK PACK 100-249	250 Up
928-0001	A-53	7-20	4.04	3.37	3.13	2.99	1.46	1.3

Control Transformers

ESSEX Stancor products | STANCOR

POLYCHROMATRAN TRANSFORMERS AND CHOKES

- Color-Coded According to Application • Fatigue-Resistant Gold-Plated Leads
- Extended Low-Frequency Response • Reduced Distortion Levels
- Minimum Size and Weight • Test Rating of 500 Volts rms



selection of miniature audio polychromatran formers specially designed and engineered for with printed circuit boards. All units have plated leads of fatigue-resistant nickel-iron .020" diameter, 9/16" long. Leads are spaced ultiples of 0.1" grid spacing for convenient llation on PC boards. Incorporating the t advances in transformer design, these units reductions in audio distortion up to 50%, substantially improved lower end frequency response. Each unit is clearly color-coded according to application, greatly reducing chances of error in handling and selection during production. Extremely lightweight and compact, average size is only .460x.405x.305". Rectangular shape allows utmost utilization of space and stacking in limited area. Protective stand-off prevents solder flow-back and allows maximum lead exit protection. All have rms test voltage rating of 500 volts. Actual wt. per unit, approx., ¾ oz.

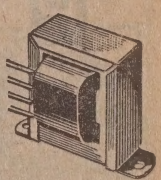
ock lo.	Mfr's Type	Cap., mW	Applica-tion	Impedance Primary	Impedance Secon-dary	Unbal. DC mA In Pri.	DC Resistance Ohms		EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk-Packed 100-249	Bulk-Packed 250-Up
5615	PCT-15	35	Input	50,000	1000 CT	0	4600	90	11.91	9.91	9.36	8.81	6.70	6.10
5631	PCT-31	75	Driver	10,000 CT	2000 CT	1	1250	400	10.50	8.94	8.25	7.77	5.91	5.38
5676	PCT-76	75	Output or Isolation	10,000 CT	10,000 CT	1	1100	1400	10.16	8.46	7.99	7.52	5.71	5.20
5677	PCT-77	75	Output or Isolation	600 CT	600 CT	3	85	110	9.00	7.50	7.08	6.66	5.06	4.61
5716	PCT-116	.....	Choke	6 H	.....	2	1800	.....	8.46	7.05	6.66	6.26	4.76	4.33
5717	PCT-118	.....	Choke	3.5H	.....	2	1200	.....	7.44	6.19	5.85	5.50	4.19	3.81

CONTROL TRANSFORMERS

ɔmation-type transformers provide trouble-free ɔrmance in high-speed automatic equipment. ical applications include: relays, pilot lamps, ioids, small motors, speed changers, pumps, electronic tubes, heating elements, elevators, door openers, automatic musical instruments, and many other mechanical and electric devices. For 115-230 volts, 50-60 Hz AC.

tock No.	Mfr's Type	Fig.	Secondary Parallel	Secondary Series	Size HxWxD	Mtg. Ctrs.	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
-3000	P-6375	A	6V @ 2A	12V @ 1A	2⅜x2⅞x1⅝"	2⅜"	1	6.02	5.01	4.73	4.46	2.19	1.99
-3001	P-6376	A	12V @ 4A	24V @ 2A	2¾x3⅛x1⅞"	2 13/16"	1½	7.06	5.89	5.56	5.23	3.31	3.01
-3002	P-6377	A	12V @ 4A	24V @ 2A	3⅛x3⅝x2¼"	3⅛"	2½	8.38	6.98	6.60	6.21	3.31	3.01
-3003	P-6378	B	12V @ 8A	24V @ 4A	3 7/16x2 13/16x2⅞"	2¼x2¼"	4¼	13.70	11.41	10.78	10.14	5.44	4.95
-3004	P-6379	B	12V @ 16A	24V @ 8A	4 3/16x3 7/16x3 3/16"	3x2¾"	8	24.10	20.09	18.97	17.86	8.56	7.79

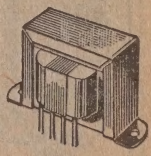
LOW-CURRENT CONTROL TRANSFORMERS



satile low-current transformers with many applica-s in design and engineering. All have three isolated ndaries (one with center tap) to provide many com-ations of output voltages and currents. May be series parallel connected for a wide variety of designs. lications include: pilot light, miniature relays, low-current, low-voltage power supplies. Lead wire terminations for fast, easy connections to circuit. Color-coded (Two black leads for primary; brown and silver leads for 1st secondary; blue and red leads for 2nd secondary; green and yellow leads for 3rd secondary, with green/yellow center tap lead). 117 V, 60 Hz primary, 12-V secs.

Stock No.	Mfr's Type	Amps Each Sec.	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk-Packed 100-249	Bulk-Packed 250-Up
928-4020	P-8361	.10	1¾x2x1½"	⅓	5.56	4.64	4.38	4.12	2.11	1.92
928-4021	P-8362	.15	2x2⅜x1¾"	⅔	4.42	3.68	3.48	3.27	2.50	2.27
928-4022	P-8363	.25	2⅜x2⅞x1¾"	1	6.28	5.24	4.95	4.66	2.18	1.98
928-4023	P-8364	.50	2⅜x2⅞x2⅛"	1¼	7.32	6.09	5.75	5.42	2.85	2.60

MINIATURIZED CONTROL TRANSFORMERS



mary 117 volts, 60 Hz AC; secondary, 12 volts. Lead wire terminations.

Stock No.	Mfr's Type	Secondary Amps rms	Secondary Amps Bridge	Secondary Amps Half-Wave	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
8-4046	P-8390	.150	.100 DC	.050 DC	1¼x2⅛x1¼"	¼	3.72	3.10	2.92	2.75	1.36	1.24
8-4047	P-8391	.350	.225 DC	.110 DC	1⅜x2⅜x1⅜"	⅓	3.86	3.21	3.03	2.86	1.31	1.19
8-4048	P-8392	.700	.450 DC	.225 DC	1⅝x2⅞x1⅝"	⅔	3.96	3.30	3.12	2.94	1.44	1.31
8-4049	P-8393	1.200	.750 DC	.375 DC	2x3¼x1⅝"	1	4.84	4.04	3.82	3.59	1.94	1.77

mary, 117 volts, 60 Hz AC; secondary 24 volts, CT. Lead wire terminations.

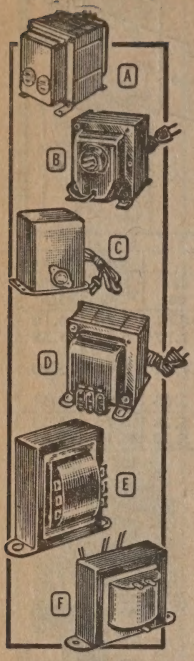
Stock No.	Mfr's Type	Secondary Amps rms	Secondary Amps FW CT	Secondary Amps Bridge	Size HxWxD	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Packed 100-249	Bulk Packed 250-Up
928-4050	P-8394	.085	.135 DC	.065 DC	1¼x2⅛x1¼"	¼	4.10	3.42	3.23	3.04	1.31	1.19
928-4051	P-8395	.200	.275 DC	.135 DC	1⅜x2⅜x1⅜"	⅓	4.24	3.53	3.23	3.14	1.41	1.28
928-4052	P-8396	.400	.550 DC	.270 DC	1⅝x2⅞x1½"	⅔	4.50	3.75	3.54	3.34	1.69	1.54
928-4053	P-8397	.700	.925 DC	.450 DC	2x3¼x1⅝"	1	4.62	3.84	3.63	3.42	1.81	1.65

ATTENTION BUYERS

Allied can supply the entire line of Chicago/Stancor Transformers in production quantities at lowest prices. Quantities of 100 or more are shipped bulk-packed. For complete price and delivery information on quantities larger than those shown, contact the Allied facility nearest you. See page 3 or back cover for addresses.

Transformers and DC Power Supplies

CHICAGO STANCOR TRANSFORMERS



ISOLATION TRANSFORMERS

All have electrostatic shields grounded internally to core. Rms insulation test: 1500 V *Primary is tapped for 125, 115 and 105 V; 115-volt secondary, †Isolation testing transformer with 117 V primary; has tapped secondary with three standard receptacles for 105 and 125 volts. ‡117 V primary and 117 V secon§Stepdown isolation transformers with primary ta for 250, 230 and 210 V; 115-volt secondary.

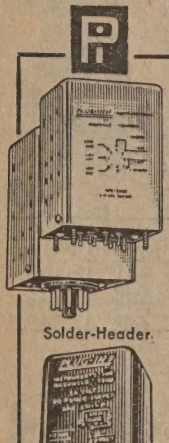
Stock No.	Mfr's Type	Fig.	Size HxWxD	Watts	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Pac 100-249	Bulk Pac 2
928X2060	P-6125*	A	7⅛x5⅜x7¾"	1000	35	135.86	113.19	106.90	100.62	.....	...
928-2075	P-6160*	B	4¹¹⁄₁₆x3¾x3¾"	100	7	29.92	24.94	23.55	22.17	10.63	9
928-2076	P-6161*	B	4¹¹⁄₁₆x3¾x5½"	250	14¼	32.78	27.31	25.79	24.27	14.88	13
928X2079	P-6298*	B	7⅝x5⅝x7⅛"	500	28	100.10	83.41	78.78	74.14	.....	...
928-2091	P-6371‡	C	5⅝x4⅜x5¼"	175	9	39.74	33.12	31.28	29.44	.....	...
928-3006	P-6385§	B	4¹¹⁄₁₆x3¾x5½"	250	14¼	38.56	32.12	30.34	28.55	.....	...
928X3007	P-6387§	B	7¾x5⅝x7⅛"	500	29½	101.30	85.24	80.50	75.77	.....	...
928-3010	P-6410‡	B	3½x2¹³⁄₁₆x3⅛"	50	4	12.54	10.45	9.87	9.29	5.25	4
928-3012	P-6415†	D	5⅞x4⅝x5¹¹⁄₁₆"	350	17	41.26	34.38	32.47	30.56	.....	...

LINE-TO-VOICE-COIL TRANSFORMERS

*Type A3837 is an autotransformer for one or more speakers in parallel across 500-ohm line. †Constant-voltage PA, EIA 70.7-volt types. §25-volt types. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Primary Impedance	Sec. Imp.	Watts	Mtg. Ctrs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-99	Bulk Pa 100-249	Bulk Pa
928-0012	A3837*	E	500	.06 to 48	15"	2⅜"	7.32	6.09	5.75	5.42	2.59	2
928-0028	A7947	F	2000/1500/1000/500	6-8/3.2	8	2⅜"	5.96	4.13	3.90	3.67	1.71	1
928-0033	A8101	F	500	3.2/6-8	5	2"	3.14	2.61	2.47	2.32	1.08	1
928-0034	A8102†	E	625/1250/2500/5000/10000	4/8/16	8	2"	4.92	4.10	5.87	3.64	1.85	1
928-0035	A8103†	E	312/625/1250/2500/5000/10000	4/8/16	16	2¹³⁄₁₆"	7.76	6.47	6.11	5.75	2.71	2
928-0036	A8104	E	3000/2000/1500/1000/500	16/8/4	10	2⅜"	6.24	5.19	4.90	4.62	2.08	1
928-0037	A8105†	F	1000/2000/4000/8000/16000	4/8	5	2"	5.00	4.18	3.94	3.72	1.66	1
928-0031	A8080†	F	1000/1250/1667/2500/5000	8/16	5	2"	4.98	4.14	3.91	3.68	1.68	1
928-0032	A8082†	E	333/357/384/417/455	8/16	15	2⅜"	6.14	5.12	4.84	4.55	2.10	1
928-0019	A8096§	E	78/156/132/625/1250	4/8/16	8	2"	6.58	5.48	5.18	4.87	1.81	1
928-0020	A8097§	E	39/78/156/312/625/1250	4/8/16	16	2¹³⁄₁₆"	7.18	5.98	5.64	5.31	2.84	2

DC POWER SUPPLIES BY ROSEMOUNT PLUG-IN

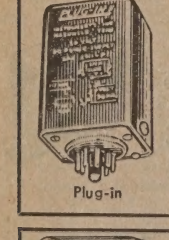


Solder-Header

Miniature transistorized power supplies feature silicon transistors and rectifiers. Plug-in or solder header construction. Pot adjusts output. Line regulation: 2 mV DC or less. Lead regulation: 5 mV DC or less. Ripple: 1 mV p-p or less. DC isolation to case exceeds 100 megs @ 200 VDC; Output imped. (DC to 1 kHz): 0-1 ohm. Transient response (full load change): less than 200 mV p-p within 50 μ-sec. Stability better than ±0.1% for 500 hours. Ambient air temperature: 30° to 130° F. Temp coef.: 0.0008% degrees F. 3⅛x2⅛x2⅜". Solder type have 1½x1½" spacing. Plug-in type includes socket. 105-130 V, 50-400 Hz AC. Av. shpg. wt. 3 lbs. **Contact Allied for larger quantity prices.**

Stock No.	Mfr's Type	Style	Volts Range	Output mA	EACH 1-9	EACH 10-24	EACH 25-
906C1952	SPS-2052-P	Plug-In	9-13	0-200	86.00	82.50	67
906C1953	SPS-2052-S	Solder Header	9-13	0-200	87.00	83.60	68
906C1954	SPS-2053-P	Plug-In	13-17	0-175	86.00	82.50	67
906C1955	SPS-2053-S	Solder Header	13-17	0-175	87.00	83.60	68
906C1956	SPS-2054-P	Plug-In	17-21	0-150	86.00	82.50	67
906C1957	SPS-2054-S	Solder Header	17-21	0-150	87.00	83.60	68
906C1958	SPS-2055-P	Plug-In	1-6.5	0-300	80.00	76.85	62
906C1959	SPS-2055-S	Solder Header	1.6-5	0-300	82.40	79.00	64
906C1960	SPS-2056-P	Plug-In	5-9	0-250	80.00	76.85	62
906C1961	SPS-2056-S	Solder Header	5-9	0-250	82.40	79.00	64
906C1972	SPS-2062-S	Solder Header	1-6.5	0-800	87.00	83.60	68
906C1974	SPS-2063-S	Solder Header	5-9	0-600	87.00	83.60	68

DUAL MINIATURE POWER SUPPLIES WITH SILICON TRANSISTORS

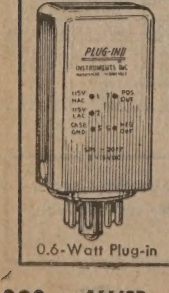


Plug-in

Similar to above, but with separate positive and negative outputs, each adjustable ±5% by potentiometer. Line regulation, 3 mV; load regulation, 6 mV. Ripple, 1 mV rms. Temp. coeff., .015%/°F. Size, 2⅝x2⅜x3⅛". Wt., 2 lbs. **Contact Allied for prices on quantities larger than those shown.**

Stock No.	Type SPS-	Style	Volts (±)	mA	EACH 1-9	EACH 10-24	EACH 25-
906C7984	2073D-P	Plug-In	12	0-75	95.50	94.00	76
906C7985	2073D-S	Solder Header	12	0-75	98.50	91.00	77
906C7986	2074D-P	Plug-In	15	0-65	95.50	94.00	76
906C7987	2074D-S	Solder Header	15	0-65	98.50	91.00	77

REGULATED DC POWER SUPPLIES



0.6-Watt Plug-in

Solid-state DC power supplies for small electronic and instrumentation equipment. Output isolated from input, for either positive or negative output. Output impedance, 0.1 ohm. Operating range, 30°F to 120°F. Ripple, 1 mV rms. Slip-on case. Size, less plug, 2x2x3". Plug-in power supply includes octal receptacle. 105-125 V, 60 Hz AC. Av. shpg. wt., 2 lbs. **Contact Allied for prices on quantities larger than those shown.**

Stock No.	Type SPS-	Output VDC	Output mA	Regulation Line%	Regulation Load%	EACH 1-9	EACH 10-24	EACH 25-
906-1924	2017-P	9	0-175	±0.05	±0.1	60.00	57.60	46.
906-1910	2010-P	12	0-175	±0.05	±0.1	60.00	57.60	46.
906-1926	2018-P	15	0-125	±0.04	±0.08	60.00	57.60	46.
906-1927	2019-P	18	0-100	±0.04	±0.08	60.00	57.60	46.
906-1929	2020-P	22.5	0.90	±0.02	±0.05	60.00	57.60	46.
906-1912	2011-P	24	0.90	±0.02	±0.05	60.00	57.60	46.
906-1931	2021-P	28	0.75	±0.02	±0.05	60.00	57.60	46.

0.6-WATT PLUG-IN MINIATURE DC POWER SUPPLIES

Rated 0.6-watt; pot output adjustment. Momentary 5-minute automatic electronic short protection. Shielded transformer. AC isolation, 20 pF typ. DC isolation to case, over 100 megs @ 200 VDC. Amb. temp., 20 to 12 F. With octal receptacle. 1⅜x1⅜x2⅜". Av. wt. 1 **Contact Allied for larger quantity prices.**

Stock No.	Mfr's Type	Volts Range	Output mA	Regulation Line	Regulation Load	Ripple mV	Temp. Coeff. (%/°F)	EACH 1-9	EACH 10-24	EACH 25-
906C7994	SPS-2077-P	9-13	0-50	3 mV	6 mV	1.5	0.015	56.50	54.30	44.2
906C7996	SPS-2078-P	13-17	0-40	3 mV	6 mV	1.5	0.015	56.50	54.30	44.2

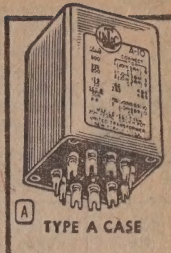
Ask Your Nearest Allied Electronics Facility for Prices on Larger Quantiti

UTC Transformers and Chokes

A ULTRACOMPACT TRANSISTOR AND TUBE-TYPE AUDIO HI-FI TRANSFORMERS

broadcast standards. Response (Hz): ‡20-20,000;),000; A-27 and A-44, 30-20,000; A-20, 10-50,000; 30-30,000; A-26, 20-40,000; A-43, 20-30,000. All ±2 dB. *Multiple-alloy shield for extremely low hum pickup. §High electrostatic shielding. A-33 (hipermalloy shield) fits entire "A" series. Wt., ½ lb.

ock).	Mfr's Type	Application	Primary Imp. (ohms)	Secondary Imp. (ohms)	EACH 1-4	5-9	10-24	500-Up
010	A-10‡	Low imp. to grid	50, 125-150, 200-250, 333, 500-600	50k	25.05	21.78	19.80	13.20
011	A-11*‡	Low imp. to 1, 2 grids	50, 200, 500	50k, P.P	18.79	16.34	14.85	9.90
012	A-12‡	Low imp. to PP grids	Same as A-10	80k 2 sect	34.68	21.45	19.50	13.00
015	A-15†	Transistor interstage	10k-2.5k	500-2k	15.18	13.20	12.00	8.00
018	A-18†	1 or PP pl. to PP gr.	15k (Split)	80k P.P. 2.3:1	22.01	19.40	17.40	11.60
019	A-19†	Plate to PP grids	15k—8 mA DC	80k P.P. 2.3:1	18.41	16.01	14.55	9.70
020	A-20§	Mixing, matching	Same as A-10	Same as Pri.	24.68	21.45	19.50	13.00
021	A-21*§	Mixing, matching	50, 200-250, 500-600	Same as Pri.	16.70	14.52	13.20	8.80
022	A-22†	T. interstage or out.	500	125-250 (Split)	13.86	12.05	10.95	7.30
023	A-23†	T. interstage or out.	500	4-16 (Split)	13.86	12.05	10.95	7.30
026	A-26	1 or PP pl. to line	30k P. to P.	As A-10 pri.	24.49	21.29	19.35	12.90
027	A-27	Xtal/hi. imp. to line	100k (Split)	As A-10 pri.	23.15	20.13	18.30	12.20
028	A-28†	Transistor to V.C.	48 CT	16 (Split)/8/4	14.79	12.87	11.70	7.80
035	A-35	Transistor interstage	10k-2.5k (Split)	500-125 (Split)	15.94	13.86	12.60	8.40
039	A-39*‡	Line to transistor	600-150 (Split)	2000-500 (Split)	17.46	15.18	13.80	9.20
043	A-43§	Mixing/matching line	600-150 (Split)	Two 600-125 (Split)	23.91	20.79	18.90	12.60
044	A-44	T. interstage or out.	4k-1k (Split)	600-150 (Split)	16.70	14.52	13.20	8.80
048	A-48	Hybrid circuit use	500-600	Two 500-600	22.70	19.80	18.00	12.00
033	A-33	Mu-metal shield; for any of above. Size, $1\frac{19}{32}$x$1\frac{19}{32}$x$2\frac{1}{32}$"			5.31	4.62	4.20	2.80

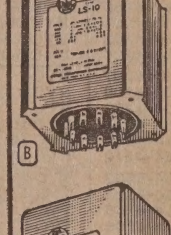


A TYPE A CASE

B LS-33 HIGH-LEVEL MATCHING TRANSFORMER

level matching transformer designed to keep hum p extremely low. Built with hipermalloy core, multiple section, and inter-leaved windings. Response, ±1 dB at 10-40,000 Hz. Size, $4\frac{3}{16}$x$3\frac{1}{2}$x$4\frac{7}{16}$".

ock No.	Mfr's Type	Max. Level	Primary Imp. (Ohms))	Secondary Imp. (Ohms)	Wt., Lbs.	EACH 1-4	5-9	10-24	500-Up
-4733	LS-33	20 W.	50, 125, 200, 250, 333, 500/600	1.2, 2.5, 5, 7.5, 10, 15, 30, 50, 125, 200, 250, 333, 500/600	7½	48.39	42.08	38.25	25.50

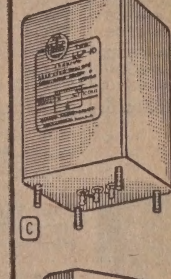


B

B TYPE LS HYBRID AND REPEAT COILS

at and hybrid units with many applications. LS are designed for uniform frequency response, low wave form distortion and high efficiency. *High electrostatic shielding. $3\frac{1}{8}$x$2\frac{5}{8}$x$3\frac{1}{4}$". Shpg. wt., 3 lbs.

Stock No.	Mfr's Type	Application	Primary Imp. (Ohms)	Secondary Imp. (Ohms)	EACH 1-4	5-9	10-24	500-Up
4-4768	LS-68*	Mix, match lines and/or transistors	600/150 split	2 sec. each 600/150 split	39.20	34.16	31.05	20.70
4-4740	LS-140*	Isol. bal. and unbal. circuits	500/600 split	500/600 split	41.18	35.81	32.55	21.70
4-4741	LS-141	Hybrid Coil	3 bal. windings, each 500/600 CT		36.44	31.68	28.80	19.20

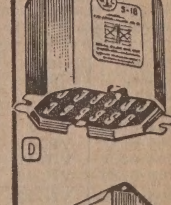


C

C LOW-FREQUENCY LOW PASS FILTERS

e a loss of less than 3 dB at nominal frequency, with uation of more than 40 dB at twice nominal fre- quency. Housed in a hermetically sealed metal case to meet MIL-F-18327 B specs. Shpg. wt., 1½ lbs.

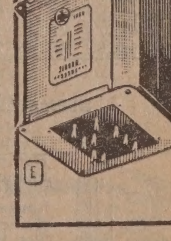
Stock No.	Mfr's Type	Nominal Frequency	Source and Load Impedance (Ohms)	Size HxWxD	EACH 1-4	5-9	10-24	500-Up
4-4310	LLP-10	10 Hz	100 k	$3\frac{1}{8}$x$2\frac{5}{16}$x$2\frac{1}{16}$"	85.40	74.25	67.50	45.00
4-4315	LLP-15	15 Hz	100 k	$3\frac{1}{8}$x$2\frac{5}{16}$x$2\frac{1}{16}$"	202.50	202.50	202.50	.....



D

FILTER, SWINGING AND AUDIO CHOKES

ock lo.	Mfr's Type	Fig.	Henrys (*mH)	mA (†A)	Ohms	Size HxWxD	Wt., Lbs.	EACH 1-4	5-9	10-24	500-Up
6237	S-37	E	8	550	60	$4\frac{5}{8}$x$5\frac{3}{8}$x$5\frac{3}{8}$"	12	33.01	28.71	26.10	17.40
6238	S-38	E	4/20	550	60	$4\frac{5}{8}$x$5\frac{3}{8}$x$5\frac{3}{8}$"	12	33.01	28.71	26.10	17.40
6281	S-81	D	100/8*	2.5†	.6	2 windings					
			25/2*	5†	.15	$2\frac{1}{2}$x$3\frac{3}{4}$x$2\frac{5}{32}$"	2	13.10	11.39	10.35	6.90



E

PLATE TRANSFORMERS (Primary 115 V, 50-60 Hz)

tock No.	Mfr's Type	Fig.	Secondary	Size HxWxD	Wt., Lbs.	EACH 1-4	5-9	10-24	500-Up
X6244	S-44	E	575-525-0-525-575 @ 500 mA	$5\frac{7}{8}$x$5\frac{3}{8}$x$6\frac{3}{4}$"	22½	50.72	52.80	48.00	32.00
-6245	S-45	E	900-750-0-750-900 @ 200 mA	$4\frac{5}{8}$x$5\frac{3}{8}$x$5\frac{3}{8}$"	12	45.54	39.60	36.00	24.00
X6246	S-46	E	1000-750-0-750-1000 @ 300 mA	$5\frac{7}{8}$x$5\frac{3}{8}$x$6\frac{3}{4}$"	20½	56.93	49.50	45.00	30.00
X6247	S-47	E	1500-1250-1000-0-1000-1250-1500 @ 300 mA	$5\frac{7}{8}$x$6\frac{1}{8}$x$6\frac{5}{8}$"	26¾	74.01	64.35	58.50	39.00
X6248	S-48	E	1500-1250-1000-0-1000-1250-1500 @ 500 mA	$5\frac{7}{8}$x$6\frac{19}{32}$x$7\frac{3}{8}$"	31	82.50	71.77	65.25	43.50
X6249	S-49	E	2100-1800-1500-0-1500-1800-2100 @ 300 mA	$5\frac{7}{8}$x$6\frac{19}{32}$x$7\frac{3}{8}$"	31	79.70	69.30	63.00	42.00
Z2014	S-50	E	3000-2500-0-2500-3000 @ 300 mA	$10\frac{1}{4}$x$7\frac{3}{8}$x$9\frac{1}{4}$"	52	153.71	133.65	121.50	81.00

SINGLE-SECONDARY FILAMENT TRANSFORMERS (Primary 105/115 V, 50-60 Hz)

-6258	S-58	E	2.5V CT @ 20A	$3\frac{3}{4}$x$3\frac{1}{8}$x$4\frac{1}{2}$"	4½	25.63	22.28	20.25	13.50
-6259	S-59	E	5V CT @ 13A	$3\frac{3}{4}$x$3\frac{1}{8}$x$4\frac{1}{2}$"	4½	23.91	20.79	18.90	12.60
-6260	S-60	E	5V CT @ 22A	$4\frac{5}{8}$x$4\frac{5}{8}$x$5\frac{1}{2}$"	8	33.59	29.21	26.55	17.70
-6262	S-62	E	10V CT @ 10A	$3\frac{3}{4}$x$3\frac{1}{8}$x$4\frac{1}{2}$"	4½	23.91	20.79	18.90	12.60
-6263	S-63	E	14, 12, 11V CT @ 10A single wdg, tapped	$4\frac{5}{8}$x$4\frac{5}{8}$x$5\frac{1}{2}$"	8	34.73	30.20	27.45	18.30

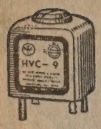
TRANSISTOR/FILAMENT SUPPLY TRANSFORMERS (Primary, 115 V, 50-60 Hz)

-6275	S-75	D	Two-6.3V @ .6A each	$1\frac{7}{8}$x$2\frac{13}{16}$x$1\frac{3}{4}$"	1	13.10	11.39	10.35	6.90
-6276	S-76	D	Two-12.6V @ 2.0A each	$2\frac{15}{16}$x$4\frac{1}{8}$x$2\frac{5}{16}$"	3	17.66	15.35	13.95	9.30
-6277	S-77	E	Two-17/21.5V @ 1.5A each Tapped	$3\frac{3}{4}$x$3\frac{1}{8}$x$4\frac{1}{2}$"	4½	23.91	20.79	18.90	12.60
X6278	S-78	E	Two-34/43V @ 4.5A each Primary	$5\frac{7}{8}$x$5\frac{3}{8}$x$6\frac{3}{4}$"	21	135.00	135.00	135.00	.....

ALLIED CAN FURNISH THE ENTIRE LINE OF UTC TRANSFORMERS AND CHOKES. WRITE FOR INFORMATION AND OEM PRICES ON ITEMS NOT LISTED

UTC Transformers, Inductors and Toroids

HERMETICALLY SEALED MIL-T-27B TYPES HVC AND TVC VARIABLE INDUCTORS



Hermetically sealed, provide a wide inductance range with a high Q in an extremely compact unit. Ideal for tuned circuits. Adjustable, —70% to +200% of mean inductance by 900° rotation. Usable over a wide frequency range. Highly stable with temperature and voltage change. TVC series has taps at 30% and 50% of total turns. Units have two 4-40 mtg. studs. Size: 1⅛x2²⁵⁄₃₂x1¹⁵⁄₃₂". Wt., 2 oz.

Stock No.	Mfr's Type	Mean H	Max. mA	EACH 1-4	5-9	10-24	500-Up
964-4201	HVC-1	.006	100	12.53	10.89	9.90	6.60
964-4202	HVC-2	.015	60	12.53	10.89	9.90	6.60
964-4203	HVC-3	.040	40	12.53	10.89	9.90	6.60
964-4204	HVC-4	.1	30	12.53	10.89	9.90	6.60
964-4205	HVC-5	.25	20	12.53	10.89	9.90	6.60
964-4206	HVC-6	.6	15	12.53	10.89	9.90	6.60
964-4207	HVC-7	1.5	10	13.29	11.55	10.50	7.00
964-4208	HVC-8	4.0	7	13.29	11.55	10.50	7.00
964-4209	HVC-9	10	5	13.29	11.55	10.50	7.00
964-4210	HVC-10	25	3.5	13.67	11.88	9.90	7.20
964-4211	HVC-11	60	2	14.81	12.87	11.70	7.80
964-4212	HVC-12	150	1.5	16.32	14.19	11.82	8.60
964-6502	TVC-2	.015	60	15.18	13.20	12.00	8.00
964-6504	TVC-4	.1	30	15.18	13.20	12.00	8.00
964-6505	TVC-5	.25	20	15.18	13.20	12.00	8.00
964-6506	TVC-6	.6	15	15.18	13.20	12.00	8.00
964-6508	TVC-8	4	7	15.95	13.89	12.60	8.40
964-6509	TVC-9	10	5	15.95	13.89	12.60	8.40
964-6510	TVC-10	25	3.5	42.30	42.30	42.30	.....
964-6512	TVC-12	150	1.5	49.50	49.50	49.50	.....

TYPE VIC VARIABLE INDUCTORS FOR TUNED AUDIO CIRCUITS

Type VIC inductors offer a convenient approach to the problem of tuned audio circuits. By adjusting a set screw in the side of the case, any inductance value of —45% to +85% from the mean value is obtained. Range is covered in 600° rotation with positive setting for precise values. Mounting centers on terminal board side are 1³⁄₁₆x2²⁹⁄₃₂", and tapped for 4-40 screws. 1¹½₂x1¼x1⁷⁄₁₆". Average shpg. wt., 5½ oz.

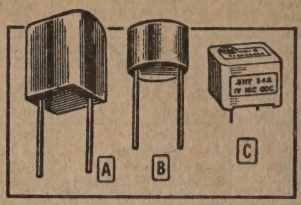
Stock No.	Mfr's Type	Mean H	Max. mA	EACH 1-4	5-9	10-24	500-Up
964-6547	VIC-7	.13	25	9.87	8.58	7.80	5.20
964-6548	VIC-8	.21	21	10.25	8.91	8.10	5.40
964-6549	VIC-10	.54	15	10.25	8.91	8.10	5.40
964-6550	VIC-11	.85	12	10.25	8.91	8.10	5.40
964-6552	VIC-12	1.3	10	10.62	9.24	8.40	5.60
964-6553	VIC-13	2.2	8	10.62	9.24	8.40	5.60
964-6554	VIC-14	3.4	7	10.62	9.24	8.40	5.60
964-6555	VIC-15	5.4	6	11.01	9.57	8.70	5.80
964-6556	VIC-16	8.5	5	11.01	9.57	8.70	5.80
964-6557	VIC-17	13	4	11.01	9.57	8.70	5.80
964-6558	VIC-18	21	3.5	11.39	9.90	9.00	6.00

HERMETICALLY SEALED MIL-TF4RX20YY TYPE M PERMALLOY DUST TOROIDS

Hermetically sealed, meet MIL-T-27B specs. 1% tolerance. Type M toroids offer high voltage stability, maximum Q factor in their class, and miniature dimensions. Inductance is virtually independent of frequency, temperature or vibration. The DC currents shown will cause only a slight drop in coil inductance. Extremely low hum pick-up. High permeability case affords additional shielding so close spacing of units is possible. Toroid sizes: Type MQA, 1⁹⁄₃₂x1²¹⁄₃₂x1¹¹⁄₁₆"; Type MQB, 2⁹⁄₁₆x2¹³⁄₁₆x1³⁄₁₆"; Type MQE, 1¹⁄₁₆x1¹⁄₃₂x½". MQA, 4 oz.; MQB, 14 oz.; MQE, 1½ oz.

Stock No.	Mfr's Type	Inductance	Max. mA	EACH 1-4	5-9	10-24	500-Up
964-5212	MQA-2	1 H	20	15.18	13.20	12.00	8.00
964-5304	MQB-4	120 mH	120	22.77	19.80	18.00	12.00
964-5305	MQB-5	.5 H	60	22.77	19.80	18.00	12.00
964-5306	MQB-6	1 H	40	24.68	21.45	19.50	23.00
964-5409	MQE-9	.25 H	22	12.15	10.56	9.60	6.40
964-5410	MQE-10	.4 H	17	12.53	10.89	9.90	6.60
964-5412	MQE-12	.9 H	12	12.90	11.22	10.20	6.80
964-5416	MQE-16	4 H	5	44.10	44.10	44.10	.....

HERMETICALLY SEALED MINIDUCTORS PROVIDE HIGH Q WITH SMALL CASE SIZE



A ML Series, Seale Hipermalloy Ca

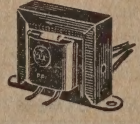
B MM, MH, MW S Symmetrical Tor

C MO Series. Has Lo ductance Variatio

For transistor and printed circuit, as well as vacuum tube des Hermetically sealed. Provide high Q in miniature form. Low pickup. Stable over a temperature range of from —55° C +10 The ML-5 thru 10 and the MO-2 thru 100 are for lower frequen The MM and the MW series are for medium frequencies. The series are for high frequencies. Miniductors meets specs of M 278. MH, MM cases are 2³⁄₃₂" dia. x ¼" high; actual wt., 07. oz. cases are 2³⁄₃₂" dia. x ¼" high; actual wt., .25 oz. ML cases are 3¹⁄₆₄x3⁹⁄₁₆" high; actual wt., 2 oz. MO cases are ¾x1¹⁄₁₆"x1³⁄₁₆" actual wt., 1 oz.

Stock No.	Mfr's Type	Inductance (0 DC)	DC mA Max.	EACH 1-4	5-9	10-24
964-4801	MH-1	.6 mH	90.0	10.64	9.24	8.40
964-4802	MH-2	1.5 mH	57.0	10.62	9.24	7.70
964-4803	MH-3	2.5 mH	44.0	11.39	9.90	9.00
964-4804	MH-4	6 mH	28	11.39	9.90	9.00
964-4805	MH-5	10.0 mH	22.0	11.76	10.23	9.30
964-4806	MH-6	15 mH	18	11.76	10.23	9.30
964-4807	MH-7	25 mH	14	12.15	10.56	9.60
964-4809	MH-8	40.0 mH	11.0	12.15	10.56	9.60
964-5001	MM-1	3 mH	50	9.87	8.58	7.80
964-5002	MM-2	5.0 mH	40.0	9.87	8.58	7.80
964-5003	MM-3	8.0 mH	30.0	10.25	8.91	8.10
964-5005	MM-5	20.0 mH	20.0	10.62	9.24	8.40
964-5006	MM-6	30.0 mH	16.0	10.62	9.24	8.40
964-5007	MM-7	60.0 mH	11.0	11.39	9.90	9.00
964-5008	MM-8	120.0 mH	8.0	11.39	9.90	9.00
964-5710	MW-.10	.10 H	18	9.87	8.58	7.80
964-5725	MW-.25	.25 H	11	9.87	8.58	7.80
964-5750	MW-.5	.5 H	8	10.25	8.91	8.10
964-5701	MW-1	1.0 H	6	11.76	10.23	9.30
964-5702	MW-2	2 H	4	14.42	12.54	11.40
964-5703	MW-3	3 H	3.5	15.56	13.53	12.30
964-5705	MW-5	5 H	3	19.35	16.83	15.30
964-4900	ML-0	.15 H	12	11.39	9.90	9.00
964-4901	ML-1	.25 H	9.0	11.39	9.90	9.00
964-4902	ML-2	.4 H	7.0	11.39	9.90	9.00
964-4903	ML-3	.7 H	5.0	11.39	9.90	9.00
964-4904	ML-4	1.4 H	3.0	11.39	9.90	9.00
964-4905	ML-5	2.5 H	1.0	11.39	9.90	9.00
964-4906	ML-6	4.0 H	.7	11.39	9.90	9.00
964-4907	ML-7	6.0 H	.6	11.39	9.90	9.00
964-4908	ML-8	10.0 H	.5	11.39	9.90	9.00
964-4909	ML-9	25.0 H	.3	11.76	10.23	9.30
964-4910	ML-10	60.0 H	.2	13.29	11.55	10.50
964-5155	MO-.5	.5 H	23	12.90	11.22	10.20
964-5101	MO-1	1 H	16	12.90	11.22	10.20
964-5102	MO-2	2 H	8	13.29	11.55	10.50
964-5105	MO-5	5 H	5	13.29	11.55	10.50
964-5120	MO-20	20 H	2.7	13.29	11.55	10.50
964-5100	MO-100	100 H	1.1	14.04	12.21	11.10

FILAMENT AND TRANSISTOR TRANSFORMERS WITH 117 V 60 Hz AC PRIMARIES



Industrial-type transformer (primary 117 v 60 Hz) with demonstrated reliability in a variety of uses. All transformers listed below low-temperature-rise, vacuum-sealed. *Trans types with taps on primary to modify secon nominal voltage from —6%, to +6%, or +1 Av. shpg. wt., 2 lbs.

Stock No.	Mfr's Type	Secondary VCT@Amps		Size H x W x D	EACH 1-4	5-9	10-24
964-2902	FT-2	6.3	1.2	1¹¹⁄₁₆x2⁷⁄₈x1⅝"	7.22	6.27	5.70
964-2904	FT-4	6.3	3	2x3⅝x1⅞"	7.97	6.93	6.30
964-2908	FT-8	6.3	8	2⅝x4x2½"	10.45	9.08	8.25
964-2910	FT-10	24/12	2/4	2¹¹⁄₁₆x4x2⅝"	11.96	10.40	9.45
964-2913	*FT-13	26	.04	1¼x2¹⁄₈x1⅜"	10.45	9.08	8.25
964-2914	*FT-14	26	.25	1¹¹⁄₁₆x2⁷⁄₈x1⅝"	9.87	8.58	7.80
964-2915	*FT-15	48	1	2⅝x4x2½"	13.29	11.55	10.50
964-2916	*FT-16	11/5.5	2.5/5	2⁵⁄₁₆x3¾x2⅛"	13.29	11.55	10.50

Call, Write or Wire Your Nearest Allied Facility for Prices on Quantities 25 to 4

UTC Filters, Inductors and Transformers

-T TRANSISTOR TRANSFORMERS AND INDUCTORS

miniature transistor transformers and inductors. ' diameter x 13/32" high. Units are rugged, fully metically sealed. Exceed MIL-T-27 B, Grade 4. Turns circular to eliminate turn corner stress and provide form wire lay. Bobbin of units completely rigid. 1½" ds, plastic, insulated copper. Actual wt., 1/10 oz. g. wt. 1 oz.

Stock No.	Mfr's Type DO-	Application	Primary Ohms	Secondary Ohms	EACH 1-4	5-9	500-Up
1-2000	T1	Interstage	20K-30K	800-1200	7.59	6.60	4.00
1-2002	T2	Output	500-600	50-60	6.83	5.94	3.60
1-2003	T3	Output	1K-1.2K	50-60	6.83	5.94	3.60
1-2004	T4	Output	600	3.2	6.83	5.94	3.60
1-2006	T6	Output	10K	3.2	7.59	6.60	4.00
1-2007	T7	Input	200K	1K	11.76	10.23	6.20
1-2008	T8	Inductor 3.5 H @ 2 ma DC			6.08	5.28	3.20
1-2009	T9	Out. or Driver	10K-1K2	500-600 CT	8.35	7.26	4.40
1-2010	T10	Driver	10K-12.5K	1.2K-1.5K CT	8.35	7.26	4.40
1-2012	T12	S/PP Output	150-200 CT	12-16	7.22	6.27	3.80
1-2013	T13	S/PP Output	300-400 CT	12-16	7.22	6.27	3.80
1-2014	T14	S/PP Output	600-800	12-16	7.59	6.60	4.00
1-2015	T15	S/PP Output	800-1070 CT	12-16	7.59	6.60	4.00
1-2016	T16	S/PP Output	1K-1.33K CT	12-16	7.59	6.60	4.00
1-2017	T17	S/PP Output	1.5K-2K CT	12-16	7.59	6.60	4.00
1-2020	T20	Out. or Match to line	500 CT	600	7.59	6.60	4.00
1-2021	T21	Output to line	900 CT	600	7.59	6.60	4.00
1-2022	T22	Output to line	1.5K CT	600	7.59	6.60	4.00
1-2023	T23	Interstage	20K-30K CT	800-1.2K CT	8.73	7.59	4.60
1-2024	T24	Input	200K CT	1K CT	12.53	10.89	6.60
1-2025	T25	Interstage	10K-12K CT	1.5K-1.8K CT	9.11	7.92	4.80
1-2026	T26	Inductor 6 H @ 2 mA DC			7.22	6.27	3.80
1-2027	T27	Inductor 1.25 H @ 2 mA DC			6.08	5.28	3.20
1-2028	T28	Inductor .3 H @ 4 mA DC			6.08	5.28	3.20
1-2030	T30	Single/PP Output	320-400 CT	3.2-4	7.22	6.27	3.80
1-2031	T31	Single/PP Output	640-800 CT	3.2-4	7.59	6.60	4.00
1-2034	T34	Single/PP Output	1.6K-2K CT	3.2-4	7.59	6.60	4.00
1-2036	T36	Isol. or Interstage	10K-12K CT	10K-12K CT	9.50	8.28	5.00
1-2037	T37	Interstage	2K-2.5K split	8K-10K split	9.87	8.58	5.20
1-2038	T38	Interstage	10K-12K CT	K-2.4K split	9.87	8.58	5.20
1-2040	T40	Interstage	40K-50K CT	400-500 split	10.62	9.24	5.60
1-2041	T41	Output	400-500 CT	400-500 split	9.50	8.25	5.00
1-2044	T44	Interstage	80-100 CT	32-40 split	9.50	8.25	5.00
1-2047	T47	Isol. or Interstage	9K-10K CT	9K-10K CT	10.25	8.91	5.40
1-2051	T51	Interstage	2K-2.5K CT	2K-2.5K CT	9.87	8.58	5.20
1-2053	T53	Input	400-500 CT	4K-5K CT	9.87	8.58	5.20
1-2054	T54	Interstage	40K-50K CT	4K-5K CT	11.01	9.57	5.80
1-2420	T420	Isol.—pri. and sec., 28 V, 380-1000 Hz., 10 mA			9.87	8.58	5.20
1-2099	TSH	Hipermalloy shield and cover for any DO-T units			1.15	.99	.60

DI-T200 TRANSISTOR TRANSFORMERS

ailar in construction to DI-T series (left), but with leads uninsulated, gold-plated .017D Dumet wire. Leads are ced on 1/10" radius circle. Hermetically sealed, metal ed to meet MIL-T-27B Grade 4 Class R (105° max.). 5/16" x '. Actual wt., 1/15 oz. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type DI-	Application	Primary Ohms	Secondary Ohms	EACH 1-4	5-9	500-Up
4-1245	T245	Output	500-600 CT	50-60 CT	8.73	7.59	4.60
4-1250	T250	Output	500 CT	600 CT	9.11	7.92	4.80
4-1255	T255	Output	1K-1.2K CT	50-60 CT	8.73	7.59	4.60
4-1260	T260	Output to Line	1.5K CT	600 CT	9.11	7.92	4.80
4-1265	T265	Isol. or Interstage	2K-2.5K CT	8K-10K split	11.01	9.57	5.80
4-1270	T270	Output or Driver	10K-12K CT	500-600 CT	9.87	8.58	5.20
4-1273	T273	Output	10K-12.5K CT	1.2K-1.5K CT	9.87	8.58	5.20
4-1276	T276	Interstage	10K-12K CT	2K-2.4K CT	9.87	8.58	5.20
4-1283	T283	Isol. or Interstage	10K-12K CT	10K-12K CT	10.62	9.24	5.60
4-1200	T200 SH	Hipermalloy shield and cover for DI-T200			.95	.83	.50

YPE PIP SUBMINIATURE PULSE TRANSFORMERS

me physical design and reliability as UTC DO-T and -T transformers. Metal-cased and hermetically sealed MIL-T-21038B. Types 1 through 9 are MIL type TP6-RX-10CZ and have a 4:4.1 ratio. Type 11 is MIL type 5RK-5310CZ and have a 5:3.1 ratio. 5/16Dx3/16"H. Actual . 1/20 oz. Av. shpg. wt. 2 oz.

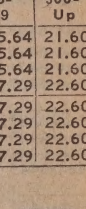
Stock No.	Mfr's Type	Width (μs)	Rise Time (μs)	Volts Out	Imp. In, Out, (Ohms)	EACH 1-4	5-9	500-Up
64-6101	PIP-1	.05	.02	9	50	7.59	6.60	4.00
64-6104	PIP-4	.5	.05	7	100	7.59	6.60	4.00
64-6105	PIP-5	1	.08	6.8	100	7.59	6.60	4.00
64-6107	PIP-7	3	.20	6.8	100	7.59	6.60	4.00
64-6108	PIP-8	5	.30	7.9	200	7.59	6.60	4.00
64-6109	PIP-9	10	.35	6.5	200	7.59	6.60	4.00
64-6111	PIP-11	1	.02	6.6	280/100	7.59	6.60	4.00
64-6199	PIPSH	Hipermalloy Shield and Cover				1.14	.99	.60

DI-T TRANSISTOR TRANSFORMERS AND INDUCTORS

Subminiature transistor transformers and inductors. Hermetically sealed and metal cased, exceeding MIL-T-27B, Grade 4 specifications. Bobbin of units is completely rigid to eliminate stress and wire movement. 1½" solder-melting-plastic insulated copper leads. Actual wt. 1/15 oz, Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type DI-	Application	Primary Ohms	Secondary Ohms	EACH 1-4	5-9	500-Up
964-1008	T8	Inductor 2.5 H @ 2 mA DC			6.08	5.28	3.20
964-1009	T9	Output or Driver	10K-12K	500-600 CT	8.35	7.26	4.40
964-1011	T11	Driver	10K-12.5K	2K-2.5K CT	8.35	7.26	4.40
964-1025	T25	Interstage	10K-12K CT	1.5K-1.8K CT	9.11	7.92	4.80
964-1026	T26	Inductor 4:5 H @ 2 mA DC			7.22	6.27	3.80
964-1027	T27	Inductor .9 H @ 2 mA DC			6.08	5.28	3.20
964-1036	T36	Isol. or Interstage	10K-12K CT	10K-12K CT	9.50	8.25	5.00
964-1052	T52	Interstage	4K-5K CT	8K-10K CT	9.87	8.58	5.20
964-1053	T53	Input	400-500 CT	4K-5K CT	9.87	8.58	5.20
964-1099	TSH	Hipermalloy shield and cover for DI-T units			1.14	.99	.60

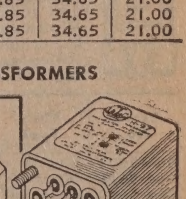
INTERSTAGE AND LINE FILTERS



Precision made midrange frequency filters. Suffix in Mfr's Type indicates cutoff frequency. BMI units have source and load impedance of 10k. HMI filters are high-pass interstage units with source and load of 10k. BMI units are sharply peaked, 2 dB down ±3% from center frequency, and down 40 dB per octave. Cases sealed to meet MIL-F-18327B specifications. Av. shpg. wt. 9 oz.

Stock No.	Mfr's Type	Imp. (Ohms)	Size (Inches)	EACH 1-4	5-9	500-Up
964-0130	BMI-60	10K	1⅝x1 11/16x1 3/16	40.98	35.64	21.60
964-0120	BMI-400	10K	1⅝x1 11/16x1 3/16	40.98	35.64	21.60
964-0101	BMI-1000	10K	1⅝x1 11/16x1 3/16	40.98	35.64	21.60
964-4400	LMI-100	10K	1⅝x1 11/16x1 3/16	42.89	37.29	22.60
964-4430	LMI-3000	10K	1⅝x1 11/16x1 3/16	42.89	37.29	22.60
964-4410	LMI-10000	10K	1⅝x1 11/16x1 3/16	42.89	37.29	22.60
964-4120	HMI-200	10K	2 1/2x1 11/16x1 3/16	42.89	37.29	22.60
964-4530	LML-3000	500/600	2 1/2x1 11/16x1 3/16	42.89	37.29	22.60

INTERSTAGE MINIFILTERS

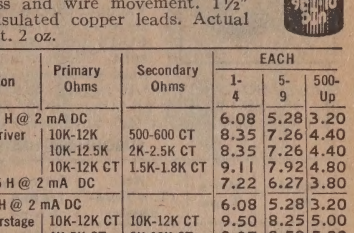


Compact, hermetically-sealed interstage filters. Cases meet MIL-F-18327B specifications. Cutoff frequency indicated by digits in Manufacturer's type number. All input and output impedances are 10k. Attenuation is approximately 2 dB ±3% from center frequency, down 35 dB per octave. For transistor use units may be reversed so that continuity is on input side. Av. shpg. wt. 6 oz.

BPM HPM. LPM

Stock No.	Mfr's Type	Size (Inches)	EACH 1-4	5-9	500-Up
964-0150	BPM-1000	1⅛x¾x¾	37.95	33.00	20.00
964-0190	BPM-8000	1⅛x¾x¾	37.95	33.00	20.00
964-4160	HPM-500	1⅜x1x1	39.85	34.65	21.00
964-4150	HPM-1000	1⅜x1x1	39.85	34.65	21.00
964-4620	LPM-200	1⅜x1x1	39.85	34.65	21.00
964-4650	LPM-500	1⅜x1x1	39.85	34.65	21.00
964-4600	LPM-1000	1⅜x1x1	39.85	34.65	21.00
964-4630	LPM-3000	1⅜x1x1	39.85	34.65	21.00
964-4610	LPM-10000	1⅛x¾x¾	39.85	34.65	21.00

TRANSISTOR INVERTER TRANSFORMERS

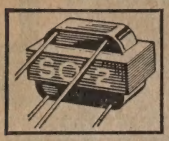


Hermetically sealed to MIL-T-27B. New winding/coupling method greatly reduces transitory peaks—protects driving transistors. DC output shown for 12/14 or 24/48 V battery. Current ratings same with 6/7 V battery but output V is halved. Optimum results at 1000 Hz. Av. wt., 1½ oz.

Stock No.	Mfr's Type	DC Output V	DC Output mA	Size (Inches)	EACH 1-4	5-9	500-Up
964-3097	H-97	250	60	1 5/16x1 5/16x1¾	23.35	20.30	12.30
964-3098	H-98	375	100	1⅝x1 5/8x2 3/8	25.05	21.78	13.20
964-3100	H-100	550	200	2¾x2 3/8x2 13/16	36.06	31.35	19.00

UTC Miniature and Isolation Transformers

SUBOUNCER AND SUB-SUBOUNCER TRANSFORMERS



Subouncers (SO) weight less than ½ oz.; sub-subouncers (SSO), less than ⅓ oz. Mount with securely anchored 4" color-coded leads or with channels, listed below. Vacuum-processed and double-sealed (waterproof). Pri. windings of SO-11 through SO-16 are center-tapped; sec. windings are split. *Both windings are split. SO-1 has max. dBm level of +10; SO-2, +20; SO-3, through SO-8, +23; SO-10 through SO-16, +24; SSO-1 and SSO-21, +7; SSO-2, +15; all others, +20. Size of type SO, 1 9/32"x 2 3/32"x 7/8"; Type SSO, 7/16"x 3/4"x 33/64". Shpg. wt. 2 oz.

SUBOUNCER UNITS

Stock No.	Mfr's Type	Use (T.=Transistor)	Primary Imped. Ohms	Sec. Imped. Ohms	EACH 1-4	5-9	500-Up
964-6301	SO-1	Input	200, 50	250K, 62.5K	6.83	5.94	3.60
964-6303	SO-2	Interstage	10K	90K	6.65	5.78	3.50
964-6305	SO-3	Pl. to line	10K, 25K	200, 500	6.08	5.28	3.20
964-6315	SO-8	Transistor to PP sec.	10K	2000 CT	6.08	5.28	3.20
964-6319	SO-10	Transistor to VC	2000 CT 4000 CT	8 16	5.14	4.46	2.70
964-6321	SO-11	T. Interstage	400, 500	400, 500	5.89	5.12	3.10
964-6323	SO-12	T. Interstage	400, 500	120, 150	5.89	5.12	3.10
964-6329	SO-15	T. Output	600	600	5.89	5.12	3.10
964-6331	SO-16	T. Interstage	2500	2500	6.27	5.45	3.30
964-6300	SO-CH	Mtg. channel for SO units			.38	.33	.20

SUB-SUBOUNCER UNITS

964-6401	SSO-1	Input	200, 50	250K 62.5K	7.59	6.60	4.00
964-6403	SSO-2	Interstage	10K	90K	7.59	6.60	4.00
964-6415	SSO-8	T. to PP sec.	10K	2000 CT	6.28	5.45	3.30
964-6421	SSO-11	T. Output	500, 600	50, 60	5.14	4.46	2.70
964-6427	SSO-14	T. Interstage	10K CT 25K CT	200 CT 500 CT	6.45	5.61	3.40
964-6437	SSO-19	Out. Matching	500 CT	600 CT	5.51	4.79	2.90
964-6439	SSO-20	Output	1500 CT	600 CT	5.51	4.79	2.90
964-6441	SSO-21	Crystal/Chop.	200K CT	1000 CT	7.79	6.77	4.10
964-6445	SSO-23	Inductor: 8 H @ 2 mA; 4 H @ 5 mA; 650 ohms			4.37	3.80	2.30
964-6451	SSO-26	T. Interstage	40K, 50K*	400, 500†	7.40	6.44	3.90
964-6400	SSO-CH	Mtg. Channel for SSO units			.38	.30	.20

POWER-LINE ISOLATION TRANSFORMERS

Ultrashielded—provide maximum isolation for critical circuits. Coupling less than 0.10 pF. MIL type TF4RX01YY—meet MIL-T-27B specifications. Primary, 115V 50-60 Hz; secondary, 115 V. *Industrial rating.

Stock No.	Mfr's Type	Watts *	Size H x W x D	Wt., Lbs.	EACH 1-4	5-9	500-Up
964-4001	HIT-1	60	4 1/32"x4 1/32"x3 1/32"	5½	66.23	57.59	38.74
964-4015	HIT-15	150	5 11/32"x5x3 1/2"	13	87.29	75.90	46.00
964-4002	HIT-2	200	5 17/32"x5 17/32"x4 17/32"	15½	91.08	79.20	48.00
964X4003	HIT-3	480	8x6 17/32"x5 17/32"	35	143.32	123.75	75.00

MQL, MQM LOW-FREQUENCY HIGH-Q COILS

Hermetically sealed to MIL-T-27B. Ideal when permalloy dust toroids are unsuitable. 2% tol. at 1 V, 60 Hz. Hipermalloy shielding greatly reduces hum pickup. Two like windings and 4 terminals permit series, parallel, center-tap, or trans.-type connections. MQL: 1 13/16"x 2½", wt., 16 oz.; MQM: 1 5/16"x1 5/8", wt., 5 oz.

Stock No.	Mfr's Type	Series H	Parallel H	EACH 1-4	5-9	500-Up
964-5503	MQL-3	200	50	49.34	42.90	26.00
964-5616	MQM-16	16	4	26.18	22.77	13.80
964-5640	MQM-40	40	10	26.18	22.77	13.80
964-5630	MQM-300	300	75	27.70	24.09	14.60

MIL-T-27B SEALED FILTER INDUCTORS

Types H-70 and H-170 are rated at 1000 volts. Type H-170 has two windings, is designed for transistor applications. Stainless steel mounting studs. Sizes: H-70, 1 3/4"x1 5/16"x1 5/16"; H-170, 2 13/16"x2 3/4"x2 3/8". Wt.: H-70 and H-170, 2½ lbs. *Millihenries.

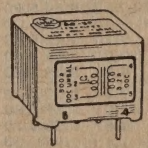
Stock No.	Mfr's Type	Ind. H	DC mA	DC Ohms	EACH 1-4	5-9	500-Up
964-3070	H-70	10.0	35	925	14.04	12.21	7.40
964-3170	H-170	*140, 35	250, 500	6, 15	20.49	17.82	10.80

OUNCER AUDIO TRANSFORMERS FOR APPLICATIONS REQUIRING SMALL SIZE

Compact, weigh just 1 ounce. Aluminum housing 1 high, 7/8" dia. Ideal for hearing aids, aircraft, conce service. 0-1 thru 0-16 have max. dBm level of +8; 0-18 t 0-21 and 0-26 thru 0-29, +20; 0-25, +15. *In t below indicates 1 watt at 200 Hz. "S" indicates s winding. Current ratings are DC. 1 1/16" mounting cent Av. shpg. wt., 2 oz.

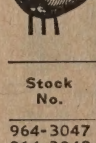
Stock No.	Mfr's Type	Primary Impedance Ohms	Secondary Imped. Ohms	EACH 1-4	5-9	
964-5801	0-1	50, 200-250, 500-600	50K	10.82	9.41	5
964-5802	0-2	50, 200-250, 500-600	50K CT	11.20	9.74	5
964-5803	0-3	7.5-30	50K	10.45	9.08	5
964-5804	0-4	15K	60K	9.31	8.09	4
964-5806	0-6	15K	95K CT	10.45	9.08	5
964-5807	0-7	15K; 4 mA	95K CT	10.45	9.08	5
964-5808	0-8	15K	50, 200-250, 500-600	10.82	9.44	5
964-5809	0-9	15K; 4 mA		10.82	9.44	5
964-5810	0-10	30K CT		11.59	10.07	6
964-5812	0-12	50, 200-250		10.82	9.44	5
964-6613	0-13	50 H @ 3 mA DC	6000	8.93	7.76	4
964-5814	0-14	200	500K	10.45	9.08	5
964-5816	0-16	250 CT	50K	14.04	12.21	7
964-5818	0-18	10K-2.5K S; 4 mA	2K-500	10.82	9.41	5
964-5819	0-19	10K-2.5K S; 4 mA	4K-1K S	10.82	9.41	5
964-6622	0-22	400 CT/500 CT; 20 mA	3.2/4	7.59	6.60	4
964-6625	0-25	600-500 S	2000-500 S	10.82	9.41	5
964-6626	0-26	10K CT; 4 mA	100-20K	10.82	9.41	5
964-6627	0-27	10K CT; 4 mA	500-125 S	11.20	9.74	5
964-6630	0-30*	500-125 S; 20 mA	500-125 S	11.01	9.57	5
964-6637	0-37*	4K/1K S; 4 mA	600/150 S	11.01	9.57	5
964-5817	0-17	Mumetal Shield; for any Ouncer unit		2.09	1.82	1
964-6600	0-BR	Ouncer Chassis Mounting Bracket		.58	.50	

MOLDED-CASE SUBOUNCERS AND SUB-SUBOUNCERS FOR MINIATURE AUDIO CIRCUITS



Vacuum molded and hermetically sealed. use in a wide variety of miniature audio circu Meet specifications of MIL-T-27B Grade 5. Ep encased, with same design as Subouncers Sub-Subouncers. Pin terminals are ¼"x. diameter. *In table below indicates split wi ings. Mfr's type SO-15P has maximum d level of +24; all others, +20. SO-P Series, 1x2 3/32" high. SSO-P Series, ¾"x7/8"x9/16" high. shpg. wt., ½ oz.

Stock No.	Mfr's Type	Use	Primary Imped. Ohms	Sec. Imped. Ohms	EACH 1-4	5-9	
964-6330	SO-15P	T. Output	600CT	600*	10.45	9.08	5
964-6416	SSO-8P	T. to PP Sec.	10K	2000CT	11.01	9.57	5
964-6428	SSO-14P	T. Interstage	10K, 25K CT	200, 500CT	11.20	9.74	5
964-6430	SSO-15P	T. Interstage	20K, 30K CT	800, 1200CT	11.20	9.74	5
964-6440	SSO-20P	Output	1500CT	600CT	10.45	9.08	5
964-6450	SSO-25P	T. Interstage	10K CT	10K/2500*	11.39	9.90	6
964-6454	SSO-27P	Tr.Out or Dr	4K CT	600 split	11.76	10.23	6



MINIATURE PULSE TRANSFORMERS VACUUM TUBE TYPE

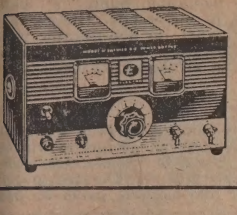
For wide use in all types of vacuum tube circu Meet specifications of MIL-T-21038B. —70°C to +1 C. Width at 50% amplitude. Rise time, 10% to 9 of max. amplitude. *Blocking osc. and coupling ch acteristics. Sizes: 45, 3/8"x3/8"; 47-52, 9/16"x9/16"; 54- 5/8"x5/8". Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Width (μs)*	Rise Time (μs)	Volts Out	EACH 1-4	5-9	500-Up
964-3047	H-47	.20	.01	18	10.07	8.75	5.30
964-3048	H-48	.50	.01	20	10.07	8.75	5.30
964-3049	H-49	1.0	.02	24	10.07	8.75	5.30
964-3050	H-50	2	.05	27	10.45	9.08	5.50
964-3051	H-51	3	.07	26	10.82	9.41	5.70
964-3052	H-52	5	.15	23	11.20	9.74	5.90
964-3054	H-54	10	.25	24	11.96	10.40	6.30
964-3055	H-55	16	.40	23	12.90	11.22	6.80
964-3057	H-57	25	1.50	24	10.25	8.91	5.40

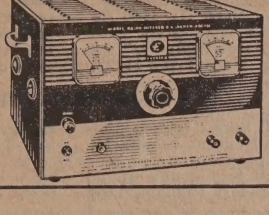
Call, Write, Or Wire Your Nearest Allied Facility for Prices on Quantities 10 to 49

Electro Industrial Power Supplies

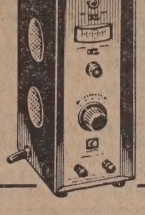
GENERAL-PURPOSE POWER SUPPLIES



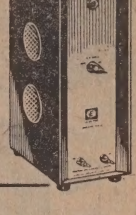
D-612T, H



PS-30



EC-2



EC-1

stable output supplies are rugged, versatile and reliable. Ex-nt for servicing transistorized mobile equipment; production applications; research and development in industry, schools, Space-saving design; low ripple. For 117 V, 50/60 Hz AC.

el D-612T, Model H. D-612T boasts low-ripple output of less 0.5% rms up to 5 amps—the maximum output in this price e. Excellent for servicing transistor radios, CB transceivers, ery charging, solenoids requiring up to 16 VDC. Model H is as storage battery replacement in school labs and other high-ent, low-voltage applications. Both types have voltage and ent output meters. See table below for specifications.

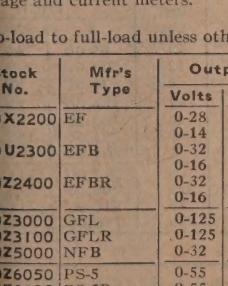
el PS-30. Adjustable 12-volt supply for servicing communica-s equipment. Useful in industrial and educational labs, thermo-ric cooling, electro-plating applications. Low ripple at maximum ent. PS-30 has 30-amp output capacity. Constructed with easy-ad voltage and current output meters. See table below for ifications.

Model EC-1. Low-cost source for school labs, industrial research, production testing, and similar uses. Provides 12 VDC at 5 amps output. Less than 0.5% rms ripple at 5 amps. Four-position voltage adjustment switch; off, low, medium, and high. Patented EPL rectifier conduction cooling. Pilot light. Has convenient wing-nut output terminals. Steel case with two-tone gray finish. Space-saving design operates in vertical or horizontal position. See table below for specifications.

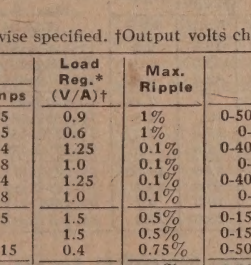
Model EC-2. Excellent for many applications in research and development work. Also can be used for servicing auto tape decks, auto and transistor portable radios. Output is continuously variable from 0 to 16 VDC. Very low ripple—only 0.5% at 5 amps. Has combination voltmeter/ammeter edge-view meter for precise adjustment of output. Patented EPL rectifier conduction cooling. Meter function switch. Pilot light, on-off switch. Insulated binding posts. Steel case with two-tone gray finish. Operates vertically or horizontally. See table below.

load to full-load unless otherwise specified. †Output volts change for each amp of output current change.

tock No.	Mfr's Type	Output Volts	Output Amps	Load Reg.* (V/A)†	Max. Ripple	Meters	DC Imp.* (ohms)	Size (HWD)	Shpg. wt., Lbs.	EACH 1-4	EACH 5-Up
X1000	D-612T	0-16	0-10	.44 (3-10A)	.5%@5A	0-20V,	.44 (3-10A)				
		0-8	0-10	.3 (3-10A)	2%@10A	0-10A	.3 (3-10A)	7x12x8½"	22	103.00	89.50
X4000	H	12 (adj.)	0-10	.23 (3-10A)	5%	0-20V,	.23 (3-10A)				
		6 (adj.)	0-20	.15 (3-20A)	5%	0-30A	.15 (3-20A)	7x12x8½"	30	145.00	125.00
Z6200	PS-30	12 (adj.)	0-30	.12 (6-30A)	1%	0-20V, 0-50A	.27	9¾x14¼x14¼"	68	260.00	225.00
-2000	EC-1	12 (adj.)	0-5	1.4	.5%	None	1.4	10¾x4⅜x6½"	12	51.50	44.50
-2100	EC-2	0-16	0-5	1.8	.5%	0-20V/10A	1.8	10¾x4⅜x6½"	11	74.00	64.50



EF, EFB, EFBR



GFL, GFLR, NFB

FILTERED HEAVY-DUTY POWER SUPPLIES

Non-regulated or semi-regulated power supplies. 2% accuracy meters. Supply well-filtered DC up to 125 volts, at 5 amps. For 117 volts, 50/60 Hz AC. Low ripple output. See table below for full data.

Model EF Dual Range DC Supply. Provides variable voltage 0-28 V or 0-14 V, at 5 amps continuous, 10 amps intermittent load. Uses selenium rectifiers. Panel-mounted voltmeter and ammeter.

Models EFB and EFBR. Designed to meet the very-low-ripple requirements of transistor work. Continuously variable voltage control. Selenium rectifiers. Ripple filter. Model EFBR has standard EIA rack panel. Model EFB Federal Stock Number 6130-957-1450.

Model NFB. For continuous heavy-duty operation. Continuously variable output from 0 to 32 volts for loads to up to 15 amps. Ripple is less than 0.75% at 15 amps. Ripple filter circuit uses chokes and capacitors. Variable autoformer provides smooth voltage control. Bridge type silicon rectifiers.

Models GFL and GFLR. Low-cost semi-regulated, low ripple higher voltage supplies. Ideal for designing and testing DC appliances, telephone circuits, relays and solenoids, laboratory work. Continuously variable output 0-125 VDC to 5A. Silicon rectifiers. Overload protection. Model GFLR has standard EIA rack panel.

els PS-5 and PS-5R. Specially designed for 48-V applications. ivers 550 watts well-filtered DC output continuously variable volts, Ripple 0.5% at 10A. Silicon rectifiers. Model PS-5R has dard EIA rack panel.

el PS-1000. Similar to Models NFB, PS-5 and GFL, but has roximately twice the output power. Excellent load regulation ripple characteristics for such powerful units. Rugged cabinet, age and current meters.

o-load to full-load unless otherwise specified. †Output volts change for each amp of output current change at full load.

tock No.	Mfr's Type	Output Volts	Output Amps	Load Reg.* (V/A)†	Max. Ripple	Meters	DC Imp.* (ohms)	Size (HWD)	Shpg. Wt., Lbs.	EACH 1-4	EACH 5-Up
X2200	EF	0-28	0-5	0.9	1%	0-50V,	.9 (1-5A)				
		0-14	0-5	0.6	1%	0-6A	.6 (1-5A)	7x12x8½"	25	145.00	125.00
U2300	EFB	0-32	0-4	1.25	0.1%	0-40/20V,	1.25				
		0-16	0-8	1.0	0.1%	0-10A	1.0	7x12x8½"	36	202.00	175.00
Z2400	EFBR	0-32	0-4	1.25	0.1%	0-40V/20V,	1.25				
		0-16	0-8	1.0	0.1%	0-10A	1.0	8¾x19x8½"	47	226.00	195.00
Z3000	GFL	0-125	0-5	1.5	0.5%	0-150V, 0-5A	1.5	9¾x14¼x14¼"	88	370.00	320.00
Z3100	GFLR	0-125		1.5	0.5%	0-150V, 0-5A	1.5	10½x19x14¼"	100	398.00	345.00
Z5000	NFB	0-32	0-15	0.4	0.75%	0-50V, 0-25VA	0.4	9¾x14¼x14¼"	84	346.00	300.00
Z6050	PS-5	0-55	0-10	0.8	0.5%	0-75V, 0-15A	.8	9¾x14¼x14¼"	70	376.00	325.00
Z6100	PS-5R	0-55	0-10	0.8	0.5%	0-75V, 0-15A	.8	10½x19x14¼"	89	404.00	350.00
Z6950	PS-1000-125	0-125	0-8	1.0	1%	0-150V, 0-10A	1.0	9¾x14¼x19¼"	120	490.00	425.00

Superior Electric Variable Transformers

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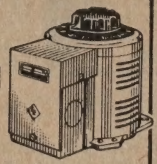
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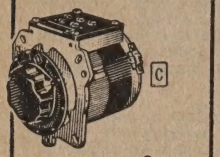
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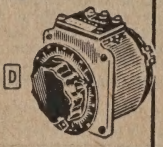
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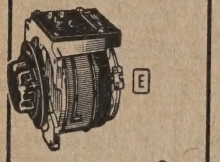
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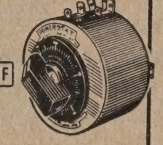
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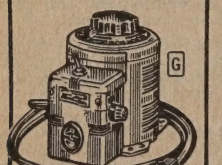
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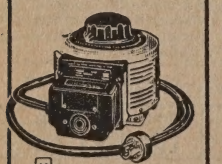
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POWERSTAT® VARIABLE TRANSFORMERS WITH POWERKOTE™ CO

Deliver continuously adjustable output voltage from AC line. Zero waveform distortion, good regulation, conservative ratings. All are for 50-60 Hz. (§60 Hz only.) Enclosed for plane-surface mtg. except 10B, 10B-40, 21, 22, and other types with suffix "U" are open types for panel mounting. Mfr's Types 21, 22, 126, 136B, 226, 236B, 1156D and 1256D are for panel and surface mounting. Suffix "T" ind terminals enclosed in metal box. †Indicates mounted on metal panel, for non-metallic pan bracket mounting, derate to 1.75 amps with c ponding reduction in maximum kVA.

SINGLE-PHASE TYPES

Portable Types 116B and 216B have 2-wire parallel blade input cord-plug sets and output receptacles. *In table indicates unit is equipped with 3-wire plug and receptacle. Type LW136B is a double-wound assembly with an isolated secondary winding. Type 22 incorporates a unique coil-winding techniqu signed to provide higher voltage ratings witho crease in size or weight of transformer. ††R when mounted on metal panel. Derated to 0.5 when mounted for non-metallic panel or br

Stock No.	Mfr's Type	Fig.	Input Volts	Output Volts	Output Amps	Output kVA	Max. Size (DWH)	Wt., Lbs.	EACH 1-5	EACH 6-24	2
931X2410	LW136B	A	120-240	0-30	25.0	0.75	9x7¾x6⅝"	23	131.00	94.50	8
931-5600	§117BT	B	120	0-120	12.0	1.4	7⅛x5⅛x6½"	12	43.80	31.50	2
931-5610	§117BU	C	120	0-120	12.0	1.4	5x5⅛x5¾"	11	33.80	24.30	2
931-2730	§Q117U	C	120	0-120	12.0	1.4	4⅞x4¼x5 1⅛6"	11	33.80	24.30	2
931-5290	21	D	120	0-140	4.5	0.63	3⅜x3¾x4½"	6	23.80	17.10	1
931-5420	116BU	C	120	0-140	10.0	1.4	5x5⅛x5¾"	11	31.20	22.50	2
931-2700	Q116U	C	120	0-140	9.0	1.3	4⅞x4¼x5 1⅛6"	11	31.20	22.50	2
931-5700	126	A	120	0-140	15.0	2.1	6¾x6¼x5⅜"	17	63.75	45.90	4
931-5730	126U	E	120	0-140	15.0	2.1	4¼x6x6¾"	16	57.50	41.40	3
931X5800	136B	A	120	0-140	22.0	3.1	8⅞x7¾x6½"	24½	91.50	65.70	6
931X5820	136BU	E	120	0-140	22.0	3.1	4 5⅛6x7¾x8 1⅛6"	24	83.75	60.30	5
931X5900	146	A	120	0-140	30.0	4.2	11x10x6⅜"	38	145.00	104.00	9
931-6020	216BU	C	240	0-280	3.5	0.98	5x5⅛x5¾"	11	37.50	27.00	2
931-2760	Q216U	C	240	0-280	3.5	0.98	4⅞x4¼x5 1⅛6"	11	37.50	27.00	2
931-6100	§217BT	B	240	0-240	5.0	1.2	7⅛x5⅛x6½"	12	50.00	36.00	3
931-6110	§217BU	C	240	0-240	5.0	1.2	5x5⅛x5¾"	11	40.00	28.80	2
931-2790	§Q217U	C	240	0-240	5.0	1.2	4⅞x4¼x5 1⅛6"	11	40.00	28.80	2
931-5350	22	D	240	0-280	2.25	0.63	4 9⅛6x3¾x4 1⅜6"	6	35.00	25.20	2
931-6200	226	A	240	0-280	7.5	2.1	6¾x6¼x5⅜"	17	63.75	45.90	4
931-6230	226U	E	240	0-280	7.5	2.1	4¼x6x6¾"	16	57.50	41.40	3
931X6320	236B	A	120-240	0-280	10.0	2.8	8⅞x7¾x6½"	23¼	91.50	65.70	6
931X6340	236BU	E	120-240	0-280	10.0	2.8	4 5⅛6x7¾x8 1⅛6"	23¼	83.75	60.30	5
931X6400	246	A	120-240	0-280	15.0	4.2	11x10x6⅜"	38	145.00	104.40	9

Stock No.	Mfr's Type	Fig.	Input Volts	Output Volts	Output Amps	Output kVA	Max. Size (DWH)	Wt., Lbs.	EACH 1-4	EACH 5-11	1
931-5230	§10B-40	F	40	0-40	7.0	0.28	2¼x2 7⅛x3⅛"	3.3	20.00	16.00	1
931-5070	*3PN117B	G	120	0-120	12.0	1.4	7¼x5⅛x6½"	12	55.00	44.00	3
931-5200	§10B	F	120	0-132	†2.25	0.3	2⅛x2 7⅛x3⅛"	2.4	16.50	13.00	1
931-5400	116B	G	120	0-140	10.0	1.4	7⅛x5⅛x6½"	12	42.60	34.00	2
931-5065	3PN116B	G	120	0-140	10.0	1.4	7⅛x5⅛x6½"	12	50.00	40.00	3
931-5080	*3PN126	H	120	0-140	15.0	2.1	8¾x6¼x5¾"	18.5	81.50	65.00	5
931X5090	*3PN136B	H	120	0-140	22.0	3.1	10¼x7¾x6⅛"	26½	117.50	94.00	7
931-5260	12	F	240	0-240	††0.7	0.17	2⅛x2 7⅛x3⅛"	2.5	25.00	20.00	1
931-6000	216B	G	240	0-280	3.5	0.98	7⅛x5⅛x6½"	12	49.50	39.00	3
931-5110	§3PN217B	G	240	0-240	5.0	1.2	7⅛x5⅛x6½"	12	55.00	44.00	3
931-5120	*3PN226	H	240	0-280	7.5	2.1	8¾x6¼x5¾"	18.5	81.50	65.00	5
931X5130	*3PN236B	H	240	0-280	10.0	2.8	10¼x7¾x6⅛"	25¾	117.50	94.00	7

Types 1256D-2P and 1256D-3P are single units (Fig. J) ganged and parallel connected. Type 1256D-2P has two units connected in para Type 1256D-3P, three units connected in paral

Stock No.	Mfr's Type	Fig.	Input Volts	Output Volts	Output Amps	Output kVA	Max. Size (DWH)	Wt., Lbs.	EACH 1	EACH 2-
931F6700	1156D	J	120	0-140	50.0	7.0	15 5⅝x13 7⅛x9 3⅜"	79	216.00	147
931F7300	1256D	J	240	0-280	28.0	7.8	15 1⅛x13 7⅛x9 3⅜"	79	216.00	147
931F6730	1256D-2P	....	240	0-280	56.0	15.7	15 5⅝x15 5⅛x16"	158	480.00	325
931F6780	1256D-3P	....	240	0-280	84.0	23.5	15 5⅝x15 5⅛x22 5⅛"	274	830.00	562

THREE-PHASE TYPES (Not Illus.)

Consist of single units ganged together. Types with suffix "-2" are open delta connected; Type Nos. which have suffixes "-3" and "-3Y" are wye connec All are for 50-60 Hz. (§60 Hz only.) †See note ab

Stock No.	Mfr's Type	Input Volts	Output Volts	Output Amps	Output kVA	Max. Size (DWH)	Wt., Lbs.	EACH 1	EACH 2-U
931X5630	§117BU-2	120	0-120	12.0	2.5	11⅛x5⅛x5¾"	22	89.00	60.
931F5830	136B-2	120	0-140	22.0	5.3	9⅛x8¾x12½"	52	311.00	211.
931-5900	§10B-3	240	0-240	†2.2	0.94	8⅛x3⅞x3⅞"	8½	73.50	50.
931-5110	§21-3	240	0-280	4.5	2.18	10⅞x4 5⅛x5"	17	106.00	72.
931X5450	§116BT-3	240	0-280	10	4.8	7⅛x5⅛x18⅜"	36	145.00	98.
931Z5780	§126-3	240	0-280	15.0	7.27	7⅛x7¼x15⅛"	49	226.00	153.
931Z5810	126U-3	240	0-280	15.0	7.27	7⅛x7¼x15⅛"	49	206.00	139.
931F5860	§136B-3	240	0-280	22.0	10.66	9⅛x8¾x17¾"	76	312.00	211.
931F6790	§1156D-3Y	240	0-280	50.0	24.2	15½x13 7⅛x22 5⅛"	225	790.00	536.
931F6390	§236B-3	480	0-560	10.0	9.7	9⅛x8¾x17¾"	76	310.00	211.
931F7000	§1256D-3Y	480	0-560	28.0	27.2	15⅛x13 7⅛x22 5⅛"	225	790.00	536.

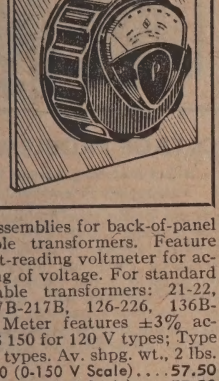
ATTENTION INDUSTRIAL BUYERS

Make Allied your one complete source for all your electronics needs. Allied has the highest percentage of filled-orders in the country. Simply contact the Allied facility nearest you.

Superior Electric Variable Transformers

POWERSTAT METERED KNOBS

Accurate
Voltmeter
Remains
Stationary
Side Knob
Trim, Does
Not Turn
With Knob



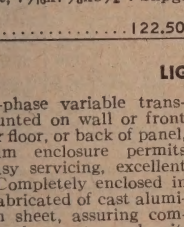
ered knob assemblies for back-of-panel nted variable transformers. Feature onary, direct-reading voltmeter for ac- te monitoring of voltage. For standard erstat variable transformers: 21-22, 3-216B, 117B-217B, 126-226, 136B-3, 146-246. Meter features ±3% ac- cy. Type VS 150 for 120 V types; Type 00 for 240 V types. Av. shpg. wt., 2 lbs.

-2956. VS150 (0-150 V Scale)....57.50
-2990. VS300 (0-300 V Scale)....57.50

TYPE UC1MB VOLTBOX® VARIABLE TRANSFORMER

Direct-Reading Voltmeter

Three Output Receptacles



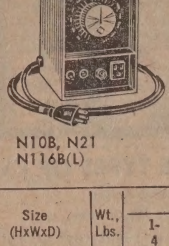
rs continuously able 0-140-volt out from 120 s, 50-60 Hz, gle-phase AC ce. Rated at 10 amps. Has direct read- voltmeter; line switch; line/load meter ch; two five-way binding posts; 3 output ptacles. Complete fuse protection. Sup- d with 6-foot 2-wire line cord and plug. rall measurement, 7 3/16x7 7/8x8 1/2". Shpg. 17 3/4 lbs.

X2895.....122.50

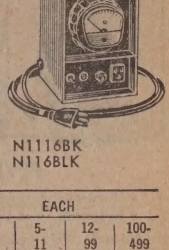
POWERSTAT ENCLOSED LABORATORY TRANSFORMERS

- Integral Handle for Easy Portability
- Functional Design with Recessed Controls
- Front Panel Pilot Light, Output and Fuse

Portable AC voltage source for laboratory applications. With Powerstat variable transformers for zero waveform distortion, smooth control and linear output voltage. All except N10B have Powerkote coils for greater overload resistance and higher current ratings. Integral handle, provision for wall-mounting. Grounded NEMA cord-plug assembly, recessed front-panel controls. *constant impedance load. †metered knob. For single-phase 120 V AC input.



N10B, N21
N1116B(L)

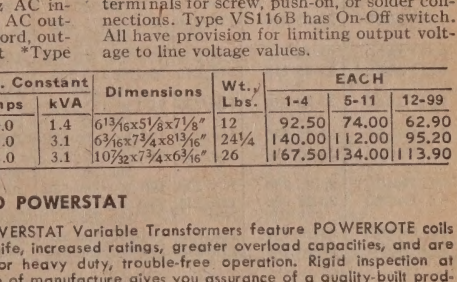


N1116BK
N1116BLK

Stock No.	Mfr's Type	Hz	OUTPUT Constant Cur. Load V	Max. A	Max. kVA	Size (HxWxD)	Wt., Lbs.	EACH 1-4	5-11	12-99	100-499
931-2550	N10B	60	0-132	2.25	0.30	6 1/16x4 1/4x3 29/32"	5	37.45	30.00	25.50	21.00
931-2555	N21	50/60	0-140	4.5	0.63	8 1/16x5x5 9/16"	10	52.50	42.00	35.70	29.40
931-2560	N116B	50/60	0-140	10	1.4	9 5/16x5 5/8x6 3/8"	15	61.25	49.00	41.65	34.30
931-2570	N116BK†	50/60	0-140	10	1.4	9 5/16x5 5/8x7 11/32"	15	112.50	90.00	76.50	63.00
931-2565	N116BL	50/60	0-120	10, *13	1.2, *1.6	9 5/16x5 5/8x6 3/4"	15	61.25	49.00	41.65	34.30
931-2575	N116BLK†	50/60	0-120	10, *13	1.2, *1.6	9 5/16x5 5/8x7 11/32"	15	112.50	90.00	76.50	63.00

METERED-KNOB POWERSTAT VARIABLE TRANSFORMERS

- Voltmeter Reads 0 to 150 Volts
- Remains Stationary Inside Knob
- Full Scale Accuracy of ±3%

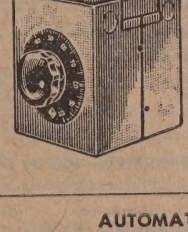


Each Powerstat incorporates a large, easy-to-read voltmeter stationary inside its control knob. Powerstats are especially suited for applications where close voltage control is necessary. Voltmeters have full scale accuracy of ±3%; are insensitive to stray magnetic fields; read from 0 to 150 volts AC. Units listed operate from 120 volt, 50-60 Hz AC input; provide continuously variable AC output of 0 to 140 volts. Have input cord, output receptacle and fuse except *Type VS136B is less cord and receptacle; but has terminals for screw, push-on, or solder connections. Type VS116B has On-Off switch. All have provision for limiting output voltage to line voltage values.

Stock No.	Mfr's Type	Fig.	Max. Constant Amps	kVA	Dimensions	Wt., Lbs.	EACH 1-4	5-11	12-99
931-2500	VS116B	A	10.0	1.4	6 13/16x5 1/8x7 1/8"	12	92.50	74.00	62.90
931X2930	*VS136B	B	22.0	3.1	6 3/16x7 3/4x8 13/16"	24 1/4	140.00	112.00	95.20
931X2875	VS3PN136B	B	22.0	3.1	10 7/32x7 3/4x6 3/16"	26	167.50	134.00	113.90

LIGHTWEIGHT ALUMINUM ENCLOSED POWERSTAT

h-quality single-phase variable trans- ners can be mounted on wall or front anel, on bench or floor, or back of panel, ctional aluminum enclosure permits r wiring and easy servicing, excellent uit protection. Completely enclosed in t-tight housing fabricated of cast alumi- n and aluminum sheet, assuring com- e protection to both operator and unit. -60 Hz AC. †60 Hz AC only. Amperage kVA ratings in table at right are given constant current load. Overall size, 6x5 3/4x6". Average shpg. wt. 15 lbs.



NOTE: POWERSTAT Variable Transformers feature POWERKOTE coils for longer life, increased ratings, greater overload capacities, and are designed for heavy duty, trouble-free operation. Rigid inspection at every stage of manufacture gives you assurance of a quality-built product.

Stock No.	Mfr's Type	Input Volts	Output Volt	Amp	kVA	EACH 1-5	6-24	25-99
931-1010	EN116B	120*	0-140	8	1.1	61.25	44.10	41.65
931-1040	EN117B	120†	0-120	10.0	1.2	63.50	45.90	43.35
931-1070	EN216B	240*	0-280	3.0	0.84	68.50	49.50	46.75
931-1090	EN217B	240†	0-240	4.4	1.1	71.00	51.30	48.45

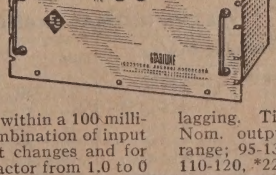
WERSTAT REPLACEMENT BRUSHES

ality replacement brushes for use with verstat variable transformers. 2 oz.

Stock No.	Mfr's Type	For Series	EACH
31-2805	RB10B	10B	1.87
31-2806	RB12	12	1.87
31-2807	RB21	21	2.50
31-2808	RB22	22	2.50
31-2809	RB116B	116B	2.50
31-2810	RB216B	216B	2.50
31-2811	RB117B	117B	2.50
31-2812	RB217B	217B	2.50
31-2813	RB126	126	3.12
31-2814	RB226	226	3.12
31-2815	RB136	136B	3.12
31-2816	RB236	236B	3.12
31-2817	RB146	146	4.34
31-2818	RB246	246	4.34
31-2819	RB1156B	1156D	5.65
31-2820	RB1256B	1256D	5.65

AUTOMATIC VOLTAGE REGULATORS

- Highly Reliable
- Solid-State Construction
- Distortion under 3%
- Instant Correction
- Can Be Rack Mounted



Maintain output voltage within a 100 millivolt rms band for any combination of input voltage and load current changes and for changes for load power factor from 1.0 to 0 lagging. Time constant resp., 30 ms. Nom. output volts; 115, *220; input V range; 95-135, *195-255; output V range; 110-120, *220-240. Can be rack mounted.

STABILINE

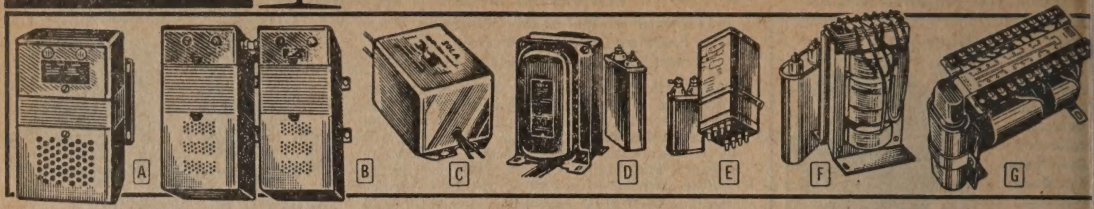
Stabiline Automatic Voltage Regulators of the advanced IES Series are highly accurate, fast correcting units featuring ultra-reliable solid-state circuitry.

Stock No.	Mfr's Type	Max. Output Amps	Rated Output kVA	Max. Size (DWH)	Shpg. Wt., Lbs.	EACH 1	2-49
931F1210	IES9101	8.7	1.0	13 1/4x19x5 3/8"	72	600.00	433.50
931F1220	IES9103	26.1	3.0	15 1/8x19x8 3/4"	136	912.00	658.75
931F1230	IES9106	52.2	6.0	15 1/8x19x12 3/8"	181	1065.00	769.25
931F1270	IES9206*	26.1	6.0	15 1/8x19x12 3/8"	171	1195.00	862.75

SOLA ELECTRIC SLB

Constant-Voltage Transformer

AUTOMATIC INSTANTANEOUS REGULATORS



FIVE TYPES OF CV TRANSFORMERS TO SOLVE ANY VOLTAGE PROBLEM

- Ultra-Fast Regulating Action
- Response Time 1½ Hz or Less
- Fully Automatic, Continuous Regulation
- No Manual Adjustments Required
- Self-Protecting Against Short Circuits
- Negligible External Field

Static-magnetic voltage regulators accept input variations up to ±15% and regulate to within ±1%. Completely automatic, no moving parts, no maintenance, no manual adjustment. Fast regulating action response time is usually 1½ Hz (25 milliseconds) or less. Short-circuit and overload protection inherent in design. CVS: Less than 3% harmonic distortion at full load, the newer CVS delivers a sine wave output and is recommended for all AC applications. CVN: Recommended as transformer for DC power supplies, delivers a square wave and average 20% rms harmonic content. CVE: Electronic power type for plate-filament ser ice. Regulates to ±3% of nominal input. CVF: Electronic pow type for filament service. 50-Hz models of CVE and CVF ava able. Figure codes: A—exposed core, end housings, screw-ty terminals in outlet box; B—same as A but duplex; C—drawn ca integral capacitor; D—exposed core, end bells, separate capacit E—hermetically sealed case, separate capacitor; F—varnished co and coil, epoxy coated; G—Multi-tap™, screw lugs, mtg. pla *Triplex. *Suffix F in Stk. No.—Shipped FOB whse. Elk Grove, Ill.*

TYPE CVS SINUSOIDAL TRANSFORMERS—60 Hz DUTY

Stock No.	Mfr's Type	Output Volts	Input Volts	VA	Nominal Dimensions (In.) Outline	Nominal Dimensions (In.) Mounting	Fig.	Use Adapter	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-U
921-3150	23-13-030-2	118	95-130	30	6⅛x4x5 3/16	3x3½	A	d	8	40.60	29.20	27.6
921-3200	23-13-060-2	118	95-130	60	6 5/16x4x5 3/16	3x3½	A	d	10	48.20	34.65	33.7
921-3600	23-23-060-2	118	190-260/380-520	60	6 5/16x4x5 3/16	3x3½	A	d	10	51.50	37.85	35.7
921-3300	23-22-112-2	118	95-130/190-260	120	8x4x5 3/16	3x3½	A	d	14	61.50	44.35	41.9
921-3650	23-23-112-2	118	190-260/380-520	120	8x4x5 3/16	3x3½	A	d	14	66.00	47.60	44.9
921X3350	23-22-125	118	95-130/190-260	250	9⅝x5⅜x7 7/16	4⅛x4¾	A	b	28	84.00	60.60	57.2
921U3700	23-23-125	118	190-260/380-520	250	10x5⅜x7 7/16	4⅛x4¾	A	b	49	90.00	64.90	61.3
921U3400	23-22-150	118	95-130/190-260	500	12 7/16x9x6 7/16	5⅝x8⅛	A	c	45	131.00	94.10	88.9
921U4250	23-26-150	118/236	190-260/380-520	500	12 7/16x9x6 7/16	5⅝x8⅛	A	c	46	140.00	100.60	95.0
921F3800	23-25-175	118/236	95-130/175-235 190-260	750	16 13/16x9x6 7/16	5⅝x8⅛	A	c	54	180.00	129.80	122.6
921F3850	23-25-210	118/236	95-130/175-235 190-260	1000	17 15/16x9x6 7/16	5⅝x8⅛	A	c	72	222.00	157.95	149.2
921F4300	23-26-210	118/236	190-260/380-520	1000	17 15/16x9x6 7/16	5⅝x8⅛	A	c	72	222.00	157.95	149.2
921F3900	23-25-215	118/236	95-130/175-235 190-260	1500	19 5/16x10 11/16x9 1/32	3 15/16x11¾	A	.....	128	294.00	210.95	199.2
921F3950	23-25-220	118/236	95-130/175-235 190-260	2000	19 15/16x12¾x10 11/16	4½x11¾	A	.....	140	382.00	286.70	270.7
921F4350	23-26-220	118/236	190-260/380-520	2000	19 15/16x12¾x10 11/16	4½x11¾	A	.....	148	382.00	286.70	270.7
921F4000	23-25-230-3	118/236	95-130/175-235 190-260	3000	21⅞x12¾x10 11/16	6 7/16x11¾	A	.....	194	535.00	385.20	364.8
921F4400	23-26-230	118/236	190-260/380-520	3000	21⅞x12¾x10 11/16	6 7/16x11¾	A	.....	196	535.00	385.20	364.8
921F4050	23-25-250	118/236	95-130/175-235 190-260	5000	20 9/16x25 13/16x10 11/16	5 7/16x24 13/16	B	.....	335	830.50	601.50	568.1
921F4450	23-26-250	118/236	190-260/280-520	5000	20 7/16x25 13/16x10 11/16	5 7/16x24 13/16	B	.....	342	830.50	601.50	568.1
921F4500	23-28-275	118/236	190-260/280-520	7500	20 9/16x38 1/4x11 1/16	5 7/16x37¼	A*	.....	502	1240.00	893.60	843.9

TYPE CVS SINUSOIDAL TRANSFORMERS—50 Hz DUTY

Stock No.	Mfr's Type	Output Volts	Input Volts	VA	Nominal Dimensions (In.) Outline	Nominal Dimensions (In.) Mounting	Fig.	Use Adptr. Kit	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-U
921X3450	23-22-612	118	95-130/190-260	120	8¾x5⅜x7 7/16	4⅛x4¾	A	b	21	70.50	50.85	48.0
921X3500	23-22-625	118	95-130/190-260	250	11 5/16x9x6 7/16	5⅝x8⅛	A	c	35	96.00	69.25	65.4
921F3550	23-22-650-1	118	95-130/190-260	500	13x9x6 7/16	5⅝x8⅛	A	c	53	152.00	108.20	102.1

TYPE CVS SINUSOIDAL TRANSFORMER—400 Hz DUTY

For 115-V nominal input (95-130). 118-V regulated output. Up to 50° C ambient temperature. With oil-filled capacitor.

Stock No.	Mfr's No.	VA	Transformer Dimensions	Mtg. Ctrs.	Capacitor Dimensions (HWD)	Structure	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-49
921-4550	43-13-060	60	5¾x3⅜x3 3/16"	2¾x2 3/16"	2⅞x1 3/16x1 1/16"	F	6	60.00	43.30	40.85
921-4600	43-13-112	120	5¾x3⅜x3⅞"	2¾x2⅞"	4¾x2 1/4x1 3/16"	F	8	82.50	59.50	56.20
921-4700	43-13-150	500	7 13/16x4⅝x3¾"	3¾x2¾"	4¾x3¾x3 3/16"	F	19	141.00	101.65	96.05

TYPE CVN NORMAL HARMONIC TRANSFORMER—60 Hz DUTY

Stock No.	Mfr's Type	Voltage Rating Output	Voltage Rating Input	VA	Nominal Size (Inches) Outline	Nominal Size (Inches) Mounting	Fig.	Use Adapter Kit	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-U
921-1000	20-10-015	118	95-130	15	5 5/16x2 5/8x3½	5 1/16x1⅛	C	.....	4	24.00	17.30	16.3
921-1100	20-11-015	118	95-130	15	5¼x3½x2¼	3x1½	E	.....	4	35.00	25.15	23.7
921-1800	20-14-015	118	95-130	15	4 5/16x2 3/8x2 7/16	1¾x1⅞	D	.....	3	22.60	16.25	15.3
921-1850	20-14-030	118	95-130	30	4 5/16x2 5/8x3 5/16	1⅞x2 3/8x	D	.....	5	25.60	18.40	17.3
921-1150	20-13-030-2	118	95-130	30	6x4x5 3/16	3x3½	A	d	7	33.00	23.80	22.2
921-1200	20-13-060-2	118	95-130	60	6 13/16x4x5 3/16	3x3½	A	d	10	40.60	29.20	27.6
921-1900	20-14-060	118	95-130	60	4 13/16x3 1/8x3⅞	2½x3⅞	D	.....	8	34.60	24.90	17.4
921-1950	20-14-112	118	95-130	120	4 13/16x3 1/8x4 15/16	2½x3⅞	D	.....	11	47.00	33.75	31.8
921-1250	20-13-112-2	118	95-130	120	7⅜x4x5 3/16	3x3½	A	d	12	54.00	39.00	36.8
921-2200	20-21-112-2	236	190-260	120	7⅞x4x5 3/16	3x3½	A	d	13	54.00	39.00	36.8
921X1300	20-13-115	118	95-130	150	8⅞x5⅜x7 7/16	4⅛x4¾	A	b	22	64.50	46.50	43.9
921X2250	20-22-125	118	95-130/190-260	250	11 7/16x6 15/16x6 7/16	4 9/16x6 15/16	A	c	25	79.50	57.35	54.1
921X2300	20-22-150	118	95-130/190-260	500	12 5/16x6 15/16x6 7/16	4 9/16x6⅛	A	c	36	125.00	89.80	84.8

Best Percentage of Orders Filled in the Countr

rovide ± 1% Voltage Regulation

SOLA ELECTRIC SLB

TYPE CVN NORMAL HARMONIC TRANSFORMER—60 Hz DUTY (Cont'd)

Stock No.	Mfr's Type	Voltage Rating		VA	Nominal Size (inches)		Fig.	Use Adapter Kit	Wt., Lbs.	EACH		
		Output	Input		Outline	Mounting				1-4	5-9	10-Up
921Z2350	20-22-210	118	95-130/190-260	1000	15⅛x6¹⁵⁄₁₆x6⁷⁄₁₆	4⁹⁄₁₆x6⅛	A	.....	48	212.00	149.50	140.95
921F2800	20-25-220	118/236	95-130/175-235/ 190-260	2000	20x10½x10¹¹⁄₁₆	4⁹⁄₁₆x9½	A	.....	128	340.00	245.30	231.65
921F2850	20-25-230	118/236	95-130/175-235/ 190-260	3000	22x10½x10¹¹⁄₁₆	6⁹⁄₁₆x9½	A	.....	170	510.00	367.85	347.40
921F3100	20-27-250	118/236	190-260/380-520	5000	21x14½x14⅜	7x13	A	.....	290	790.00	572.30	540.50
921F3000	20-26-310	118/236	190-260/380-520	10,000	21x29⁹⁄₁₆x14⅜	7x27¹⁵⁄₁₆	B	.....	590	1530.00	1101.15	1039.95

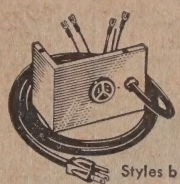
TYPE CVN NORMAL HARMONIC TRANSFORMER—50 Hz DUTY

Stock No.	Mfr's Type	Output Volts	Input Volts	VA	Nominal Dimensions (In.)		Fig.	Adapter Kit	Wt., Lbs.	EACH		
					Outline	Mounting				1-4	5-9	10-Up
921-1050	20-10-515	118	95-130	15	5⁹⁄₁₆x2⁵⁄₈x3½	5¹⁄₁₆x1⅛	C	.....	5	28.40	20.45	18.40
921-2000	20-14-530	118	95-130	30	4¹³⁄₁₆x3⅛x3¹³⁄₃₂	2½x2⁵⁄₃₂	D	.....	6	30.20	22.65	20.45

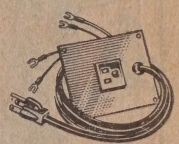
CORD/RECEPTACLE ADAPTER KITS FOR "A" STRUCTURES

Stock No.	Mfr's Type	Style Code	Input Cord	Output Recept	EA.
921-6200	999-104	d	2-wire	2-wire	4.75
921-6100	999-019	b	3-wire	3-wire	3.75
921-6000	999-009	c	2-wire	2-wire	3.25
921-6150	999-020	c	3-wire	3-wire	3.75

Provides the convenience of an input plug and output receptacle on CV transformers in "A" type housings. Easily wired to standard terminal arrangement located under top plate of housing. Determine correct part number by noting "Adapter Kit" in tabular lists for CVS and CVN types.



Styles b and c



Style d

TYPE CVE—FOR PLATE-FILAMENT SERVICE—50 TO 250 mA—60 Hz

00-130 V input. *Additional 6.3 V, 8 amp unregulated filament winding.

Stock No.	Mfr's Type	Typical Rectifier Tube	Av. DCV to Filter	Fil. Windings		Nominal Dimensions (In.)		Fig.	Wt., Lbs.	EACH		
				6.3 V	5.0 V	Outline	Mounting			1-9	10-49	50-Up
921-6300	7104	5Y3	275 @ 50 mA	2.5A; CT	2 A	4¹³⁄₁₆x3⅛x3³⁄₁₆"	2½x2⅛"	D	6	20.00	14.45	16.35
921-6350	7106	5Y3	385 @ 110 mA	3A; CT	2 A	4¹³⁄₁₆x3⅛x3¹⁵⁄₁₆"	2½x2⅞"	D	8	24.40	17.80	16.80
921-6400	7107	5U4	380 @ 250 mA	4A*	3 A	7x4½x4⅞"	3⅝x3⅜"	D	19	46.40	33.40	31.55

TYPE CVF—FOR FILAMENT SERVICE—2.5 TO 25 AMPS—60 Hz

Stock No.	Mfr's Type	Output Volts	Input Volts	Amps	Nominal Dimensions (In.)		Fig.	Wt., Lbs.	EACH		
					Outline	Mounting			1-4	5-9	10-Up
921-0050	20-01-015	6.0	95-130	2.50	5⁹⁄₁₆x2⁵⁄₈x3½"	5¹⁄₁₆x1⅛"	C	4	24.00	18.30	16.35
921-0150	20-02-015	6.3	95-130	2.38	5⁹⁄₁₆x2⁵⁄₈x3½"	5¹⁄₁₆x1⅛"	C	4	24.00	18.30	16.35
921-0250	20-04-015	6.3	95-130	2.38	4¹⁵⁄₁₆x2³⁄₈x2⁷⁄₁₆"	1¾x1⅞"	D	3	22.60	16.25	15.35
921-0300	20-04-030-2	6.3	95-130/190-260	5.0	4¹³⁄₁₆x3⅛x3⅞"	2½x2¹⁄₁₆"	D	6	25.60	18.40	17.35
921-0350	20-04-065	6.3	95-130/190-260	10.0	4¹³⁄₁₆x3⅛x3¾"	2½x2¹¹⁄₁₆"	D	8	33.00	23.80	22.50

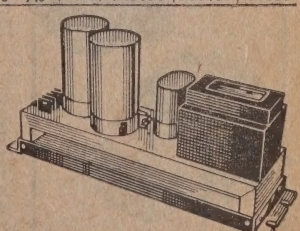
G TYPE CVR MULTI-TAP ™ CV TRANSFORMER FOR PROTOTYPE POWER SUPPLIES (illus. opposite pg.)

Constant-voltage transformer which provides over 100 regulated utput voltages. Designed to operate in full-wave or bridge type ircuits with stock silicon rectifiers. Output voltage remains constant within ±1% over input variations from 105 to 125 V. Other characteristics similar to type CVN. Ideal for prototypes, short-run production, and lab work where final required output is unknown.

Stock No.	Mfr's Type	VA	Range of AC Volts	DC OUTPUT		Dimensions (HxWxD)	Wt., Lbs.	EACH		
				Resistive	Capacitive			1-4	5-9	10-Up
21-5650	73-13-075	75	10.3-30.0	4.0V to 12.8V @ 4 amp 8.6V to 27.6V @ 2 amp	4.2V to 14.6V @ 4 amp 9.6V to 31.6V @ 2 amp	4¹¹⁄₁₆x3⅛x6⅝"	8	52.00	37.50	35.40
21-5700	73-13-115	115	10.8-31.4	4.0V to 13.0V @ 8 amp 8.8V to 27.8V @ 4 amp	4.1V to 14.5V @ 8 amp 9.5V to 32.9V @ 4 amp	6¹³⁄₁₆x4⅜x5⅞"	13	72.00	51.80	48.95
21X5850	73-13-145	450	9.4-30.2	3.6V to 13.0V @ 22.5 amp 8.2V to 27.5V @ 12 amp	3.8V to 14.7V @ 22.5 amp 8.8V to 31.3V @ 12 amp	6¹³⁄₁₆x4⅜x8³⁄₁₆"	30	145.00	103.65	97.85

CVDC FIXED-OUTPUT DC POWER SUPPLIES

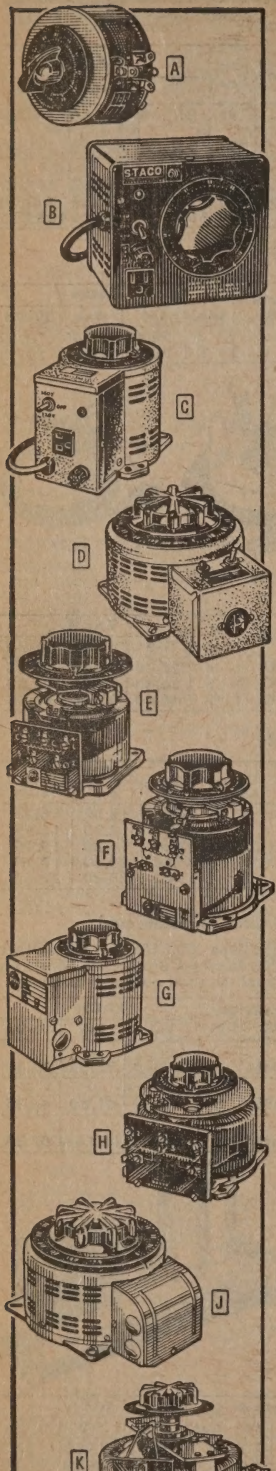
Designed for intermittent, variable or pulse loads. Excellent for ontrolling line-voltage fluctuations, particularly effective when mployed with fixed loads. Large filter capacitances also provide ood dynamic response for rapidly changing loads (speed of voltage orrection). CVDC "brute force" supplies offer DC voltage regulaion to ±1% for ±15% input voltage variation. Requires no adustments or maintenance for easy simplified operation. Constant oltage transformer (CVT) provides automatic current limiting in vent of load faults; short-circuit protection prohibits overloads rom damaging power supply or equipment. Utilizes full rating of rectifiers . . . wave shape minimizes necessary filtering. Normal ripple, 1% (rms) except *½%. Negative or positive DC polarity. Typical efficiency, 75%. Electrical circuits insulated from ground for operation at either polarity. With panel for std. 19" rack mtg. For 100-130 V, 60 Hz AC.



Stock No.	Mfr's Type	Output Ratings			Wt., Lbs.	EACH		
		V	A	W		1-4	5-9	10-Up
21X7500	281513-2	6	10	60	27½	145.00	103.95	92.40
21X7550	281514-2	12	5	60	21½	145.00	103.95	92.40
21X7750	282124	12	10	120	31	145.00	118.80	105.60
21X7600	281515-2	18	5	90	26	141.00	108.90	96.80
21Z7400	282125	18	10	180	45	185.00	143.55	127.60
21X7200	281024-1	24	6	144	30	145.00	103.95	92.40
21Z7850	282126	24	10	240	48	154.00	123.75	110.00
21U8000	28626-1	28	8	224	41¼	160.00	118.80	105.60

Stock No.	Mfr's Type	Output Ratings			Wt., Lbs.	EACH		
		V	A	W		1-4	5-9	10-Up
921F7875	282128	28	15	420	55	250.00	193.00	175.60
921X7250	281048	48	4	192	31½	141.00	108.90	96.80
921U7650	281561	48	10	480	44½	199.00	153.45	136.40
921F7950	282129	48	20	960	95	320.00	247.50	220.00
921U7300	281125	125	2	250	41¾	154.00	123.75	110.00
921U7400	281200	200	1	200	39	141.00	108.90	96.80
921F7450	281250*	250	1	250	54	148.00	113.85	101.20

Staco Variable Autotransformers



Rugged and reliable units offer precise voltage control to meet modern needs with minimum maintenance and longer life. New proprietary process bonds commutator to core assembly for secure, stable surface, free of distortion even under severe overload. Improves heat transfer away from critical brush contact area. No wa shape distortion. For 50-60 Hz except *60 only with over-voltage output. Type numb without suffix are open types for panel mount Types with suffix (CT) are enclosed types cluding terminals for plane-surface mounting.

SINGLE PHASE TYPES

Portable types, prefix "2PF" for models with 2-wire cord, plug and receptacle or "3PN" with 3-wire grounded cord, plug and receptacle, hous in rugged case. With switch, fuse, pilot lig

Stock No.	Mfr's Type	Fig.	Input Volts	Volts	Output Amps	kVA	Size, Inches	Wt., Lbs.	EACH 1-4	EACH 5-Up
927-3171	171	A	120	*0-120/132	1.75	.23	2 1/16 x 2 3/32	3	14.80	12.0
927-3251	251	A	120	*0-120/132	2.5	.33	2 1/16 x 2 3/16	3 1/2	16.00	13.0
927-2171	2PF171	B	120	*0-132	1.75	.23	3 7/8 x 3 7/8 x 3 1/2	3 1/2	28.40	23.0
927-2300	3PN171	B	120	*0-132	1.75	.23	3 7/8 x 3 7/8 x 3 1/2	3 1/2	34.60	25.0
927-2302	3PN501	B	120	0-120/140	5.0	.7	5 3/8 x 6 1/16 x 5 5/8	9	37.00	30.0
927-2175	2PF1010	C	120	0-120/140	10.0	1.4	5x6 7/8 x 5 5/8	12 1/2	42.00	34.0
927-2303	3PN1010	C	120	0-120/140	10.0	1.4	5x6 7/8 x 5 5/8	12 1/2	49.40	40.0
927-2177	2PF1210	C	120	*0-120	10.0	1.4	5x6 7/8 x 5 5/8	12 1/2	49.40	40.0
927-2305	3PN1210	C	120	*0-120	12.0	1.4	5x6 7/8 x 5 5/8	11	54.50	44.0
927X2179	2PF1510	D	120	0-120/140	15.0	2.1	5 7/8 x 6 3/8 x 9	22	76.50	62.0
927X2307	3PN1510	D	120	0-120/140	15.0	2.1	5 7/8 x 6 3/8 x 9	22	76.50	62.0
927X2181	2PF2210	D	120	0-140	22.0	3.1	5 5/8 x 7 5/8 x 10 3/4	20	116.00	94.0
927X2309	3PN2210	D	120	0-140	22.0	3.1	5 5/8 x 7 5/8 x 10 3/4	20	116.00	94.0
927-2176	2PF1020	C	240	0-240/280	3.5	.98	5x6 7/8 x 5 5/8	12	48.00	39.0
927-2304	3PN1020	C	240	0-240/280	3.5	.98	5x6 7/8 x 5 5/8	12	56.50	46.0
927-2178	2PF1220	C	240	*0-240	5.0	1.2	5x6 7/8 x 5 5/8	12	55.50	45.0
927-2306	3PN1220	C	240	*0-240	5.0	1.2	5x6 7/8 x 5 5/8	12	58.00	47.0
927X2180	2PF1520	D	240	0-240/280	9.5	2.7	5 7/8 x 6 3/8 x 9	22	76.50	62.0
927X2308	3PN1520	D	240	0-240/280	9.5	2.7	5 7/8 x 6 3/8 x 9	22	76.50	62.0
927X2182	2PF2520	D	240	0-280	10.0	2.8	5 5/8 x 7 5/8 x 10 3/4	23	116.00	94.0
927X2330	3PN2520	D	240	0-280	10.0	2.8	5 5/8 x 7 5/8 x 10 3/4	23	116.00	94.0

Stock No.	Mfr's Type	Fig.	Input Volts	Volts	Output Amps	kVA	Size, Inches	Wt., Lbs.	EACH 1-4	EACH 5-Up
927-3375	371	E	*120	0-120/140	3.75	.53	3 3/4 x 3 3/4 x 3 1/4	5	22.20	18.00
927-5501	501	E	120	0-120/140	5.0	.70	3 3/4 x 3 3/4 x 3 5/16	6	23.40	19.00
927-6010	1010	F	120	0-120/140	10.0	1.4	5 1/16 x 5 x 4 3/16	11	38.00	25.00
927-6013	1010CT	G	120	0-120/140	10.0	1.4	5x6 7/8 x 5 5/8	11 1/2	40.60	33.00
927-6120	1020	F	240	0-240/280	3.5	.98	5 5/16 x 5 x 4 3/16	11	37.00	30.00
927-6125	1020CT	G	240	0-240/280	3.5	.98	5x6 7/8 x 5 5/8	11 1/2	45.60	37.00
927-7000	1220	F	*240	0-240	5.0	1.2	5 5/16 x 5 x 4 3/16	12	39.40	32.00
927-7005	1220CT	G	*240	0-240	5.0	1.2	5x6 7/8 x 5 5/8	12	49.40	40.00

Stock No.	Mfr's Type	Fig.	Input Volts	Volts	Output Amps	kVA	Size, Inches	Wt., Lbs.	EACH 1-4	EACH 5-Up
927X7501	1510	H	120	0-120/140	15.0	2.1	4 3/8 x 6 1/8 x 6 5/8	20	59.00	48.00
927X7502	1510CT	J	120	0-120/140	15.0	2.1	5 7/8 x 6 3/8 x 9	22	66.50	54.00
927X7507	1520	H	240	0-240/280	9.5	2.7	4 13/16 x 6 1/8 x 6 5/8	23	59.00	48.00
927X7510	1520CT	J	240	0-240/280	9.5	2.7	5 7/8 x 6 3/8 x 9	22	66.50	54.00
927X8001	2510	H	120	0-120/140	25.0	3.5	4 1/8 x 8 3/16 x 7 5/8	25	80.00	65.00
927X8006	2510CT	J	120	0-120/140	25.0	3.5	4 1/8 x 9 5/8 x 7 5/8	25	96.00	78.00
927X8500	2520	H	240	0-240/280	10.0	2.8	4 1/8 x 8 3/16 x 7 7/8	25	80.00	65.00
927X8510	2520CT	J	240	0-240/280	10.0	2.8	4 1/8 x 9 5/8 x 7 5/8	25	96.00	76.00

Stock No.	Mfr's Type	Fig.	Input Volts	Volts	Output Amps	kVA	Size, Inches	Wt., Lbs.	EACH 1-2	EACH 2-Up
927F9000	5010	K	120	0-140	50.0	7.0	6 1/2 x 12 1/2 x 12 1/2	60	162.00	137.70
927F9015	5010CT	K	120	0-140	50.0	7.0	6 1/2 x 15 5/8 x 14	65	182.00	154.70
927F9100	5020	K	240	0-240/280	28.0	7.8	6 1/2 x 12 1/2 x 12 1/2	60	162.00	137.70

THREE-PHASE TYPES (Not Illustrated)

Consist of single units ganged together on a common shaft. Types with suffixes—"3" and "3Y" are wye connected. All are for 60 Hz only wit over-voltage output.

Stock No.	Mfr's Type	Input Volts	Volts	Output Amps	kVA	Size, Inches	Wt., Lbs.	EACH 1-2	EACH 2-Up
927F5502	501-3	240	0-240/280	5.0	2.4	4 3/4 x 5 x 10 7/8	19	105.00	85.00
927F6012	1010-3	240	0-240/280	10.0	4.8	5 11/32 x 6 x 14 5/8	36	112.00	91.00
927F6013	1010CT-3	240	0-240/280	10.0	4.8	6 23/32 x 6 x 16 1/8	36	143.00	116.00
927F7505	1510-3	240	0-240/280	15.0	7.3	6 5/8 x 6 1/8 x 15	56	198.00	160.00
927F8005	2510-3	240	0-240/280	25.0	12.0	8 3/16 x 7 5/8 x 14 7/8	80	282.00	228.00
927F9600	5010-3Y	240	0-280	50.0	24.0	13 3/8 x 12 1/2 x 16	50	740.00	600.00
927F8502	2520-3	480	0-480/560	10.0	9.7	8 3/16 x 7 5/8 x 14 7/8	80	282.00	228.00
927F9700	5020-3Y	480	0-480/560	28.0	27.2	13 3/8 x 12 1/2 x 16	50	740.00	600.00

HANDY CROSS-REFERENCE GUIDE

New Type No.	Replaces Type No.	New Type No.	Replaces Type No.	New Type No.	Replaces Type No.	New Type No.	Replaces Type No.	New Type No.	Replace Type No
171	100BU	371 Ser.	375BU Ser.	1210	510BU	2520	2520BU	5010CT	T501B
171	121	1010	500BU	1210	SQ510BU	2520CT	2520B	5020	T502U
171	175BU	2PF1010	500B	1510	T1500U	2510	3000BU	5020CT	T502B
2PF171	PA-175	3PN1010	3PN500B	1520	T1520U	2510CT	3000B	EJ401V	IV-1-2M
3PN171	3PNPA-175	1020	520BU	1510CT	1500B	2520	3020BU	EJ401V	IV-1-4M
251	250BU	2PF1020	520B	2510	2500BU	2520CT	3020B	EJ901V	IV-1-9M
371	300BU	3PN1020	3PN520B	2510CT	2500B	5010	T501U	EJ401V	EJ201V

Make Allied Electronics Your Headquarters for Industrial Product

Variable Autotransformers and Power Supplies

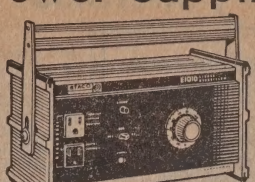
STACO VARIABLE AUTOTRANSFORMERS

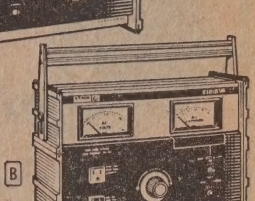
IDEAL FOR INDUSTRY, CLASSROOM, OR LAB

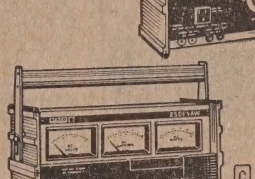
Units utilize the latest techniques of circuit design and construction to meet U.L. and CSA safety standards. Feature laminated silicon steel cores to ensure low core loss and low excitation current; continuous voltage control over a wide range; negligible waveform distortion; neon pilot lights; permanently etched legends; tamper-proof and mar-resistant ventilated case; standard 6-ft. cord and receptacle; moderate voltage drop under load; up to 98% efficiency; better than 5% regulation. Thermal circuit breaker prevents overload damage.

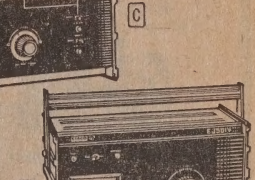
Three-position switch enables selection of "line voltage" or "over-voltage" (0-120/140 V on 120 V input) from off position. 10 or 15-amp outlet energizes when line cord is plugged in. Anodized collapsible handle of extruded aluminum. Protective bezel mounts. All meters provided with zero adjustment for easy calibration. Metered units have isolated AC and DC outputs rated for 10% of unit's total output rating; available at banana jacks in front panel. **Optional voltmeter, ammeter, and wattmeter. Contact your nearest Allied center for full information.**

Stock No.	Mfr's Type	Fig.	Input V	Volts	Output Amp	Isolated AC/DC Output mA	Size	Wt., Lbs.	EACH 1-6	EACH 7-Up
927-0371	E371	A	120	0-120/140	3.75	.....	6⅛x11¼x5	11	37.00	28.50
927-5501	E501	A	120	0-120/140	5.0	.....	6⅛x11¼x5	12	44.40	34.20
927-0502	E501VA	B	120	0-120/140	5.0	500	10x15 1/16x5⅞	17	130.00	99.75
927-0503	E501VAW	C	120	0-120/140	5.0	500	10x15 1/16x5⅞	18	204.00	156.75
927X0505	E1010	A	120	0-120/140	10.0	.....	6⅛x11 15/16x5⅞	18	80.00	61.75
927X1010	E1010VA	B	120	0-120/140	10.0	1000	10x15 1/16x5⅞	23	154.00	118.75
927-1011	E1010VAW	C	120	0-120/140	10.0	1000	10x15 1/16x5⅞	23	246.00	190.00
927X1020	E1020	A	240	0-280	3.5	.....	6⅛x11 15/16x5⅞	18	77.50	59.85
927X1710	E1710	A	120	0-140	17.0	.....	10x15 1/16x6¼	31	120.00	95.00







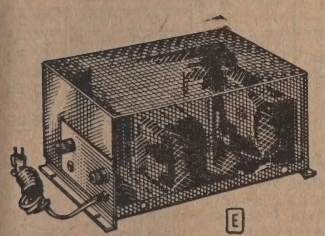


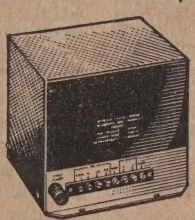
ISOLATED VARIABLE TRANSFORMERS

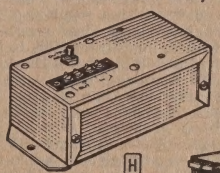
For use in industrial, medical, and educational applications where the safety of isolation is required. Ideal for transformerless receiver testing and general experimentation. Units completely isolated from the power line. Have new brush design and are insulated with epoxy material that provides a degree of safety unmatched in any other single package. DC output rated equal to isolated AC output. Either side of output can be grounded independently of supply line. All U.L. Listed and CSA approved: with ventilated case, ±2%-accurate 0-150 V voltmeter, circuit breaker, pilot light, banana jacks, on/off switch, 6-ft. cord/NEMA std. 3-prong plug, receptacle.

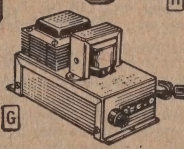
Stock No.	Mfr's Type	Fig.	Input Volts	Volts	Output AC Amps	DC Amps	Size	Wt., Lbs.	EACH 1-6	EACH 7-Up
927X2002	EJ401V	D	120	0-140	4.0	4.0	10x15½x5⅞	26	135.00	104.50
927X2003	EJ901V	D	120	0-140	9.0	9.0	10x16 3/32x7½	36	190.00	147.25

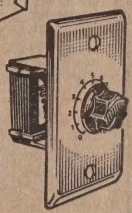
SOUNDOLIER POWER SUPPLIES, TONE GENERATOR, AND AUTOTRANSFORMERS

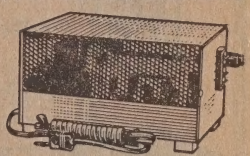


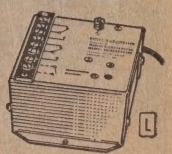












E REGULATED DC POWER SUPPLIES

May be used wherever a regulated source of DC voltage is required. Output: *22-32 VDC, 4 amps; †22-32 VDC, 2 amps; ‡22-26 VDC, 1 amp. Output voltage variation: less than 350 mV no load to full load. Ripple: less than 1.2 mV rms at full load. Ambient temperature range: 0 to +50° C. *5⅝x12x8 9/16"; †5⅝x12x8 9/16"; ‡5⅝x6¾x8 9/16". With 6' cord. 105-125 V, 60 Hz AC.

Stock No.	Mfr's Type	Wt., Lbs.	EACH
923-2140	RPS24-40*	14	109.25
923-2120	RPS24-20†	11	96.00
923-2110	RPS24-10‡	8	69.83

F AC-DC POWER SUPPLIES

Supply 24, 12, 6 VDC at 2 amps and 24, 12, 6 VAC at 2 amps simultaneously. Regulation: 27 VDC, no load; 23 VDC, full load. Ripple: less than .125%. All outputs are clearly labeled. Separate commons for AC, DC and 2 ground terminals. *Uncovered, 6x7¼x6⅛"; †protective cover, 6 9/16x7⅜x6⅛". 6' power cord, 117 V, 60 Hz AC.

923-0320	FPS24-20*	13½	45.88
923-0301	CFPS24-20†	14	49.75

G DC POWER SUPPLY

Model PS24-20. For all-purpose use. Supplies 24, 12, 6 VDC at 2 amps. Ripple: less than 2½% at full load. Positive and negative terminals isolated from chassis. 4x6¾x3⅝". With 6' power cord. 117 V, 60 Hz AC. **923-0820.** Wt., 5¾ lbs.....Each 24.75

H SOLID-STATE TONE GENERATOR

Model GPS610. Steady tone adjustable 600-1000 Hz. Adjustable output level. Up to 1 volt into 5000 ohm load. Provisions for external switching with SPST switch. 2¼x6¾x3⅝". With 6' cord. 117 V, 60 Hz AC. **923-0350.** Wt., 2½ lbs.....Each 39.58

J AUTOTRANSFORMER

For attenuating loudspeakers. Positive attenuation thru 10 steps. Total attenuation, 36 dB. For 70 V or 25 V lines. Mounts to standard outlet box. With mtg. hardware. *Power rating (watts). †Mtg. plate (Gang).

Stock No.	Mfr's Type	*	†	Wt., Lbs.	EACH
923-0110	AT-10	10	1	1¼	10.28
923-0135	AT-35	35	2	1¾	10.60
923-0175	AT-75	75	2	2¼	39.58

K HEAVY-DUTY DC POWER SUPPLIES

Delivers 24 VDC for solid-state equipment, relays or laboratory use. All have silicon rectifiers. Ripple: less than 2½%, full load. Positive and negative terminals are isolated. 29 VDC at no load; 23 VDC at full load. Wall or rack mounted. Model PS24-32 suitable for Class II wiring—output uses defeat proof fuse which cannot exceed 3.2 amps. *6½x13x9"; †5¼x9¾x7"; ‡5¼x9¾x7". 6' power cord. 117 V, 60 Hz AC.

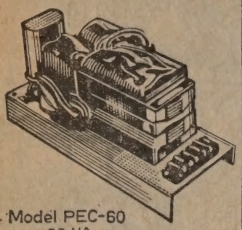
Stock No.	Mfr's Type	Amps	Wt., Lbs.	EACH
923-0890	PS24-100*	10	26	83.17
923-0850	PS24-50†	5	19	71.08
923-0832	PS24-32‡	3.2	16	57.83

L DC POWER SUPPLY/RELAY MODULE

Model PSRM-1. Quick, efficient way to use an internally powered DPDT relay. 24 VDC power supply and DPDT relay complete in one chassis. Screw terminals for external switch. Terminals to relay and external switch clearly labeled. Has pressure sensitive tape for instant mounting. 2¼x4x4⅜". With 6' power cord. 117 V, 60 Hz AC. **923-0550.** Shpg. wt., 2¼ lbs.....18.50

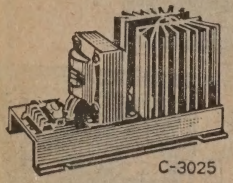
WANLASS Paraformer™ and Regulators

AC & DC VOLTAGE REGULATORS



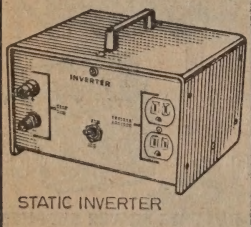
Model PEC-60
60 VA

P-5505 PARAX
POWER SUPPLY

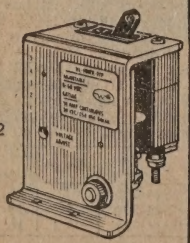


C-3025

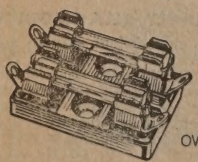
CVR-120



STATIC INVERTER



OVP-2



OVP-1

PARAFORMER . . LATEST CONCEPT IN AC POWER CONDITIONING

AC power transformer operates on new concept of parametric coupling—eliminates mutual inductance and flux coupling for greatly increased energy transfer. Provides voltage regulation and noise rejection of over 50 dB, over a frequency range of 0 to 1 MHz. Removes SCR-type switching transients, noise and other interference. Completely isolates line noise from the load and load noise from line. Entire unit consists only of primary winding, secondary winding, magnetic core and AC capacitor—no other components are used. Primary winding modulates inductance of the secondary transferring electrical power to the sustain secondary oscillations and deliver power to the load. This results in far more efficient energy transfer than ferroresonant transformers. Also provides line voltage regulation of ±½%; overload protection and low-line voltage protection; over 50 dB attenuation for line and load noise. For 115 VAC, single-phase 60 or 400 Hz input, 60 or 400 Hz output. Numbers in Mfr's Type indicate output capacity in Volt-Amperes. **Contact Allied for larger quantity prices.**

60 Hz UNITS

Stock No.	Mfr's Type PEC-	Size (HxWxD)	Wt., Lbs.	EACH 1-9	10-24	25-Up
934-4060	60	4¼x4x9"	10	95.00	90.25	85.50
934U4150	150	5½x4x12"	21	150.00	142.50	135.00
934F4200	500	7½x5x17"	50	225.00	213.75	202.50
934F4160	1000	7½x10x17"	85	425.00	403.75	382.50

400 Hz UNIT

Stock No.	Mfr's Type PEC-	Size (HxWxD)	Wt., Lbs.	EACH 1-9	10-24	25-49	50-Up
934-4075	75	4¼x5x6"	7	105.00	99.75	94.50	89.25

P-5505 VARIABLE AC/DC PARAX POWER CONDITIONER

Perhaps the most versatile piece of test gear offered by Wanlass, this fine instrument provides regulated and filtered variable AC (0-140 V) and DC (0-8 V) power with complete transient suppression. "Parax" operation guarantees high reliability.

The unit is composed of a variable AC regulated power conditioner combined with a highly regulated, variable DC power supply. Has extensive capabilities and uses in testing high line and low line limits, as well as providing a DC range of voltage for testing integrated circuits.

Variable AC supply is a standard "Parax" circuit, while variable DC supply is a highly precise transistor-series-regulator with "Parax" filtering advantages. Indicative of the instrument's potential wide-use features is the fact that it is completley metered: AC volts in, AC volts out; DC volts out, and DC amps out.

Input voltages (*range dependent on load current): fixed AC power, 105-125 VAC, 1 phase nominal (*50-150 VAC); variable AC power, (*50-150 VAC); DC power, (*50-150 VAC). Output voltages: fixed AC, 118 VAC; variable AC, 0-140 VAC; DC, 0-8 VDC. Output capacity: AC, 500 VA; DC, 0-15 amps. Line regulation: AC, ±.25%, DC, ±100μV. Load regulation. (10%-FL): fixed AC, ±1.5%; variable AC, ±2% (typical); DC, ±5 mV. DC ripple: 2 mV (rms). Protection for fixed AC power: inherent overload and short circuit. DC response time: 10 μsec. Noise attenuation: AC, 50 dB (to 1 MHz). Size: 5¼x19x19". Shpg. wt. 80 lbs.

983F4000.....875.00

C-3000 SERIES SOLID-STATE RMS CLIPPING REGULATORS

True rms clipping regulators hold output voltage constant under varying conditions of line, load, frequency and power factor. Peak clipping regulation technique. Line regulation of ±½% rms for ±10% line change; load regulation of ±½% rms for load changes from 10% to full rated load. AC input: 100-130 V, 47-420 Hz single-phase. AC output: 115 V nominal (see VA ratings in Table). Response time, less than 50 μsec. Line transient suppression; excellent surge loading characteristics. Silicon transistor circuit. Temp. range, —20° C to +50° C. Efficiency, 75% minimum at nominal input voltage and full rated load. **Type C-3003.** 3x4x2.8". Shpg. wt., 1½ lbs. **Type C-3006.** 3x4.12x3.75". Shpg. wt., 2½ lbs. **Type 3012.** 3x 4.15x4.5". Shpg. wt., 3.2 lbs. **Type 3025.** 5.5x6.12x 9.5". Shpg. wt., 6½ lbs. **Type 3050.** 7.25x10.88x 6.12". Shpg. wt., 10¼ lbs. **Type C-3100.** 7.25x 6.12x16". Shpg. wt., 17½ lbs. **Contact Allied for larger quantity prices.**

Stock No.	Mfr's Type	Output VA	EACH 1-9	10-24	25-Up
983-3003	C-3003	30	39.00	37.00	35.00
983-3006	C-3006	60	46.00	43.75	41.50
983-3012	C-3012	120	51.00	48.50	46.00
983-3025	C-3025	250	89.50	85.00	80.50
983-3050	C-3050	500	125.00	118.75	112.50
983-3100	C-3100	1000	210.00	199.50	189.00

CVR-120 AC VOLTAGE REGULATOR

Useful addition to any service bench. Solid-state completely static voltage regulator priced considerably lower than ferroresonant-type constant voltage transformers. Small size and light weight (approximately 10% of comparably rated units). Frequency and power factor insensitive. Peak regulated—ideal for DC power supply pre-regulator applications. AC input, 100 to 130 volts, 47 to 420 Hz, single-phase. AC output: peak, 135 volts; rms, 105 volts typical at 130 volts input and full load. Peak regulation: line, ±1% for ±10% line voltage fluctuation; load, ±1% for no load to full rated load. Operating temperature: up to 40° C ambient at full load, higher with derating. Overall size, 4x4½x2½". Shpg. wt., 10 oz. **Contact Allied for larger quantity prices.**

Stock No.	Mfr's Type	Output VA	EACH 1-9	10-24	25-Up
983-3200	CVR-120	120	26.50	25.00	24.00

100 AND 300 VA DC TO AC INVERTERS

Input voltage 12.5 ±2 VDC. Output 110 VAC. **Illuminator** rated 100 VA continuous, 200 VA for 5 minutes. **Economizer** 300 VA continuous. Regulation ±7.5% no load to full load. Frequency ±1%. Full load efficiency 80%. Floating isolated output. Overload protected. 10 lbs.

Stock No.	Mfr's Type	VA	EACH 1-9	10-24	25-Up
983-4001	Illuminator	100	89.50	85.00	80.50
983-4002	Economizer	300	129.50	123.50	116.50

OVERVOLTAGE PROTECTION DEVICES

TYPE OVP-1. Adjusts 6 to 60 VDC and currents up to 50 amps DC for power supply protection from overvoltage. 10 msec circuit breaker action. Suited for Wanlass Brutes I, II, III. ½ lb.

Stock No.	Type OVP-	VDC	EACH 1-9	10-24	25-49	50-Up
983-3531	1	6-60	52.00	49.00	47.00	42.00
983-3532	2-53	3.6	9.00	8.50	8.00	7.50
983-3533	2-5	5	9.00	8.50	8.00	7.50
983-3534	2-6	6	9.00	8.50	8.00	7.50
983-3535	2-10	10	9.00	8.50	8.00	7.50

TYPE OVP-2. Protects voltage-sensitive loads such as ICs or MOSFETs. For Wanlass DPS or OEM DC power supplies or any 10 amp or less protection. (See below for voltage capacities.) Wt. 2 oz.

Stock No.	Type OVP-	VDC	EACH 1-9	10-24	25-49	50-Up
983-3536	2-12	12	9.00	8.50	8.00	7.50
983-3537	2-15	15	9.00	8.50	8.00	7.50
983-3538	2-18	18	9.00	8.50	8.00	7.50
983-3539	2-24	24	9.00	8.50	8.00	7.50
983-3540	2-28	28	9.00	8.50	8.00	7.50

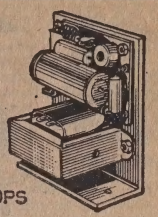
Regulated DC Power Supplies

WANLASS

REGULATED 20 WATT DC POWER SUPPLIES

Regulated DC power supplies for use in a wide variety of applications. Operate from 115 volts ±10% AC single phase, 60 Hz. Four different models for 3/6 V, 12/15 V, 24 V or 180/220 V. All silicon, solid-state construction for superior dependability and long-life reliability. Regulated ±1% for line and load, filtered to 1% rms ripple and protected by automatic recovery current overload limiting. Automatic short-circuit protection. 4½x4x3". Av. shpg. wt. 2 lbs.

Stock No.	Mfr's Type	DC Output Volts	DC Output Amp	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-Up
983-3201	DPS-1	5-6	3.0	24.95	23.70	22.50	21.25
983-3202	DPS-2	12-15	1.5	24.95	23.70	22.50	21.25
983-3203	DPS-3	24	1.0	24.95	23.70	22.50	21.25
983-3204	DPS-4	180-220	0.1	36.00	34.20	32.40	30.60
983-3205	DPS-5	5-6	1.5	19.95	18.95	17.95	16.95
983-3206	DPS-6	12-15	0.75	19.95	18.95	17.95	16.95
983-3207	DPS-7	24	0.40	19.95	18.95	17.95	16.95

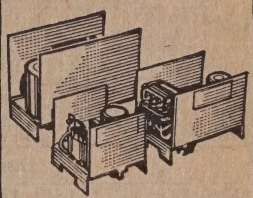


DPS

ECONOMY REGULATED DC POWER SUPPLIES

Regulated DC power supplies for a wide variety of uses. Voltage adjustment potentiometer facilitates selection of any output voltage from 3.6 to 30 VDC (voltage ranges in table at right). Line regulation: ±1% change in output for ±10% change in line voltage. Load regulation: ±1%, no load to full rated load. Low ripple output of 0.1%, 10 mV rms. Automatic short circuit protection. Floating output permits positive or negative grounding. Transformer taps. Open chassis construction for use in Manufacturer's Original Equipment Systems. Type 30-OEM: 30-watt power rating. 5x5x5". Shpg. wt., 5 lbs. Type 60-OEM. 60-watt power rating. 7x5x7". Shpg. wt., 7 lbs. Type 120-OEM: 120 watt power rating. Shpg. wt., 12 lbs.

Stock No.	Mfr's Type	Volt. Range V	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-Up
983-5500	30-OEM-1	3.6-9	46.00	43.75	41.50	39.00
983-5501	30-OEM-2	9-17	46.00	43.75	41.50	39.00
983-5502	30-OEM-3	17-30	46.00	43.75	41.50	39.00
983-5503	30-OEM-4	30-60	46.00	43.75	41.50	39.00
983-6000	60-OEM-1	3.6-9	57.50	54.50	51.75	49.00
983-6001	60-OEM-2	9-17	57.50	54.50	51.75	49.00
983-6002	60-OEM-3	17-30	57.50	54.50	51.75	49.00
983-6003	60-OEM-4	30-60	57.50	54.50	51.75	49.00
983-7000	120-OEM-1	3.6-9	86.25	82.00	77.75	73.50
983-7001	120-OEM-2	9-17	86.25	82.00	77.75	73.50
983-7002	120-OEM-3	17-30	86.25	82.00	77.75	73.50
983-7003	120-OEM-4	30-60	86.25	82.00	77.75	73.50



30, 60 and 120 OEM Power Supplies

BRUTE REGULATED DC POWER SUPPLIES

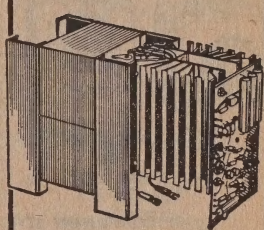
SCR regulated high power wide-range supplies employ phase control principle with ±0.1% or 50 mV line and load regulation. Automatic crossover to constant current mode, special circuit virtually eliminates RFI. Output continuously adjustable 5-50 V or 2-25 V (reconnectable). 1% rms or 500 mV ripple. Input 115-230 V, 1-phase, 47-63 Hz. Provide reliable regulation with very low ripple output. Includes remote sense capability. Brute I: 300 watts, measures 7¾x7x11"; weight, 25 lbs. Brute II: 600 watts, measures 7¾x7x12"; weight 30 lbs. Brute III: 1200 watts, measures 11¼x10x 4"; weight 65 lbs.

Stock No.	Mfr's Type	Output Amps	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-Up
983-1101	Brute I	6/12	148.00	141.00	133.00	125.00
983-1102	Brute II	12/24	195.00	185.00	176.00	166.00
983-1103	Brute III	25/50	315.00	299.00	284.00	268.00

983-3250. Type K-1 Ten-Turn Potentiometer. For finer resolution of output voltage adjustment control. Shpg. wt. 1 lb. 20.00

983-3251. Type K-2 Ripple Reduction Kit. For ½% rms ripple. For Brute I and II. Shpg. wt. 4 lbs. 25.00

983-3252. Type K2-2 For Brute III. 4.95

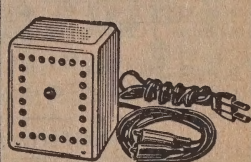


"BRUTE"

BE12 ELIMINATOR 12V DC POWER SUPPLY

Low priced, solid-state power supply for a wide variety of servicing applications. Eliminates need for 12-14 volt batteries to power DC devices. May be used for servicing all-transistor 12-14 volt equipment and hybrid or all-vacuum tube equipment. Useful for operating auto radios, stereo tape cartridge and cassette players. Specially designed for protection against inadvertent overloads and dead short circuits. Operates from 105-125 volts, single phase, 60 Hz AC. Precision regulated and filtered. DC output: 12-14 volts at 1.5 amps. All-silicon transistors for maximum dependability and ultra-long life. Comes in special corrosion resistant case. Includes sturdy, Underwriter's Laboratory listed two-wire cord and plug for AC input, output leads complete with alligator clips to DC load. Overall dimensions measure 4" high x 3½" wide x 3" deep. Wt. 1 lb.

983-1000. 1-9...Each 19.95 10-24..Each 17.95
25-49.....Each 18.95 50-Up..Each 16.95

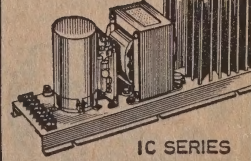


BE-12 ELIMINATOR

ALL SILICON IC SERIES DC POWER SUPPLIES

D.C. power for I.C.'s and MOS/FET applications. Provides over 100 dB noise attenuation for all voltage sensitive loads. Can be employed in the same manner as any other power, isolation or rectifier transformer, combining it with a series regulated DC power supply, providing positive protection for voltage sensitive loads, Adjustable output voltage, ±5% minimum, from nominal output. AC input: 105-125 VAC, 47-63 Hz single phase. Ripple: 5 mV rms maximum. Recovery time: 50-100 μsec. Line load regulation: ±0.25%. **Type 60-IC.** 11.5x5.2x6". Wt. 11 lbs. **Type 120-IC.** 15.5x5.2x6.3". Wt. 16 lbs. **Type 200-IC.** 17x6.2x8". Wt. 27 lbs.

Stock No.	Mfr's Type	Output V	Output W/A	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-Up
983-5101	60-IC-1	3.6-6.3	7.5A	125.00	118.75	112.50	106.50
983-5102	60-IC-2	12-15-18	60W	125.00	118.87	112.50	106.50
983-5103	60-IC-3	24-28-36	60W	125.00	118.75	112.50	106.50
983-5104	60-IC-4	48-60	60W	125.00	118.75	112.50	106.50
983T5151	120-IC-1	3.6-6.3	15A	170.00	161.50	153.00	144.50
983T5152	120-IC-2	12-15-18	120W	170.00	161.50	153.00	144.50
983T5153	120-IC-3	24-28-36	120W	170.00	161.50	153.00	144.50
983T5154	120-IC-4	48-60	120W	170.00	161.50	153.00	144.50
983U5171	200-IC-1	3.6-6.3	25A	225.00	213.50	202.50	191.50
983U5172	200-IC-2	12-15-18	200W	225.00	213.50	202.50	191.50
983U5173	200-IC-3	24-28-36	200W	225.00	213.50	202.50	191.50
983U5174	200-IC-4	48-60	200W	225.00	213.50	202.50	191.50

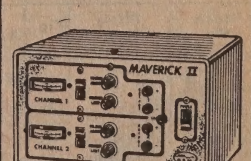


IC SERIES

"MAVERICK" REGULATED DC POWER SUPPLIES

Economy regulated variable bench and dual rack mount DC power supplies. Available in two models, one providing 0-7 volts at 5 amps and the other a dual output of 0-18 volts at 1.25 amps each. Maverick I can be seriesed or paralleled with a like unit to provide higher voltage and/or current. Maverick II can have its dual output seriesed or paralleled to provide higher voltage and/or current. Regulation: ±0.1% or 5 mV for line and ±0.1% or 5 mV for load. Ripple: 0.01% or 1 mV rms maximum. AC input: 105-125 volts, 1 phase, 47-63 Hz. Automatic current limiting, adjustable from 0-110%. Remote sensing with Auto-Revert to local in case of a disconnected or broken sense lead. Impedance: 10 milliohms maximum from DC-1 kHz. Reset-circuit breaker for AC. Floating output. Natural convection cooling for 0-45°C operating temperature. Other features include: On-off and meter selector switches on front panel. Floating output—either positive or negative may be grounded. Dual rack mount—½ of rack mounting hardware is furnished with each unit. Combination voltmeter/ammeter. Front panel voltage adjust; front panel current limit adjust. 5¼x8½x8". Shpg. wt. 9 lbs.

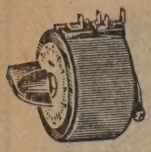
Stock No.	Mfr's Type	DC Output Volts	DC Output Amps	EACH 1-9	EACH 10-24	EACH 25 49	EACH 50-Up
983-3401	Maverick I	0-7	0.5	89.00	84.50	80.00	75.50
983-3402	Maverick II	(two) 0-18	1.25	125.00	118.75	112.50	102.25



MAVERICK II

Power Controls, Power Supplies and Transformers

OHMITE VARIABLE AND POWER TRANSFORMERS



OMITRAN® SMALL VARIABLE TRANSFORMERS

Low-power variable transformers offering a choice of six current ratings from 1 to 3 amperes. Deliver full rated current at any brush setting. Snap-in brush contact assembly for easy replacement. Adjustable shaft (except VT2LN) may extend from brush or opposite side for greater mounting versatility. Three-way terminals for ¼" push-on connectors or soldering. 60-Hz AC.

UNCASED STYLE (Mount with ⅜"-32 bushing)

Stock No.	Mfr's Type	Max. Amps	Max. V Input	Output Volts	Dia. x L	Wt., Lbs.	EACH 1-9	10-24	25-99	100-Up
876-4160	VT1	1.3	120	0-120/132	2⅞x1 13/16"	1½	16.66	11.25	10.31	9.38
876-4170	VT1N	1.5	120	0-120	2⅞x1 13/16"	1½	16.66	11.25	10.31	9.38
876-4100	VT02	2.0	120	0-120/132	2⅞x2 5/16"	2¼	16.00	10.80	9.90	9.00
876-4155	VT02N	2.5	120	0-120	2⅞x2 5/16"	2¼	16.00	10.80	9.90	9.00
876-4185	VT2LN	5.0	40	0-40	2⅞x2 5/16"	2¼	18.67	12.60	11.55	10.50
876-4190	VT3	3.0	120	0-120/132	2⅞x2 13/16"	3	17.34	11.70	10.73	9.75
876-4195	VT3N	3.0	120	0-120	2⅞x2 13/16"	3	17.34	11.70	10.73	9.75
876-6507	6507	Brush Contact Assembly				1 oz.	1.47	.99	.91	.83

CASED STYLE (*Fixed, †Portable)

876-4150	VT02E*	1.4	120	0-132	3⅜x2½x4¼"	2½	18.67	16.65	15.26	13.88
876-4151	VT02F†	1.75	120	0-132	3⅜x2½x4¼"	3¼	28.00	18.90	17.33	15.75

OHMITROL® SOLID-STATE MOTOR CONTROLS

Built-in trimmer sets starting point of the control voltage anywhere between 0 and 50 volts (for 1 kW models) or 0 and 100 volts (for 2 kW models). On-off line switch. Two-way terminals accept quick connectors or soldering. RFI filtered output. Available in two styles: component style for mounting panel in equipment. ⅜"-32 bushing mounting on aluminum panel for neat sink; and self-contained portable model with grounded line cord and standard grounded AC receptacle. Load ratings: Model PCA, 120 VAC, 1 kW, 8.3 A; 240 VAC, 2 kW, 8.3 A. Model PCD, 6.0 A DC-resistive; 3.5 A DC-motor load.

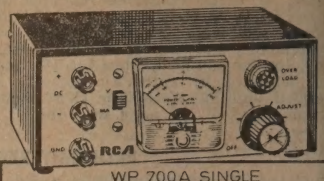
COMPONENT STYLE (LxWxD, 1¾x1¾x1") Shpg. wt. 3 oz.

Stock No.	Mfr's Type	Input	Output	Trimmer Range	EACH 1-9	10-24	25-Up
876-3000	PCA-1000	120 V,	0-120 VAC		27.67	18.68	16.60
876-3011	PCD-1000	60 Hz AC	Pulsating 0-120 VDC and Full 120 VDC	0-50 V	51.35	34.65	30.80
876-3005	PCA-1020	240 V,	0-240 VAC		31.67	21.38	19.00
876-3017	PCD-1020	60 Hz AC	Pulsating 0-240 VDC and Full 240 VDC	0-100 V	56.00	37.80	33.60

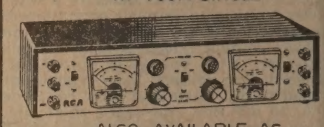
PORTABLE STYLE (LxWxD, 4¼x3¼x1 13/16") Shpg. wt. 2 lbs.

876-3001	PCA-1001	120 V,	0-120 VAC		42.00	28.35	25.20
876-3012	PCD-1001	60 Hz AC	Pulsating 0-120 VDC and Full 120 VDC	0-50 V	66.00	44.55	39.60
876-3006	PCA-1021	240 V,	0-240 VAC		46.00	31.05	27.60
876-3018	PCD-1021	60 Hz AC	Pulsating 0-240 VDC and Full 240 VDC	0-100 V	70.75	47.70	42.40

RCA SOLID-STATE DC POWER SUPPLIES



WP 700A SINGLE



ALSO AVAILABLE AS WP 702A DUAL UNIT

- Full Line and Load Regulation for Low Ripple Output of Less Than 500 μV rms
- Switchable Voltage/Current Meter

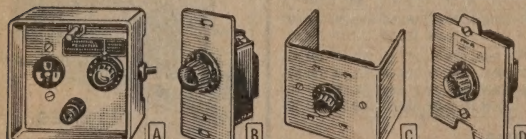
Model WP-700A. Constant-voltage DC power supply, ideally suited for circuit design, servicing, industrial and educational uses. Delivers continuously adjustable 0-20 volts at 0 to 200 mA. Negative feedback regulator for low ripple output of less than 500 μV rms. Line regulation: less than 30 mV change in output voltage for line variation of 105-135 VAC. Load regulation: less than 50 mV change for 200 mA load change. Overload indicator. Compact aluminum case, 4x6½x3". For 105-135 V, 50-60 Hz AC. Shpg. wt. 3 lbs.
928-0090. 1-4 ..... Each 48.00
5-10 ..... Each 40.00

Model WP-702A. As above, but dual unit supply with each section electrically isolated. Has separate controls, output terminals and meter for each section. 6x12x3". Shpg. wt. 5 lbs.
928-0091. 1-4 ..... Each 87.00
5-10 ..... Each 73.00

Model WP-703A. As WP-700A above, but output of 0-20 volts at 500 mA. Line regulation of 7 mV; load regulation to less than 10 mV. 5¼x8¼x3¼". Shpg. wt. 6 lbs.
928-0092. 1-4 ..... Each 58.50
5-10 ..... Each 49.00

Model WP-704A. As WP-700A above, but output of 0-40 volts at 250 mA. Line regulation of 15 mV; load regulation to less than 20 mV. 5¼x8¼x3¼". Shpg. wt. 6 lbs.
928-0093. 1-4 ..... Each 58.50
5-10 ..... Each 49.00

LUTRON POWERDIAL SCR POWER CONTROLS

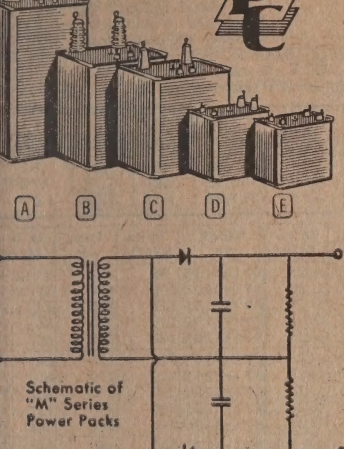


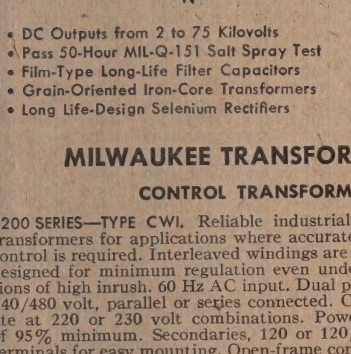
Positive control of voltage, current, heat, motor speed and mor Precision SCR power controls features solid-state circuit—weig just 1/10 as much and occupy only ½ the space of typical variabl autotransformer controls. Have continuously adjustable output o either AC or DC. No brush burnout or wear. PD series has selecto switch for AC, DC or off; fuse, 3-wire cord and receptacle. PDI series is suitable for panel mounting; may be wired for either AC o DC output with 2-wire connection. All units are for 60-Hz AC. A are bench models, except * panel mount.

Stock No.	Mfr's Type	Fig.	rms Amps AC	rms Amps DC	AC Volts Input	AC Volts Output	rms Output Volts DC	Size HxWxD	Wt., Lbs.	EACH 1-9	10-24	25-Up
849-9204	PD-50	A	0-5	0-5	120	0-120	0-85	4½x4½x2½"	2	28.80	21.60	19.15
849-9206	PD-75	A	0-7.5	0-7.5	120	0-120	0-85	4½x4½x2½"	2	32.40	24.30	21.55
849-9208	PD-100	A	0-10	0-7.5	120	0-120	0-85	4½x6x2½"	2½	36.00	27.00	23.94
849-9210	PD-150	A	0-15	0-10	120	0-120	0-85	6x6x2½"	3	72.00	54.00	47.88
849-9220	*PDU-50	B	0-5	0-5	120	0-120	0-85	4x2x1⅝"	½	18.90	14.18	12.57
849-9222	*PDU-75	D	0-7.5	0-7.5	120	0-120	0-85	4x4x1⅝"	½	22.50	16.88	14.96
849-9224	*PDU-100	D	0-10	0-7.5	120	0-120	0-85	4x4x1⅝"	¾	36.00	27.00	23.94
849-9226	*PDU-150	D	0-15	0-10	120	0-120	0-85	4½x4½x3¾"	1	72.00	54.00	47.88
849-9240	*2PDU-50	C	0-5	0-5	240	0-240	0-170	4x2x1⅝"	½	36.00	27.00	23.94
849-9242	*2PDU-75	D	0-7.5	0-7.5	240	0-240	0-170	4x4x1⅝"	½	39.60	29.70	26.33
849-9244	*2PDU-100	D	0-15	0-7.5	240	0-240	0-170	4x4x1⅝"	¾	46.80	35.00	31.12

Allied Electronics is the World's Foremost Supplier of Components for Industry

High-Voltage Packs, Transformers, Power Supplies





- DC Outputs from 2 to 75 Kilovolts
- Pass 50-Hour MIL-Q-151 Salt Spray Test
- Film-Type Long-Life Filter Capacitors
- Grain-Oriented Iron-Core Transformers
- Long Life-Design Selenium Rectifiers

PLASTIC CAPACITORS "M" SERIES HIGH-VOLTAGE PACKS

Compact, hermetically sealed units. Use latest techniques and advanced materials to achieve long operating life and small package size. Selenium rectifiers avoid failure—design life is 40,000 hours at +35°C, 25,000 hours at +65°C. Require no warm-up time, may be mounted in any position. Can be used with a primary voltage input control to adjust output voltage from zero to full rated voltage. Input, 0-118 V AC, 50-500 Hz. Output, 0-1.5, 0-5 or 0-10 mA DC to rated voltage. Ripple, 1% rms or 2.7% peak to peak. Ambient rating, −55°C to +85°C (output at +85°C limited to 4 mA) except. *0 to +85°C. Maximum altitude. 10,000 feet operating, 50,000; feet non-operating. Vibration, 10-55 cycles with 0.06″ excursion for 2 hours in each plane except ‡ for applications not subject to excessive shock. Oil-filled containers are primed and lacquered per MIL-L-7178. Terminals are steatite, solder-seal type with solder lugs, except types rated at 30 kilovolts DC and above have corona spheres with 11/64″ dia. holes to accept banana plug. §Have single high-voltage terminal and are furnished to deliver positive output potential relative to ground. Footed mounting brackets.

Stock No.	Mfr's Type	Fig.	DC Output kV	DC Output mA	Case Size H x W x D	Wt. Lbs.	EACH
884-0203	HV20-502M	E	2	5	3⅜x2¼x3¾″	2½	65.75
884-0206	HV25-103M	D	2.5	10	3¾x2¼x3¾″	3¼	83.40
884-2012	HV50-502M	D	5	5	3¾x2¼x3¾″	3¼	82.50
884X0209	HV50-103M	C	5	10	5⅞x3¾x4 9/16″	11	127.00
884-0223	HV100-152M	C	10	1.5	4½x3¾x3 3/16″	4¾	94.20
884X0224	HV100-502M	C	10	5	5⅞x3¾x4 9/16″	8⅛	127.00
884X0221	HV100-103M	A	10	10	8x3¾x4 9/16″	12⅛	183.65
884-0220	HV150-152M	C	15	1.5	5½x3¾x3 3/16″	5¾	127.00
884X0223	HV150-502M	B	15	5	6⅛x3¾x4 9/16″	12	160.00
884U0227	HV150-103M‡	E	15	10	8½x4 1/16x6″	23	234.00
884X0239	HV200-152M	C	20	1.5	5⅞x3¾x4 9/16″	8⅛	133.40
884X0242	HV200-502M	A	20	5	8x3¾x4 9/16″	12⅛	183.60
884U0245	HV250-103M‡*	D	25	10	12 3/16x5 5/8x7 11/32″	27	399.20
884X0257	HV300-152M	A	30	1.5	7½x3¾x4 9/16″	10½	234.60
884U0260	HV300-502M‡	E	30	5	8½x4 1/16x6″	23	246.00
884U0275	HV500-152M‡	E	50	1.5	8½x4 1/16x6″	19	286.50
884F0278	HV500-502M‡*	D	50	5	12 3/16x5 5/8x7 11/32″	45	399.00
884F0281	HV750-152M‡*§	...	75	1.5	12 3/16x5 5/8x7 11/32″	45	452.50

MILWAUKEE TRANSFORMER CO.

CONTROL TRANSFORMERS

200 SERIES—TYPE CWI. Reliable industrial control transformers for applications where accurate voltage control is required. Interleaved windings are specially designed for minimum regulation even under conditions of high inrush. 60 Hz AC input. Dual primaries. 240/480 volt, parallel or series connected. Can operate at 220 or 230 volt combinations. Power factor of 95% minimum. Secondaries, 120 or 120/240 volts. Screw-type terminals for easy mounting. Open-frame core and coil construction for top performance and long life. All have four oblong mounting holes, see mounting centers in table.

PRIMARY, 240/480 V—SECONDARY, 120 V

Stock No.	Mfr's Type	kVA	Mtg. Ctrs.	Size HxWxD	Wt., Lbs.	EACH
849-5910	C1-13361	.050	2½x2¼″	2 9/16x3x3½″	3	10.45
849-5911	C1-13362	.075	2½x2 7/8″	2 9/16x3x4⅛″	4¼	12.00
849-5912	C1-13363	.100	2 13/16x2¾″	2 7/8x3 3/8x4 3/8″	5½	12.70
849-5913	C1-23166	.150	3½x3⅜″	3 3/16x3 3/4x5¼″	8½	13.80
849-5931	C1-23167	.200	3¾x2 7/8″	3 1/16x4½x4 7/8″	9½	16.30
849-5922	C1-23091	.250	4½x3 5/8″	4½x5¼x5 7/8″	12	17.85
849-5942	C1-33188	.300	3¾x3 13/16″	3 13/16x4½x5 15/16″	13½	19.80
849X5943	C1-33189	.350	4 3/8x4″	4 5/8x5¼x5 7/8″	21	21.00
849X5940	C1-33112	.500	4½x5″	4½x5¼x7½″	26	22.60
849X5970	C1-43192	.750	4½x5¾″	4½x5¼x8¼″	32	27.80
849U5968	C1-43137	1.0	5¼x5¼″	5¾x6½x7½″	40	31.05
849Z5974	C1-53091	1.5	5⅞x6½″	6½x7 1/16x8¾″	59	44.10
849Z5975	C1-53129	2.0	5⅞x8″	6½x7 1/16x10¼″	72	53.55

PRIMARY, 240/480 V—SECONDARY, 120/240 V

Stock No.	Mfr's Type	kVA	Mtg. Ctrs.	Size HxWxD	Wt., Lbs.	EACH
849-5915	C1-13381	.050	2½x2¼″	2 9/16x3x3½″	3	11.30
849-5917	C1-13383	.100	2 13/16x2¾″	2 7/8x3 3/8x4 3/8″	5½	13.00
849-5935	C1-23174	.150	3½x3⅜″	3 3/16x3 3/4x5¼″	8½	14.15
849-5936	C1-23175	.200	3¾x2 7/8″	3 13/16x4½x4 7/8″	9½	16.70
849-5920	C1-23089	.250	4½x3 5/8″	4½x5¼x5 7/8″	12	18.30
849-5947	C1-33196	.300	3¾x3 13/16″	3 13/16x4½x5 15/16″	13½	20.25
849X5938	C1-33110	.500	4½x5″	4½x5¼x7½″	28	22.95
849X5965	C1-43044	.750	4½x5¾″	4½x5¼x8¼″	35	28.15
849U5967	C1-43135	1.0	5¼x5¼″	5¾x6½x7½″	40	31.60
849Z5972	C1-53089	1.5	5⅞x6½″	6½x7 1/16x8¾″	53½	44.65
849Z5978	C1-53132	2.0	5⅞x8″	6½x7 1/16x10¼″	78	54.30

Allied gives you huge selection, friendly service, OEM prices, complete one-order service, immediate shipment.

TERADO MARK I INVERTER/CHARGER

- Filtered AC Output • Solid-State
- Meter Reads −50 to +50 Amps
- Charges Batteries to 20 Amps

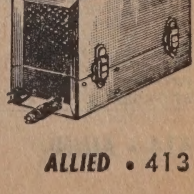
MODEL 50-131. Delivers 450 watts continuously, 500 watts intermittently at 117 VAC from your 12-volt storage battery. Operates TV, tools, lights, and many other appliances. Also charges 12-volt batteries from 117 VAC line. Charges at 20 or 10-amp rate, or at a low trickle charge. Built-in meter shows charging rate. AC receptacle on front panel. Fuse protected. Handle for easy portability. Sturdy metal case, 6x12½x6″.
959U2731. Shpg. wt. 21 lbs. 104.50
Mark II, 50-132. Above, but 275W continuous, 300W intermittent.
959U2732. Shpg. wt. 21 lbs. 89.50

SOLID-STATE POWER/INVERTERS

Operate 117-VAC electrical appliances from a 12-volt storage battery. Ideal for cars, trailers, boats, buses, mobile homes. *Automatic frequency control keeps output within ½ Hz (#¼ Hz) for operating tape recorders and phonographs. Other models are for equipment not sensitive to frequency change. †Includes remote control. With cables. Heavy-duty copper-clad steel cases.

Stock No.	Mfr's Type	Capacity, Watts Cont.	Capacity, Watts Intr.	Size HxWxD	Wt., Lbs.	EACH
959-2705	50-205	140	175	6x10¾x6″	10½	46.94
959-2770	50-170	125	150	6x10¾x6″	10½	39.87
959U2729	50-129	275	300	6x12½x6″	20	78.15
959U2728	50-128	450	500	6x12½x6″	20	97.17
959U2753	†50-153	175	200	6x10¾x6″	25	84.07
959U2701	*50-201	150	175	6x10¾x6″	20	100.51
959U2700	*50-200	175	200	6x10¾x6″	21	114.53
959U2791	*50-191	275	300	6x10¾x6″	30	158.40
959Z2702	†*50-202	550	600	6x10¾x13″	60	327.74
959Z2710	*50-110	1000	1100	15x12x12″	120	610.05

"TRAV-ELECTRIC" INVERTER



MODEL 50-160 A portable source of regular household electrical power, always ready to go. Has built-in battery and charger. Battery can be recharged from any AC outlet, or from auto cigarette lighter. Includes storage battery, inverter, charger, battery condition meter and copper-clad steel case. 125 watts AC continuous, 175 watts intermittent. 12x5½x8″.
959U2760. Shpg. wt. 30 lbs. 74.19

Nytronics, Inc. Miniature Molded Inductors

DECI-DUCTOR SUBMINIATURE RF INDUCTS

Epoxy molded, unshielded, with extreme inductance-to-size ratio. Designed to meet all environmental requirements of MIL-C-15305C, Grade I, (resistance to moisture and immersion), Class B (oper. temp.) from −55° to +125° C. Vibration, shock resistant. Operates to 70,000 ft. Tolerance, ±10%. ¼" long x 1/10" diameter. #24 leads. Av. shpg. wt. per hundred, 3 oz.

μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
Values 0.1-1	.88	.83	.66	.58	.53	.48	.45
Values 1.5-22	.96	.91	.72	.63	.58	.53	.49
Values 33-100	1.01	.96	.76	.67	.61	.56	.53
Values 150-1000	1.06	1.00	.80	.69	.63	.59	.55

Stock No.	Type DD-	Ind. μH	Q @ MHz		Stock No.	Type DD-	Ind. μH	Q @ MHz	
871-2000	.10	.10	40	25	871-2125	12.0	12.0	45	2.5
871-2005	.12	.12	40	25	871-2130	15.0	15.0	47	2.5
871-2010	.15	.15	38	25	871-2135	18.0	18.0	50	2.5
871-2015	.18	.18	38	25	871-2140	22.0	22.0	50	2.5
871-2020	.22	.22	35	25	871-2145	27.0	27.0	50	2.5
871-2025	.27	.27	35	25	871-2150	33.0	33.0	50	2.5
871-2030	.33	.33	32	25	871-2155	39.0	39.0	50	2.5
871-2035	.39	.39	32	25	871-2160	47.0	47.0	50	2.5
871-2040	.47	.47	32	25	871-2165	56.0	56.0	50	2.5
871-2045	.56	.56	32	35	871-2170	68.0	68.0	52	2.5
871-2050	.68	.68	33	25	871-2175	82.0	82.0	52	2.5
871-2055	.82	.82	30	25	871-2180	100	100	50	2.5
871-2060	1.00	1.00	30	25	871-2185	120	120	28	0.79
871-2065	1.20	1.20	30	7.9	871-2190	150	150	28	0.79
871-2070	1.50	1.50	32	7.9	871-2195	180	180	28	0.79
871-2075	1.80	1.80	35	7.9	871-2200	220	220	26	0.79
871-2080	2.20	2.20	35	7.9	871-2205	270	270	26	0.79
871-2085	2.70	2.70	37	7.9	871-2210	330	330	26	0.79
871-2090	3.30	3.30	45	7.9	871-2215	390	390	25	0.79
871-2095	3.90	3.90	45	7.9	871-2220	470	470	27	0.79
871-2100	4.70	4.70	45	7.9	871-2222	560	560	27	0.79
871-2105	5.60	5.60	52	7.9	871-2224	680	680	28	0.79
871-2110	6.80	6.80	52	7.9	871-2226	820	820	28	0.79
871-2115	8.20	8.20	60	7.9	871-2230	10000	10000	28	0.79
871-2120	10.0	10.0	60	7.9					

"WEE-DUCTOR" SUBMINIATURE RF INDUCTORS

- Meets MIL-C-15305C
- Only .164" by .450"

Encapsulated, shielded unit has high inductance: density ratio. Meets environmental requirements of MIL-C-15305C, Grade 1, Class B. Tol. to ±10%. 700 V rms diel. strength. Less than 3% coupling. 1¼", #24 leads. 0.164 dia.x7/16". Av. wt./100, 3 oz.

μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
.10-.82	.83	.79	.64	.56	.50	.46	.43
1.0-15	.92	.87	.70	.61	.55	.50	.47
18-1000	1.12	1.06	.84	.73	.67	.62	.58
1200-4700	1.26	1.19	.96	.82	.75	.70	.65
5600-56k	1.50	1.42	1.13	.99	.90	.83	.77
68k-180k	2.29	2.17	1.74	1.51	1.38	1.27	1.18

Stock No.	Type WEE-	Ind. μH	Q @ MHz		Stock No.	Type WEE-	Ind. μH	Q @ MHz	
871-4500	.10	.10	63	25	871-4587	68	68	40	2.5
871-4502	.12	.12	61	25	871-4592	100	100	63	.79
871-4505	.15	.15	59	25	871-4597	150	150	63	.79
871-4507	.18	.18	57	25	871-4600	180	180	60	.79
871-4510	.22	.22	56	25	871-4602	220	220	57	.79
871-4512	.27	.27	50	25	871-4605	270	270	52	.79
871-4515	.33	.33	48	25	871-4607	330	330	50	.79
871-4520	.39	.39	48	25	871-4610	390	390	43	.79
871-4522	.47	.47	48	25	871-4612	470	470	66	.79
871-4525	.56	.56	45	25	871-4615	560	560	64	.79
871-4527	.68	.68	45	25	871-4617	680	680	71	.79
871-4530	.82	.82	41	25	871-4620	820	820	67	.79
871-4532	1.0	1.0	42	7.9	871-4622	1000	1000	62	.79
871-4535	1.2	1.2	43	7.9	871-4625	1200	1200	52	.250
871-4537	1.5	1.5	41	7.9	871-4627	1500	1500	51	.250
871-4540	1.8	1.8	42	7.9	871-4630	1800	1800	51	.250
871-4542	2.2	2.2	42	7.9	871-4632	2200	2200	50	.250
871-4545	2.7	2.7	41	7.9	871-4635	2700	2700	51	.250
871-4547	3.3	3.3	40	7.9	871-4637	3300	3300	52	.250
871-4550	3.9	3.9	40	7.9	871-4640	3900	3900	48	.250
871-4552	4.7	4.7	40	7.9	871-4642	4700	4700	48	.250
871-4555	5.6	5.6	40	7.9	871-4645	5600	5600	48	.250
871-4557	6.8	6.8	40	7.9	871-4647	6800	6800	45	.250
871-4560	8.2	8.2	45	7.9	871-4652	10,000	10,000	36	.079
871-4562	10	10	46	2.5	871-4657	15,000	15,000	38	.079
871-4565	12	12	47	2.5	871-4662	22,000	22,000	32	.079
871-4567	15	15	47	2.5	871-4667	33,000	33,000	32	.079
871-4572	22	22	47	2.5	871-4672	47,000	47,000	25	.079
871-4577	33	33	43	2.5	871-4677	68,000	68,000	20	.079
871-4582	47	47	46	2.5	871-4682	100,000	100,000	20	.079

"SUPER-WEE-DUCTOR" SUBMINIATURE RF INDUCTORS

- Only 0.395" by 0.157"
- Meet MIL-C-15305C

Epoxy molded and shielded fo minimum coupling in high-de sity package. Meet electric and environmental requiremen of MIL-C-15305C, Grade 1 (r sistance to moisture and imme sion). Class B (from −55° t +125° C). For altitudes to 70,000 ft. Tol. ±10%. Less than 3% coupling. Low DC resis. 700 V rms diel. strength. 0.157" dia. 1⅞ 0.395" AWG #22 leads, internal T termination. Av. wt./100, 3½ o

μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
Values 0.1-15	1.31	1.24	.93	.82	.72	.67	.62
Values 22-6800	1.52	1.44	1.03	.93	.82	.77	.72
Values 10k-100k	1.63	1.55	1.34	1.24	1.18	1.08	1.03

Stock No.	Type SWD-	Ind. μH	Q @ MHz		Stock No.	Type SWD-	Ind. μH	Q @ MHz	
871-3000	.10	.10	50	25	871-3185	82	82	45	2.5
871-3005	.12	.12	51	25	871-3200	100	100	52	2.5
871-3010	.15	.15	51	25	871-3195	120	120	57	.7
871-3020	.22	.22	49	25	871-3190	150	150	56	.2
871-3030	.33	.33	46	25	871-3205	180	180	60	.7
871-3035	.39	.39	44	25	871-3210	220	220	58	.7
871-3040	.47	.47	44	25	871-3215	270	270	60	.7
871-3050	.68	.68	42	25	871-3220	330	330	54	.7
871-3055	.82	.82	40	25	871-3225	390	390	67	.7
871-3060	1.0	1.0	47	25	871-3230	470	470	60	.7
871-3065	1.2	1.2	46	7.9	871-3235	560	560	60	.7
871-3070	1.5	1.5	45	7.9	871-3240	680	680	60	.7
871-3075	1.8	1.8	43	7.9	871-3245	820	820	57	.7
871-3080	2.2	2.2	45	7.9	871-3250	1000	1000	65	.7
871-3085	2.7	2.7	46	7.9	871-3255	1200	1200	45	.2
871-3090	3.3	3.3	44	7.9	871-3260	1500	1500	49	.2
871-3095	3.9	3.9	44	7.9	871-3265	1800	1800	47	.2
871-3110	4.7	4.7	44	7.9	871-3270	2200	2200	50	.2
871-3115	5.6	5.6	47	7.9	871-3275	2700	2700	47	.2
871-3120	6.8	6.8	50	7.9	871-3280	3300	3300	43	.2
871-3125	8.2	8.2	50	7.9	871-3285	3900	3900	43	.2
871-3130	10	10	49	7.9	871-3290	4700	4700	44	.2
871-3135	12	12	55	2.5	871-3300	6800	6800	43	.2
871-3140	15	15	44	2.5	871-3310	10,000	10,000	39	.2
871-3145	18	18	45	2.5	871-3320	15,000	15,000	31	.07
871-3150	22	22	46	2.5	871-3330	22,000	22,000	27	.07
871-3155	27	27	49	2.5	871-3340	33,000	33,000	27	.07
871-3160	33	33	45	2.5	871-3350	47,000	47,000	23	.07
871-3165	39	39	53	2.5	871-3355	56,000	56,000	23	.07
871-3170	47	47	52	2.5	871-3360	68,000	68,000	23	.07
871-3175	56	56	49	2.5	871-3380	82,000	82,000	21	.07
871-3180	68	68	51	2.5	871-3390	100,000	100,000	18	.07

"PEE-WEE" SUB-MINIATURE RF INDUCTORS

- 0.85x.155"

Extremely small, meets MIL-C-15305 Grade an Class 5 requirements. ±10% tol. 300 V rms d electric strength. −20°C to +80°C. .085 dia. .155" length. #26, 1½" leads. Av. wt./100, 3 oz.

μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
.1-1.0	3.76	3.57	2.38	1.70	1.31	1.09	.99
1.2-4.7	4.14	3.93	2.62	1.87	1.44	1.20	1.09
5.6-10	4.32	4.10	2.73	1.95	1.50	1.25	1.13
12-27	4.66	4.43	2.95	2.11	1.62	1.35	1.23
33-100	5.08	4.82	3.21	2.29	1.76	1.47	1.34
120-10000	5.75	5.46	3.64	2.60	2.00	1.67	1.52

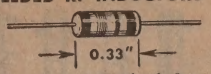
Stock No.	Type PW-	Ind. μH	Q @ MHz		Stock No.	Type PW-	Ind. μH	Q @ MHz	
871-2500	.10	.10	52	25	871-2550	4.7	4.7	45	7.9
871-2502	.12	.12	52	25	871-2552	5.6	5.6	45	7.9
871-2505	.15	.15	52	25	871-2555	6.8	6.8	45	7.9
871-2508	.18	.18	55	25	871-2557	8.2	8.2	45	7.9
871-2510	.22	.22	55	25	871-2560	10	10	45	7.9
871-2512	.27	.27	55	25	871-2562	12	12	45	2.5
871-2515	.33	.33	52	25	871-2565	15	15	45	2.5
871-2517	.39	.39	52	25	871-2567	18	18	45	2.5
871-2520	.47	.47	50	25	871-2570	22	22	46	2.5
871-2522	.56	.56	50	25	871-2572	27	27	48	2.5
871-2525	.68	.68	48	25	871-2575	33	33	48	2.5
871-2527	.82	.82	48	25	871-2577	39	39	48	2.5
871-2530	1.0	1.0	45	25	871-2580	47	47	50	2.5
871-2532	1.2	1.2	45	7.9	871-2585	68	68	55	2.5
871-2535	1.5	1.5	45	7.9	871-2590	100	100	55	2.5
871-2537	1.8	1.8	45	7.9	871-2595	150	150	34	.7
871-2540	2.2	2.2	45	7.9	871-2600	220	220	36	.7
871-2542	2.7	2.7	45	7.9	871-2605	330	330	36	.7
871-2545	3.3	3.3	42	7.9	871-2610	470	470	38	.7
871-2547	3.9	3.9	45	7.9	871-2620	1000	1000	40	.7

Best Record of Orders Filled in the Natio

Miniature Molded Inductors

WEE WEE DUCTOR" MINIATURE SHIELDED RF INDUCTORS

gh inductance. Shielded. Encapsulat-, non-flammable. Meet MIL-C-15305C, ade 1, Class B. Oper. temp., −55° to 125°C. Tol., ±10%. Less than 3% upling. 0.33x0.133" dia. 1¼"x#24 leads. Av. wt. per hundred, 3oz.

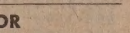


μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
Values 0.1-0.68	1.63	1.55	1.24	1.13	1.03	.93	.82
Values 1-10	1.74	1.65	1.34	1.24	1.13	1.03	.93
Values 15-1000	2.01	1.91	1.56	1.39	1.29	1.13	1.03

Stock No.	Type WEE-	Ind. μH	Q @ MHz		Stock No.	Type WEE-	Ind. μH	Q @ MHz	
71-8000	.10	.10	42	25	871-8155	39	39	38	2.5
71-8005	.12	.12	42	25	871-8160	47	47	42	2.5
71-8010	.15	.15	42	25	871-8165	56	56	41	2.5
71-8015	.18	.18	42	25	871-8170	68	68	46	2.2
71-8020	.22	.22	42	25	871-8175	82	82	46	2.5
71-8025	.27	.27	42	25	871-8180	100	100	43	2.5
71-8030	.33	.33	42	25	871-8185	120	120	50	.79
71-8035	.39	.39	42	25	871-8190	150	150	49	.79
71-8040	.47	.47	41	25	871-8195	180	180	56	.79
71-8045	.56	.56	39	25	871-8200	220	220	53	.79
71-8050	.68	.68	36	25	871-8205	270	270	57	.79
71-8055	.82	.82	35	25	871-8210	330	330	57	.79
71-8060	1.0	1.0	42	25	871-8215	390	390	57	.79
71-8065	1.2	1.2	38	7.9	871-8220	470	470	50	.79
71-8070	1.5	1.5	38	7.9	871-8222	560	560	50	.79
71-8075	1.8	1.8	38	7.9	871-8224	680	680	56	.79
71-8080	2.2	2.2	36	7.9	871-8226	820	820	49	.79
71-8085	2.7	2.7	38	7.9	871-8230	1000	1000	49	.79
71-8090	3.3	3.3	38	7.9	871-8235	1200	1200	55	.25
71-8095	3.9	3.9	40	7.9	871-8240	1500	1500	55	.25
71-8100	4.7	4.7	42	7.9	871-8245	1800	1800	55	.25
71-8105	5.6	5.6	42	7.9	871-8250	2200	2200	55	.25
71-8110	6.8	6.8	45	7.9	871-8255	2700	2700	55	.25
71-8115	8.2	8.2	47	7.9	871-8260	3300	3300	55	.25
71-8120	10	10	51	7.9	871-8265	3900	3900	55	.25
71-8125	12	12	51	2.5	871-8270	4700	4700	55	.25
71-8130	15	15	45	2.5	871-8275	5600	5600	55	.25
71-8135	18	18	43	2.5	871-8280	6800	6800	50	.25
71-8140	22	22	42	2.5	871-8285	8200	8200	50	.25
71-8145	27	27	37	2.5	871-8290	10,000	10,000	50	.25
71-8150	33	33	46	2.5					

"SUPER WEE-WEE" FIXED INDUCTOR

oxy molded. Shielded. T leads. Meet MIL-C-305C, Grade 1, Class B. 700 V rms. Wt., 3 oz.



Values in μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
.1-.82	1.82	1.73	1.38	1.27	1.15	1.04	.92
1.0-12	1.93	1.83	1.50	1.38	1.27	1.15	1.04
15-1000	2.24	2.13	1.73	1.55	1.44	1.27	1.15
1200-3300	2.84	2.70	2.16	1.87	1.71	1.58	1.47
3900-10,000	3.56	3.38	2.70	2.35	2.14	1.98	1.84

Stock No.	Type SW-W-	Ind. μH	Nom. Q @ MHz		Stock No.	Type SW-W-	Ind. μH	Nom. Q @ MHz	
71-4000	.10	.10	42	25	871-4155	39	39	46	2.5
71-4005	.12	.12	42	25	871-4160	47	47	46	2.5
71-4010	.15	.15	42	25	871-4165	56	56	48	2.5
71-4015	.18	.18	42	25	871-4170	68	68	48	2.5
71-4020	.22	.22	42	25	871-4175	82	82	46	2.5
71-4025	.27	.27	42	25	871-4180	100	100	46	2.5
71-4030	.33	.33	42	25	871-4185	120	120	53	.79
71-4035	.39	.39	42	25	871-4190	150	150	53	.79
71-4040	.47	.47	41	25	871-4195	180	180	53	.79
71-4045	.56	.56	39	25	871-4200	220	220	55	.79
71-4050	.68	.68	36	25	871-4205	270	270	57	.79
71-4055	.82	.82	35	25	871-4210	330	330	57	.79
71-4060	1.0	1.0	38	25	871-4215	390	390	57	.79
71-4065	1.2	1.2	38	7.9	871-4220	470	470	57	.79
71-4070	1.5	1.5	38	7.9	871-4225	560	560	61	.79
71-4075	1.8	1.8	38	7.9	871-4230	680	680	61	.79
71-4080	2.2	2.2	38	7.9	871-4235	820	820	58	.79
71-4085	2.7	2.7	38	7.9	871-4240	1000	1000	58	.79
71-4090	3.3	3.3	38	7.9	871-4245	1200	1200	55	.25
71-4095	3.9	3.9	42	7.9	871-4250	1500	1500	55	.25
71-4100	4.7	4.7	42	7.9	871-4255	1800	1800	55	.25
71-4105	5.6	5.6	42	7.9	871-4260	2200	2200	55	.25
71-4110	6.8	6.8	45	7.9	871-4265	2700	2700	55	.25
71-4115	8.2	8.2	47	7.9	871-4270	3300	3300	55	.25
71-4120	10	10	51	7.9	871-4275	3900	3900	55	.25
71-4125	12	12	51	2.5	871-4280	4700	4700	55	.25
71-4130	15	15	45	2.5	871-4285	5600	5600	55	.25
71-4135	18	18	45	2.5	871-4290	6800	6800	50	.25
71-4140	22	22	45	2.5	871-4295	8200	8200	50	.25
71-4145	27	27	45	2.5	871-4300	10,000	10,000	50	.25
71-4150	33	33	46	2.5					

TYPE "VIV" MINIATURE VARIABLE INDUCTORS

Epoxy encapsulated variable inductors conforming to MIL-C-15305A, Grade 1, Class B. Stable to extreme temperature variations. Inductance values from 0.10 μH to 4700 μH with high Q. Tunable range: values 0.33 μH—4700, ±20%; values 0.15 μH—0.22 μH, ±15%; 0.1 μH, ±10%. Size, ½"x.400" dia. Vertical mounting—AWG #22 start and finish leads .300" apart. Av. shpg. wt. 1 oz.

μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
Values 0.1-15	3.35	3.35	2.68	2.33	2.12	1.96	1.83
Values 22-4700	3.58	3.58	2.86	2.49	2.27	2.10	1.96

Stock No.	Type VIV-	Nom. μH	Q @ MHz		Stock No.	Type VIV-	Nom. μH	Q @ MHz	
871-5000	.10	.10	85	25	871-5140	33	33	54	2.5
871-5010	.15	.15	100	25	871-5150	47	47	51	2.5
871-5020	.22	.22	100	25	871-5160	68	68	55	2.5
871-5030	.33	.33	100	25	871-5170	100	100	50	2.5
871-5040	.47	.47	100	25	871-5180	150	150	50	.79
871-5050	.68	.68	100	25	871-5190	220	220	50	.79
871-5060	1.0	1.0	90	25	871-5200	330	330	48	.79
871-5070	1.5	1.5	70	7.9	871-5210	470	470	45	.79
871-5080	2.2	2.2	73	7.9	871-5220	680	680	42	.79
871-5085	3.3	3.3	80	7.9	871-5230	1000	1000	40	.79
871-5090	4.7	4.7	75	7.9	871-5235	1500	1500	40	.25
871-5100	6.8	6.8	80	7.9	871-5240	2200	2200	44	.25
871-5110	10	10	82	7.9	871-5245	3300	3300	46	.25
871-5120	15	15	65	2.5	871-5250	4700	4700	48	.25
871-5130	22	22	55	2.5					

WEE V-L SHIELDED VARIABLE INDUCTORS

Subminiature, hi-Q, epoxy molded inductors. Inductance adjustable ±10% of rated value. Meet MIL-C-15305C Style LT-K, Grade 1, Class B. Moisture, vibration, shock resistant. Shielded. Oper. temp., −55° to +125° C. Up to 70,000 ft. alt. 300 WVDC. 0.2" grid spacing. Size, 0.4x0.3" dia. Av. shpg. wt. per 100, 3½ oz.

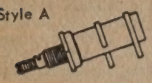
Values in μH	EACH						
	1-9	10-24	25-49	50-99	100-249	250-499	500-Up
.10-1.0	6.18	5.87	4.70	4.08	3.71	3.43	3.19
1.2-10k	5.18	4.89	3.91	3.40	3.09	2.85	2.66
12k-100k	7.35	6.98	5.59	4.85	4.42	4.08	3.80

Stock No.	Type WEE-VL-	Ind. μH	Nom. Q	Stock No.	Type WEE-VL-	Ind. μH	Nom. Q
871-6940	.10	.10	70	871-7115	120	120	95
871-6945	.12	.12	70	871-7120	150	150	90
871-6950	.15	.15	70	871-7125	180	180	95
871-6955	.18	.18	70	871-7130	220	220	95
871-6960	.22	.22	70	871-7135	270	270	100
871-6965	.27	.27	80	871-7140	330	330	100
871-6970	.33	.33	80	871-7145	390	390	100
871-6975	.39	.39	80	871-7150	470	470	100
871-6980	.47	.47	80	871-7155	560	560	95
871-6985	.56	.56	80	871-7160	680	680	100
871-6990	.68	.68	80	871-7165	820	820	90
871-6995	.82	.82	85	871-7170	1000	1000	100
871-7000	1.0	1.0	85	871-7175	1200	1200	95
871-7005	1.2	1.2	90	871-7180	1500	1500	90
871-7010	1.5	1.5	100	871-7185	1800	1800	100
871-7015	1.8	1.8	115	871-7190	2200	2200	100
871-7020	2.2	2.2	110	871-7195	2700	2700	95
871-7025	2.7	2.7	110	871-7200	3300	3300	90
871-7030	3.3	3.3	90	871-7205	3900	3900	85
871-7035	3.9	3.9	90	871-7210	4700	4700	85
871-7040	4.7	4.7	95	871-7215	5600	5600	85
871-7045	5.6	5.6	95	871-7220	6800	6800	75
871-7050	6.8	6.8	85	871-7225	8200	8200	80
871-7055	8.2	8.2	95	871-7230	10,000	10,000	70
871-7060	10	10	90	871-7235	12,000	12,000	70
871-7065	12	12	120	871-7240	15,000	15,000	70
871-7070	15	15	120	871-7245	18,000	18,000	70
871-7072	18	18	115	871-7250	22,000	22,000	70
871-7074	22	22	125	871-7255	27,000	27,000	70
871-7076	27	27	115	871-7260	33,000	33,000	70
871-7080	33	33	120	871-7265	39,000	39,000	70
871-7085	39	39	120	871-7270	47,000	47,000	70
871-7090	47	47	110	871-7275	56,000	56,000	70
871-7095	56	56	115	871-7280	68,000	68,000	60
871-7100	68	68	105	871-7285	82,000	82,000	60
871-7105	82	82	105	871-7350	100,000	100,000	60
871-7110	100	100	95				

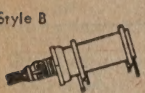
J. W. Miller Coils, Coil Forms and Shields

J. W. MILLER ADJUSTABLE RF COIL FORMS

Style A



Style B



Our wide selection of precision-made, bushing-mounted ceramic coil forms lets you choose the exact style and frequency range you require for optimum performance in most standard and industrial electronic equipment. All metal parts are plated for protection against corrosion. Fully moisture-proof cores are made of powdered iron except 100 MHz and up (suffix -5) which are brass. Available in selected frequency ranges of 0.2 MHz to 100 MHz and up, or as form alone, without tuning core. Types 60A022 and 60A024 both have two collars, one and two terminals per collar, respectively. All types are supplied complete with mounting hardware. Illustrations (A) and (B) above show the basic styles available. **Quantities of 100 and more are shipped bulk packed, with freight prepaid.** Av. shpg. wt. 2 oz.

SERIES 4300 COIL FORMS

Style A. With two wire ring terminals.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EA.	BULK PACKED		
				1-99	100-249	250-499	500-Up
855-3206	4300-0	.593x.205	Form only	1.20	.80	.60	.50
855-3209	4300-2	.593x.205	1.0-2.0 MHz	1.35	.90	.68	.56
855-3222	4300-3	.593x.205	20-50 MHz	1.35	.90	.68	.56
855-3224	4300-4	.593x.205	50-200 MHz	1.35	.90	.68	.56
855-3226	4300-5	.593x.205	100 and Up	1.56	1.04	.78	.65
855-3228	4300-6	.593x.205	2.0-40 MHz	1.35	.90	.68	.56
855-3229	4300-7	.593x.205	40-300 MHz	1.35	.90	.68	.56

SERIES 4500 COIL FORMS

Style A. With two wire ring terminals.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EA.	BULK PACKED		
				1-99	100-249	250-499	500-Up
855-3802	4500-0	.858x.260	Form only	1.29	.86	.65	.54
855-3806	4500-2	.858x.260	1.0-20 MHz	1.44	.96	.72	.60
855-3308	4500-3	.858x.260	20-50 MHz	1.44	.96	.72	.60
855-3309	4500-4	.858x.260	50-200 MHz	1.44	.96	.72	.60
855-3326	4500-7	.858x.260	40-300 MHz	1.44	.96	.72	.60

SERIES 60A022 AND 60A024 COIL FORMS

Style B. Type 60A022 has 1 terminal/collar; 60A024, 2 per collar.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EA.	BULK PACKED		
				1-99	100-249	250-499	500-Up
855-0738	60A022-0	.593x.205	Form only	1.62	1.08	.81	.68
855-0740	60A022-1	.593x.205	0.2-1.5 MHz	1.80	1.20	.90	.75
855-0742	60A022-2	.593x.205	1.0-20 MHz	1.80	1.20	.90	.75
855-0744	60A022-3	.593x.205	20-50 MHz	1.80	1.20	.90	.75
855-1646	60A022-4	.593x.205	50-200 MHz	1.80	1.20	.90	.75
855-0748	60A022-5	.593x.205	100 and Up	2.04	1.36	1.02	.85
855-0750	60A022-6	.593x.205	2.0-25 MHz	1.80	1.20	.90	.75
855-0756	60A024-0	.593x.205	Form only	1.53	1.02	.77	.64
855-0760	60A024-2	.593x.205	1.0-20 MHz	1.80	1.20	.90	.75
855-0762	60A024-3	.593x.205	20-50 MHz	1.80	1.20	.90	.75
855-0764	60A024-4	.593x.205	50-200 MHz	1.80	1.20	.90	.75
855-0766	60A024-5	.593x.205	100 and Up	2.04	1.36	1.02	.85

SERIES 66A022 COIL FORMS

Style B. Two collars, with one terminal per collar.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EA.	BULK PACKED		
				1-99	100-249	250-499	500-Up
855-1746	66A022-1	1.249x.500	0.2-1.5 MHz	2.49	1.66	1.25	1.04
855-1748	66A022-2	1.249x.500	1.0-20 MHz	2.49	1.66	1.25	1.04
855-1750	66A022-3	1.249x.500	20-50 MHz	2.49	1.66	1.25	1.04
855-1752	66A022-4	1.249x.500	50-200 MHz	2.49	1.66	1.25	1.04
855-1756	66A022-6	1.249x.500	2.0-40 MHz	2.49	1.66	1.25	1.04

SERIES 66A024 COIL FORMS

Style B. Two collars, with two terminals per collar.

Stock No.	Mfr's Type	Length x Dia. (Inches)	Freq. Range of Core Material	EA.	BULK PACKED		
				1-99	100-249	250-499	500-Up
855-1760	66A024-0	1.249x.500	Form only	2.25	1.50	1.13	.94
855-1762	66A024-1	1.249x.500	0.2-1.5 MHz	2.49	1.66	1.25	1.04
855-1764	66A024-2	1.249x.500	1.0-20 MHz	2.49	1.66	1.25	1.04
855-1766	66A024-3	1.249x.500	20-50 MHz	2.49	1.66	1.25	1.04
855-1768	66A024-4	1.249x.500	50-200 MHz	2.49	1.66	1.25	1.04
855-1772	66A024-6	1.249x.500	2.0-40 MHz	2.49	1.66	1.25	1.04

RF COIL FORMS

For use in most electronic equ ment. Types 20A000-2, 21A000 and 22A000-2 are resinite pheno impregnated tubing and can certified to meet MIL-P-798, Ty PBG Specs. Types 40A000C 41A000CBI, 42A000CBI, 43A0 CBI, and 4400, are silicone-impregnated ceramic material that c forms to JAN-1-10, grade .5 specs. Type 4200 constructed of nyl Hardware, core with range of 1-30 MHz. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	EACH	BULK PACKED		
		1-99	100-249	250-499	500-U
855-0536	20A000-2	1.17	.78	.59	.49
855-0622	21A000-2	1.17	.78	.59	.49
855-0696	22A000-2	1.71	1.14	.86	.71
855-0988	40A000CBI	1.80	1.20	.90	.75
855-1044	41A000CBI	1.89	1.26	.95	.79
855-1094	42A000CBI	1.95	1.30	.98	.81
855-1168	43A000CBI	2.01	1.34	1.01	.84
855-3184	4200-8	.93	.62	.47	.39
855-3266	4400-2	1.65	1.10	.83	.69

MINIATURE AND STANDARD RF COILS

A wide selection of variable coils desig for exacting requirements. All are wou on high-grade silicone-impregnated cera forms to reduce moisture absorption. Bo Standard and Miniature Types are tu by means of a powdered-iron core. Suppl complete with mounting hardware, see belo

STANDARD. High "Q" units with large inductance range. Mounti bushing requires a ¼" dia. hole. ⅜" dia., 1 1/16" long. Av. wt., 2

Stock No.	Mfr's Type	Inductance		EA.	BULK PACKED		
		Min. μH	Max. μH	1-99	100-249	250-499	500-
855-3278	4403	.99	1.5	2.19	1.46	1.10	.9
855-3279	4404	1.6	3.1	2.22	1.48	1.11	.9
855-3282	4405	3.3	6.5	2.25	1.50	1.13	.9
855-3284	4406	7.3	14.0	2.31	1.54	1.16	.9
855-3286	4407	16.0	29.0	2.37	1.58	1.19	.9
855-3288	4408	33.0	66.0	2.52	1.68	1.26	1.0
855-3289	4409	74	124	2.58	1.72	1.29	1.0
855-3292	4410	138	238	2.61	1.74	1.31	1.0
855-3294	4411	270	451	2.64	1.76	1.32	1.1
855-3295	4412	495	760	2.67	1.78	1.34	1.1
855-3296	4413	825	1300	2.70	1.80	1.35	1.1
855-3298	4414	1400	2000	2.70	1.80	1.35	1.1

MINIATURE. Same high-quality coils as above, but designed limited-space applications. Units mount in a 3/16" diameter ho Size: ¼" dia., ⅞" long. Includes all required mounting hardwa nut, lock washer and spring clip. Av. shpg. wt., 2 oz.

855-3328	4501	.44	.76	1.98	1.32	.99	.83
855-3329	4502	1.1	1.5	1.98	1.32	.99	.83
855-3330	4503	1.7	2.7	1.98	1.32	.99	.83
855-3332	4504	3.1	4.8	1.98	1.32	.99	.83
855-3334	4505	5.5	8.6	2.07	1.38	1.04	.86
855-3336	4506	9.9	15.0	2.16	1.44	1.08	.90
855-3338	4507	17.0	23.0	2.22	1.48	1.11	.93
855-3342	4508	26.0	33.0	2.25	1.50	1.13	.94
855-3344	4509	38.0	57.0	2.25	1.50	1.13	.94
855-3345	4511	66.0	114	2.31	1.54	1.16	.96
855-3346	4512	120	190	2.34	1.56	1.17	.98
855-3348	4513	209	314	2.37	1.58	1.19	.99
855-3352	4514	350	475	2.40	1.60	1.20	1.00

ALUMINUM COIL SHIELDS

Drawn aluminum, tarnish-proof satin fini Two #6-32 threaded bolts riveted to shie *Has ¼" dia. hole in top. Av. shpg. wt., 2

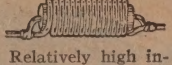
Stock No.	Type No.	Dimensions	Mtg. Center	EA.	BULK PACKED		
				1-99	100-249	250-499	500 Up
855-0254	S-21	2 1/16" dia. x 3 1/2"	2"	.72	.48	.36	.30
855-0258	S-32	1 1/8" sq. x 2 1/8"	1 1/16"	.72	.48	.36	.30
855-0260	*S-33	1 1/8" sq. x 2 1/8"	1 1/16"	.72	.48	.36	.30
855-0262	S-34	1" sq. x 1 1/4"	.....	.72	.48	.36	.30
855-0266	S-42	2" dia. x 3"	.....	.69	.46	.35	.29
855-0268	S-42C	Cover for S-42	.....	.59	.40	.30	.25
855-0270	S-51	1 3/8" sq. x 3 1/4"	1 5/16"	.72	.48	.36	.30
855-0272	S-74	1 1/4" dia. x 2"	1 5/16"	.72	.48	.36	.30
855-0186	L-110	2" sq. x 4 1/4"	1 15/16"	1.02	.68	.51	.43
855-0274	S-727	2 1/16" dia. x 2 1/2"	2"	.72	.48	.36	.30

Quantities of 100 Pieces and Up Shipped Bulk Packed

Allied Electronics is the World's Largest Supplier of Industrial Componen

J. W. Miller Filter Chokes, Coil Winder

HEAVY-DUTY HASH FILTER CHOKES



Stock No.	Mfr's Type	μH ±20%	Max. DC Ohms	EACH
5-3628	5218	3.35	.010	1.68
3-3632	5220	8.8	.021	1.68
5-3640	5240	40.0	.082	1.32
5-3642	5248	68.0	.054	1.50
5-3644	5250	100.0	.216	1.50

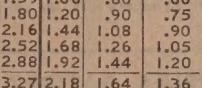
Relatively high inductance, high current chokes. Molded, powdered iron form. 9/16" dia., 1¼" long. Av. wt., 2 oz.

DUO-LATERAL LINE FILTER CHOKES

eal for AC lines to filter RF or noise pulses from nsmitters, power supplies, intermittent-type itching systems—many more. Type 7825 on bake- e form; 1⅞x1¾". 7827, ceramic form; 2½x4". 4 oz.

ock No.	Type No.	Millihenries	Amps	DC Ohms	EACH
55-4676	7825	.600	2	.7	2.97
55-4686	7827	.370	10	.15	8.34

IDE-RANGE ADJUSTABLE INDUCTORS



r prototypes when inductance value is known. Max. diameter ¾"; length, ¼". *Indicates μH. Shpg. wt., 3 oz.

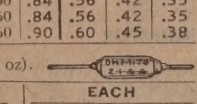
UNTAPPED INDUCTORS

Stock No.	Mfr's Type	Min. mH	Q Min.	Max. mH	Q Min.	EA. 1-99	BULK PACKED 100-249	250-499	500-Up
5-4878	9001	40*	85	.24	220	1.59	1.06	.80	.66
5-4880	9002	.18	80	.80	170	1.80	1.20	.90	.75
5-4882	9003	.57	73	2.80	110	2.16	1.44	1.08	.90
5-4884	9004	2.10	72	8.00	88	2.52	1.68	1.26	1.05
5-4886	9005	6.00	69	16.0	105	2.88	1.92	1.44	1.20
5-4888	9006	12.0	43	40.0	72	3.27	2.18	1.64	1.36
5-4890	9007	30.0	43	105.0	76	3.36	2.24	1.68	1.40
5-4892	9008	78.0	36	240.0	61	3.39	2.26	1.70	1.41
5-4894	9009	180.0	20	750.0	41	3.54	2.36	1.77	1.48

APPED OSCILLATING INDUCTORS (Basic Type Refers to Table Above)

Stock No.	Mfr's Type	Basic Type	Total Turns	Turns to Tap	EA. 1-99	BULK PACKED 100-249	250-499	500-Up
5-4896	9011	9001	102	34	1.98	1.32	.99	.83
5-4900	9013	9003	376	128	2.52	1.68	1.26	1.05
5-4902	9014	9004	608	203	2.85	1.90	1.43	1.19
5-4906	9016	9006	1480	493	3.27	2.18	1.64	1.36
5-4920	9018	9008	3860	1286	3.78	2.52	1.89	1.58
5-4922	9019	9009	6100	2030	3.95	2.64	1.98	1.65

OISTURE, FUNGUS-RESISTANT RF CHOKES



henolic, 3/16" dia. x ¾" long; iron, 7/32x1/8". nax.; †min. ±5% except: ‡ ±20%, ±10%. F is self-resonant freq. 2 oz.

PHENOLIC FORM—SINGLE LAYER WINDING

Stock No.	Mfr's Type	μH	†Q	†F MHz	DC* Ohms	mA Max.	EA. 1-99	BULK PACKED 100-249	250-499	500-Up
55-3482	4602	‡1.0	60	190	.050	2000	.66	.44	.33	.28
55-3486	4604	§1.5	58	149	.093	1800	.66	.44	.33	.28
55-3489	4606	§2.4	56	120	.190	1500	.66	.44	.33	.28
55-3508	4612	§10.0	36	61	1.50	500	.69	.46	.35	.29

IRON CORE FORM—SINGLE LAYER WINDING

55-3526	4624	15	62	33	.17	1000	.75	.50	.38	.31
55-3536	4628	39	70	20	.65	600	.78	.52	.39	.33
55-3538	4629	55	72	17	1.0	500	.84	.56	.42	.35
55-3550	4632	100	107	12	3.0	400	.84	.56	.43	.35

PHENOLIC FORM—3-SECTION WINDING

55-3556	4642	100	49	11	5.4	160	.84	.56	.42	.35
55-3558	4644	150	53	8.8	6.5	160	.84	.56	.42	.35
55-3562	4646	240	56	7.2	8.5	160	.84	.56	.42	.35
55-3582	4652	1000	59	3.7	19.0	160	.90	.60	.45	.38

OHMITE RF CHOKES (Av. shpg. wt., 2 oz).

Stock No.	Mfr's Type	μH	mA	MHz	EACH 1-9	10-24	25-Up
876-4840	Z-460	0.2	1000	320-520	.48	.41	.34
876-4834	Z-235	0.84	1000	160-350	.48	.41	.34
876-4829	Z-144	1.8	1000	80-200	.48	.41	.34
876-4824	Z-50	7.0	1000	35-110	.51	.43	.36
876-4819	Z-28	21	600	20-60	.64	.54	.45
876-4814	Z-14	44	600	7-35	.75	.64	.53
876-4807	Z-7	84	1000	3-20	1.50	1.28	1.05

J.W. MILLER RF POWER TRANSFORMERS

sed with RF oscillator and 1B3 rectifier for high-voltage ower supply. Simple resistive-capacitive filter will give w-ripple output. Complete schematic included with ch unit. Av. wt. 2½ oz.

ype 4526. Provides up to 10,000 volts DC power (up to 0,000 volts in rectifier-tripler circuit). 6x2¼" diameter.

55-3364 ..... 11.43

Best Percentage of Orders Filled in the Country

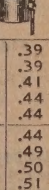
J. W. MILLER RF CHOKES

SUBMINIATURE IRON CORE RF CHOKES

Type 70F. Iron core RF chokes for high reliability in ultra-miniature components. Ideal for network and filter design, delay lines, computer applications. Rated 50 mA max. DC current. ¼" in length except: 10-.82 μH, 5/16"; 3.30-22 mH, 25-100 mH, 3/8". †Millihenries. Av. shpg. wt., 2 oz.

Stock No.	Type 70-F-	μH	Min. Q	Freq.	EA. 1-99	BULK PACKED 100-249	250-499	500-Up
855-1884	337AP	.33	47	25 MHz	.72	.48	.36	.30
855-1968	827AP	.82	48	25 MHz	.72	.48	.36	.30
855-1794	106AI	1	41	25 MHz	.72	.48	.36	.30
855-1850	226AI	2.2	43	7.9 MHz	.72	.48	.36	.30
855-1882	336AI	3.3	40	7.9 MHz	.72	.48	.36	.30
855-1792	105AI	10	36	7.9 MHz	.84	.56	.42	.35
855-1806	125AI	12	52	2.5 MHz	.84	.56	.42	.35
855-1848	225AI	22	51	2.5 MHz	.84	.56	.42	.35
855-1860	255AI	25	48	2.5 MHz	.84	.56	.42	.35
855-1880	335AI	33	50	2.5 MHz	.84	.56	.42	.35
855-1790	104AI	100	25	2.5 MHz	.84	.56	.42	.35
855-1804	124AI	120	40	790 kHz	.84	.56	.42	.35
855-1822	154AI	150	47	790 kHz	.84	.56	.42	.35
855-1840	204AI	200	47	790 kHz	.84	.56	.42	.35
855-1846	224AI	220	46	790 kHz	.84	.56	.42	.35
855-1878	334AI	330	41	790 kHz	.84	.56	.42	.35
855-1902	474AI	470	35	790 kHz	.90	.60	.45	.38
855-1938	684AI	680	37	790 kHz	.90	.60	.45	.38
855-1788	103AI	1.00mH†	30	790 kHz	.90	.60	.45	.38
855-1820	153AI	1.50mH†	40	250 kHz	.90	.60	.45	.38
855-1844	223AI	2.20mH†	40	250 kHz	.96	.64	.48	.40
855-1856	253AI	2.50mH†	48	250 kHz	.99	.66	.50	.41
855-1876	333AI	3.30mH†	52	250 kHz	.99	.66	.50	.41
855-1900	473AI	4.70mH†	49	150 kHz	.99	.66	.50	.41
855-1890	683AI	6.80mH†	51	250 kHz	.99	.66	.50	.41
855-1892	102AI	10 mH†	41	250 kHz	1.20	.80	.60	.50
855-1830	182AI	18 mH†	49	79 kHz	1.29	.86	.65	.54
855-1842	222AI	22 mH†	50	79 kHz	1.38	.92	.69	.58
855-1862	272AF	27 mH†	61	79 kHz	1.29	.86	.65	.54
855-1784	101AF	100 mH†	48	79 kHz	1.80	1.20	.90	.75

FERRITE CORE RF CHOKES



Meet industrial standards. High permeability of the ferrite core provides increased inductance—permits size of choke to be much smaller for a given inductance than one with a conventional core. Applications: transmitters, receivers, test equipment. Provide high inductance, low DC resistance. Core ¼" dia.; ⅞" long. 1½" axial leads. Av. wt., 2 oz.

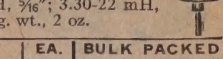
Stock No.	Mfr's Type	mH	Ohms	mA	Dia.	EA. 1-99	BULK PACKED 100-249	250-499	500-Up
855-3992	6302	2.5	9.0	160	15/32"	1.17	.78	.59	.49
855-3996	6304	5	14	160	17/32"	1.35	.90	.68	.56
855-4000	6306	10	31	100	17/32"	1.50	1.00	.75	.63
855-4004	6308	25	82	65	17/32"	1.50	1.00	.75	.63
855-4008	6310	50	127	65	5/8"	1.80	1.20	.90	.75

PRINTED CIRCUIT RF CHOKES

Available in a wide range of inductances. With printed-circuit type mounting lugs for quick, easy soldering. Coil forms are ⅞" long. Av. shpg. wt., 1½ oz.

855-2692	970	1	20.6	125	11/16"	.93	.62	.47	.39
855-2696	972	1.5	26.4	125	¾"	.93	.62	.47	.39
855-2702	975	2.7	37.4	125	13/16"	.99	.66	.50	.41
855-2704	976	3.3	41.8	125	13/16"	1.05	.70	.53	.44
855-2708	978	4.7	51.8	125	⅞"	1.05	.70	.53	.44
855-2726	982	10	81.6	100	⅞"	1.05	.70	.53	.44
855-2730	984	15	105	100	15/16"	1.17	.78	.59	.49
855-2734	986	22	130	75	31/32"	1.20	.80	.60	.50
855-2736	987	27	145	75	1 1/16"	1.23	.82	.62	.51
855-2750	994	100	473	50	1 1/16"	1.62	1.08	.81	.68

MORRIS "COILMASTER"

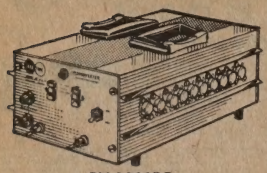


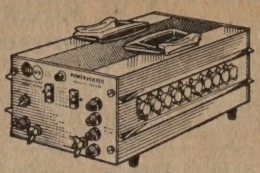
Easy-to-operate coil winder makes professional-looking self-supporting, universal and honeycomb coils; solenoids; single-layer coils; etc. Just set winder for type of coil desired and turn handle. Indicator counts turns as you wind, for neat and precise winding. Has 3 cams and 4 gears—easily adjusts for pi spacing and different types of coil forms. For use with No. 22 to No. 40 wire, and variety of coil form sizes. Base size, 5x5". Wire and coil forms not included.

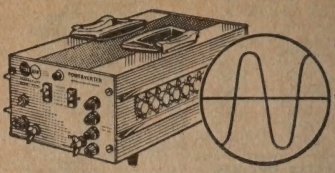
859-5401. Shpg. wt. 3 lbs. 9.00

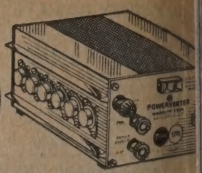
Tripp-Lite, Eico and Lectrotech Power Supplies

TRIPP-LITE SOLID-STATE DC-TO-AC INVERTERS


PV-1000FC


PV500FC


PV500SWFC


PV250FC

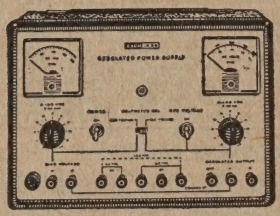
TRIPP-LITE 12- AND 24-VOLT DC 117 VOLT AC INVERTERS (*Sine Wave Output)

Stock No.	Mfr's Type	DC Input (volts)	Input Amps Max.	Max. Watts Cont.	Max. Output Watts (5 mns)	Number of Transistors	Frequency Control	Polarity Protection	Overload Pilot Light	Size (inches)	Weight	E
959-7550	PV250FC	12	25	250	275	11	Yes	No	No	3½x6¼x9	9 lbs.	1
959-7560	PV500FC	12	50	500	550	15	Yes	Yes	Yes	5x9¼x9	15 lbs.	2
959-7570	PV1000FC	12	100	1000	1100	27	Yes	Yes	Yes	5x9¼x17	35 lbs.	3
959-7585	PV1000	12	100	1000	1100	20	No	Yes	Yes	5x9¼x17	35 lbs.	3
959-7575	PV1000-24FC	24	50	1000	1100	12	Yes	Yes	Yes	5x9¼x17	35 lbs.	4
959-7580	PV1000-24	24	50	1000	1100	12	No	Yes	Yes	5x9¼x17	35 lbs.	3
959-7565	PV500SWFC*	24	50	500	500	17	Yes	Yes	Yes	5x9¼x17	35 lbs.	2

NOTE: Tripp-Lite square wave inverters are recommended for lighting, small power tools, electric razors, tape recorders radios, TV, phonographs, test equipment, etc. DO NOT USE with refrigerators, air conditioners, toasters, coffee pots, frying pans and other heavy current devices.

EICO AC AND DC POWER SUPPLIES, BATTERY ELIMINATORS

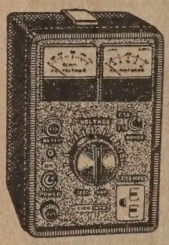
DUAL POWER SUPPLY



MODEL 1030-W. Dual independent, variable regulated DC outputs, plus dual unregulated filament voltages. Reg. B+: 0-400 VDC. Reg. Bias: 0 to −150 VDC. Filament V, 6.3 and 12.6 VAC at 3 A. 13x8½x7". 110-120 V, 50-60 Hz. AC 21 lbs.
775X1031. Factory Assembled.....99.95

DELUXE CHARGER/ ELIMINATOR

Front Panel Meters Show DC Volts, Current



MODEL 1064-W. Delivers low-ripple DC; charges 6/12 V batteries. Heavy-duty silicon rectifiers, L-C filter with iron core choke. Output: 0-8 V at 10 A continuous, 20 A intermittent; 0-16 V at 6 A continuous, 10 A interm. 8½x5¾x7½". 115VAC. 16 lbs.
775X1065. Factory Assembled.....69.95

CHARGER/ ELIMINATOR

MODEL 1060-W. Electrolytically filte low-ripple DC for 6/12 V radios. Out 0-8 V at 10 A cont., 20 A intermitten 16 V at 6 A cont., 10 A interm. Front meter, ammeter, Rugged steel case, 10½x7¾". 105-125 V, Hz AC. 19 lbs.
775X1061. Factory Assembled.....6

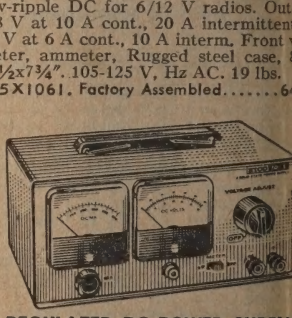
SOLID-STATE 0-30 VDC POWER SUPPLY

- Ideal for Transistor Equipment
- Full Load Ripple, 0.005% Maximum

MODEL 1020-W. Features dual-range 0.6 V and 0-30 front panel voltmeter with positive and negative binding posts. Output: 0-12 V at 150 mA; 12-24 V at 200 mA; 24-30 V at 300 mA. Front panel fuse holder; power transformer for line isolation. Steel case, 5x4x5½". 117 V, 60 Hz AC. Shpg. wt. 5 lbs.
775-1020. Factory Assembled.....34.95

CHARGER/ELIMINATOR

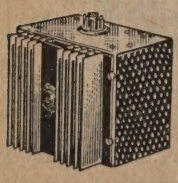
MODEL 1025-W. Solid-state 0-30 VDC power supply. Output current: 150 mA (0-12 V); 200 mA (12-14 V); 300 mA (24-30); all with 0.005% max. ripple. Front panel voltmeter, ammeter and pilot lamp. Fused. 3¾x8x 4¾". For 110-130 V, 60 Hz AC. Wt. 5 lbs.
775-1026. Factory Assembled.....49.95



REGULATED DC POWER SUPPLY

MODEL 1032-W. Solid-state supply, regu ed against line and load variations. Out 0-30 V at 0-500 mA. Regulation: 0. change, 0 to max. load. Ripple: less t 2.5 mV p-p. Voltmeter, ammeter. Fu Size, 4⅞x3¾x8⅛". 105-135 V, 50/60 AC. 5 lbs.
775-1033. Factory Assembled.....5

LECTROTECH MODULE-TYPE SOLID-STATE DC REGULATED POWER SUPPLIES



- Electrostatically Shielded Transformer
- Load and Line Voltage Regulation, .005 Volt Maximum
- Ripple and Noise, Less Than 500 Microvolts

Space-saving unit for test equipment, reference sources, bias supplies. Recovery, 50 μsec max. Op. ambient, 50°C max. Storage, −20° to +85°C. 100% overload protection. Isolated input; adjustable output. Overall, 5x5x5¼"; 3¾x2⅛" mounting centers. For 105/125/ 250 V, 48-440 Hz AC. Av. shpg. wt. 5½ lbs.

Stock No.	Mfr's Type	Output VDC	Output Amps	EACH 1-5	EACH 6-11	EACH 12-
849-4015	1015	10-15	1	95.00	89.00	82.
849-4020	1520	15-20	1	95.00	89.00	82.
849-4025	2025	20-25	1	95.00	89.00	82.
849-4030	2530	25-30	1	95.00	89.00	82.

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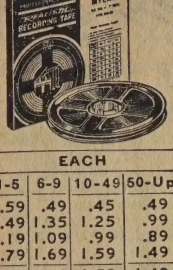
Realistic® Recording Tapes and Accessories

MYLAR AND TENSILIZED MYLAR RECORDING TAPE



TENSILIZED MYLAR BASE: pre-stretched for uniformity after repeated playings. For professional and critical recordings if thin 1.0 and 0.5 mil tapes are used.
MYLAR BASE: extra-strength DuPont "Mylar" film base. Thin tapes yield 50% (1.0 mil) or 100% (0.5 mil) greater record/play time than standard 1.5 mil tapes. Shpg. wts.: 7" Reel, 1½ lbs.; 5" Reel, ¾ lb.; 3¼ and 3" Reel, ¼ lb.

Stock No.	Type No.	Reel Size	Feet	Mil	Base	EACH 1-5	6-9	10-49	50-Up
910-0070	44-734	3"	225	1.0	Mylar	.59	.49	.45	.49
910-0071	44-760	3¼"	600	0.5	T. Mylar	1.49	1.35	1.25	.99
910-0072	44-735	5"	600	1.5	Mylar	1.19	1.09	.99	.89
910-0073	44-753	5"	900	1.0	Mylar	1.79	1.69	1.59	1.49
910-0074	44-736	5"	1200	1.5	Mylar	1.79	1.69	1.59	1.49
910-0075	44-754	7"	1800	1.0	Mylar	2.69	2.49	2.35	2.20
910-0076	44-758	7"	2400	0.5	T. Mylar	3.99	3.69	3.39	2.99
910-0077	44-766	7"	3600	0.5	T. Mylar	6.99	6.35	5.99	5.25

CONCERTAPE™ ECONOMY RECORDING TAPE

DURABLE 1.5 MIL MYLAR

Perfect for school and language lab use. Careful testing plus rugged DuPont Mylar guarantees top quality. ¼ lb.

Stock No.	Type No.	Reel Size	Feet	EACH 1-2	3-9	10-49	50-Up
910-0086	44-755	7"	1200	1.29	1.15	1.05	.89
910-0087	44-1085	5"	600	.89	.85	.79	.69

EXTRA-LENGTH 1800-FT. 1 MIL POLYESTER

Bought in quantity from America's No. 1 manufacturer. Pretested, first-line tape free of defects. 1.0 mil thickness for 50% more recording time. Shpg. wt. ½ lb.

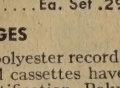
910-0088	44-1018	7"	1800	1.95	1.79	1.59	1.39

DOUBLE AND TRIPLE PLAY 0.5 MIL POLYESTER

Tensilized, stretch-free tape at lowest prices. Wt. 1 lb.

910-0089	44-1086	2⅜"	300	.69	.64	.59	.49
910-0090	44-1073	3"	300	.69	.64	.59	.49
910-0091	44-1087	3¼"	600	.99	.94	.84	.74
910-0092	44-1059	5"	1200	1.99	1.79	1.59	1.29
910-0093	44-1060	7"	2400	2.99	2.69	2.39	1.99
910-0094	44-1061	7"	3600	4.99	4.49	3.99	3.49

REALISTIC CASSETTE CARTRIDGES



WIDE-RANGE C-60 CASSETTES

A superior oxide coating with magnetic particles ⅓ the usual size reduces "dead spots." Provide longer tape head life due to less oxide coating. Formulated for wide-range frequency response—recommended for stereo recording. Low noise, low dropout, no flaking. Enclosed window prevents accumulation of dust and dirt in cartridge. Double transparent box for easy identification. *30 minutes each side. Av. shpg. wt. 4 oz.

Stock No.	Type No.	Time	EACH 1-11	12-23	24-47	48-Up
910-0095	44-605	60 minutes*	2.95	2.65	2.39	2.19

CASSETTE STORAGE ALBUM

Stores up to 12 cassettes. Keeps cassettes filed safely away from dust and grime. Provides easy accessibility.
910-0096. Type 44-612. Shpg. wt. 2 lbs. ..... Each 1.98

SET OF 3 CASSETTE "MAILERS"

Type 44-608. Sturdy plastic boxes for mailing or storage of cassettes. Complete with mailing labels. Wt. 4 oz.
910-0113. 1-11 ..... Ea. Set .39 12-Up ..... Ea. Set .29

ECONOMICAL CASSETTE CARTRIDGES

Finest quality at lowest prices. Excellent tensilized polyester recording tape for outstanding strength and long life. All cassettes have red and green polyester leaders for easy track identification. Polyester wafer pads with anti-static lubrication for long life. Each cassette packed in a rugged, heavy-duty case. *30 min./side; †45 min./side; ††60 min./side.

Stock No.	Type No.	Time Min.	Wt. Oz.	EACH 1-11	12-23	24-47	48-Up
910-0097	44-602	60*	8	1.49	1.35	1.19	1.09
910-0098	44-603	90†	12	1.99	1.79	1.59	1.49
910-0099	44-604	120††	16	2.49	2.19	1.99	1.79

SUPERTAPE™

PREMIUM QALITY TAPE

- Superior Fidelity
- Uniform Output
- Endorsed by Pros

Realistic's finest quality. Fine-grain formula that reduces hiss, print-thru and recorder head wear to the barest minimum. Priced lower than other premium quality recording, yet provides truly unsurpassed reproduction.

STANDARD SUPERTAPE ON 1.5 MIL ACETATE

Formulated to meet the most exacting requirements of the professional, educational or home recordist at lowest cost.

Stock No.	Type No.	Reel Size	Feet	Mil	Base	EACH 1-9	10-Up
910-0078	44-1870	5"	600	1.5	Acetate	1.69	1.55
910-0079	44-1871	7"	1200	1.5	Acetate	2.59	2.35

50% MORE RECORDING TIME ON 1 MIL MYLAR

Ultra-stable Mylar, extra durable base to assure trouble-free operation even in extreme heat or humidity. Retains original strength after repeated playings. Uniform sensitivity throughout. Provides extended listening time with superior quality.

910-0080	44-1872	5"	900	1.0	Mylar	2.49	2.16
910-0081	44-1873	7"	1800	1.0	Mylar	4.29	3.72

100% MORE TIME ON .5 MIL TEMPERED MYLAR

Plays twice as long and is twice as strong as other double length types. Amazingly resilient and strong. Will not get dry or brittle with age. Excellent for all general recording purposes.

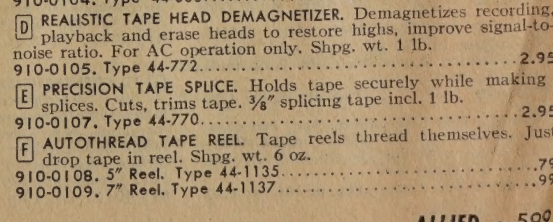
910-0082	44-1874	5"	1200	0.5	T. Mylar	3.79	3.27
910-0083	44-1875	7"	2400	0.5	T. Mylar	6.49	5.70

LOW NOISE AND HISS-REDUCING TAPE FOR PROFESSIONALS

Provides the high signal-to-noise ratio and drastically lowered hiss level required for professional recording without sacrificing other properties needed for top quality reproduction.

910-0084	44-1876	7"	1200	1.5	Acetate	2.99	2.58
910-0085	44-1877	7"	1800	1.0	Mylar	4.99	4.41

TAPE RECORDING ACCESSORIES



A REMOTE FOOT SWITCH. Connects to any recorder equipped with remote control plug. Allows control without use of hands. Shpg. wt. 1½ lbs.
910-0101. Type 44-610 ..... 2.95

B THREE-WAY BULK TAPE ERASER. Erases tape in seconds. Eliminates chance of incomplete erasure from mis-aligned recorder head. For AC operation. U.L. Listed. 5¼x2½x2¾". Shpg. wt. 10 lbs.
910-0102. Type 44-745 ..... 9.95

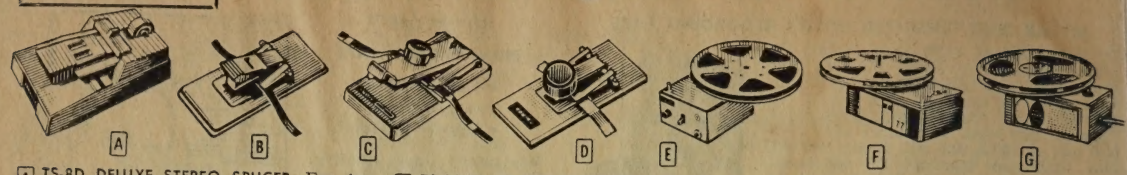
C TELEPHONE PICKUP COIL. Lets you record all phone calls without wiring. Attaches to amplifier to drive speaker. Suction cup-mounting. Clear recordings on tape or disc. ½ lb.
910-0104. Type 44-533 ..... .99

D REALISTIC TAPE HEAD DEMAGNETIZER. Demagnetizes recording, playback and erase heads to restore highs, improve signal-to-noise ratio. For AC operation only. Shpg. wt. 1 lb.
910-0105. Type 44-772 ..... 2.95

E PRECISION TAPE SPLICE. Holds tape securely while making splices. Cuts, trims tape. ⅜" splicing tape incl. 1 lb.
910-0107. Type 44-770 ..... 2.95

F AUTOTHREAD TAPE REEL. Tape reels thread themselves. Just drop tape in reel. Shpg. wt. 6 oz.
910-0108. 5" Reel. Type 44-1135 ..... .79
910-0109. 7" Reel. Type 44-1137 ..... .99

ROBINS Tape Recording Accessories



A

TS-8D DELUXE STEREO SPLICER. For 4-track tapes. Cuts diagonally with tiny "Gibson Girl" side trim. "See-thru" windows show operating position. Guide and fingers hold tape securely. Replaceable cutter, centering adjustment, integral tape dispenser. With 100 ft. of ¼" splicing tape.
913-4074. Wt. 1 lb... Ea. 12.60 2-Up 10.50

B

TS-7J JUNIOR STEREO SPLICER. Precision splicer cuts diagonally, with "Gibson Girl" trim. "See-thru" windows on knob shows cut or trim positions. Guide and fingers gently secure tape; centering adjustment for accuracy. Replaceable cutter. Uses ⅜" splicing tape. Shpg. wt., 8 oz.
913-4072.....Ea. 8.17 2-Up....6.82

C

TS-1000 1" PROFESSIONAL VIDEOTAPE SPLICER. For Ampex 1" systems. Produces "Gibson Girl" trim to prevent adhesive from harming recorder. Replaceable blades, cutter pads; centering adjustment.
913-4089. Wt. 4 lbs..Ea. 90.00 2-Up 75.00
913-4097. TSV-100. Standard diagonal cut splicer, for 1" tape. With 25 splicing patches. Wt. 1¾ lbs.....Ea. 21.40 2-Up 17.37

D

TS-500 ½" PROFESSIONAL VIDEOTAPE SPLICER. For studio work. "Gibson Girl" trimming; blades; cutter pads.
913-4080. Wt. 4 lbs..Ea. 90.00 2-Up 75.00
913-4092. TSV-50. Diagonal cut ½" splicer. With 25 patches. Wt. 1¾ lbs.....Ea. 21.40
2-Up.....Each 17.37

E

TM-100 AUDIO-VIDEO BULK TAPE ERASER. For tape to 1" on 10½" reel. 5 min. on/off cycle. Reduces background noise 50-90 dB below saturation minimum. 3¾x6x8". U.L. Listed. 115 VAC. Shpg. wt. 10 lbs.
913-4069.....Ea. 103.75 2-Up....86.50

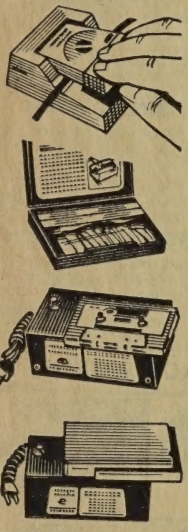
F

TM-77 DELUXE BULK TAPE ERASER. For tape reels to 7" dia.; ¼" tapes. Erasure 2 to 4 dB below erase-head level. 2¾x3¾x6¼". U.L. Listed. For 110-120 V, 50-60 Hz.
913-4062. Wt. 5 lbs..Ea. 27.65 2-Up 23.00

G

TM-44 BULK TAPE ERASER. For ¼" tape; reels to 7". Size, 5¼x2⅛x3⅛". Duty cycle: 1 minute on, 5 minutes off. For 115 V, 50-60 Hz AC. U.L. Listed.
913-4055. Wt. 2¾ lbs. Ea. 19.00 2-Up 15.75

CASSETTE, CARTRIDGE ACCESSORIES



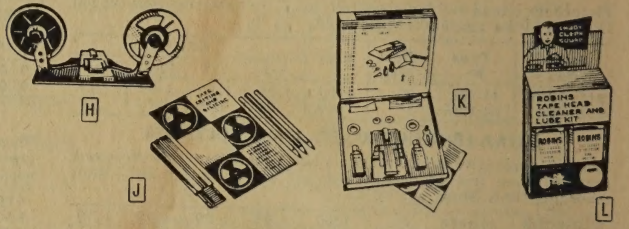
TS-115 CASSETTE TAPE SPLICER. Robins famous "Cut-N-Splice" economy model. Makes perfect cuts and splices at 45° angle. Includes 25 self-sticking splicing patches. Wt. 5 oz.
913-4078. Ea. 4.50 2-Up 3.83

TS-215 CASSETTE SPLICING BLOCK. Cuts at 45° or 90° angle. Plastic case, cutting blade and twenty-five patches.
913-4001. Wt. 5 oz..Ea. 9.45
2-Up.....Each 8.02

TMC-1 CASSETTE ERASER. Automatically erases bulk tape faster and better than manual erasers. Provides "like new" condition to cassettes in seconds. For AC. Wt. 3 lbs.
913-4053.....Ea. 19.80
2-Up.....Each 16.50

TMC-2 CARTRIDGE ERASER. Indispensable for home or pro use. Restores 8-track cartridges to original condition in seconds. For AC. 5½ lbs.
913-4054.....Ea. 29.80
2-Up.....Each 24.80

TAPE EDITING AND ACCESSORY KITS



H

TK-9 TAPE EDITING WORKSHOP. For easy and accurate splicing and editing. Handles reels to 7". Consists of two tape winders and deluxe Stereo Tape Splicer, mounted on sturdy walnut-grain, warp-proof base. 7x14x5½". Accurately calibrated timing/editing scale on base. With splicing tape, editing and cuing pencil, handy guide book for professional-quality editing and splicing. Wt., 2 lbs.
913-4022...Ea. 25.12 2-Up..20.80

J

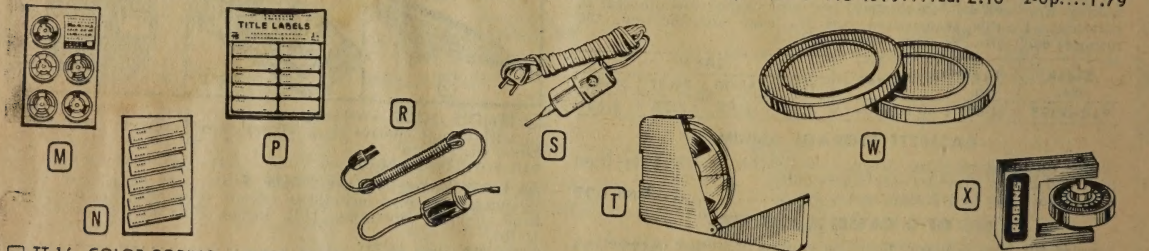
TK-19 TAPE EDITING KIT. Low-cost kit includes: TS-5 "Cut-N-Splice" metal tape splicing block; 25 self-stick splicing patches; 3 editing and cuing pencils; editing and splicing guidebook. Shpg. wt., 5 oz.
913-4030....Ea. 4.40 2-Up....3.74

K

TK-8DLX DELUXE TAPE ACCESSORY KIT. Everything needed for editing and recorder care. Contains: TS-8D Deluxe Stereo Tape Splicer; roll of ½" Splicing Tape; Tape Threader; 12 Tape Clips; 2-oz. Head Cleaner; 2-oz. Head and Guide Lubricant; Tape Jockey Cloth; pair of Reel Holders; 30 Reel Title Labels; Editing and Splicing Guide Book. Wt., 1½ lbs.
913-4021...Ea. 20.62 2-Up..17.25

L

TK-6 CLEANER AND LUBE KIT. For cleaning and lubricating tape recorder heads and guides. Insures smooth performance and minimum wear. Includes 2-oz. bottle of Head Cleaner, 2-oz. bottle of Lubricant. Both have applicator caps. Wt., 6 oz.
913-4019....Ea. 2.10 2-Up....1.79



M

TT-16 COLOR-CODING LEADER TAPES. Reinforce and color-code tape ends. Set of five 2½" reels in 5 colors. Tear-proof 1½-mil Mylar base.
913-4098. Wt. 14 oz..Ea. 4.28 2-Up 3.56

N

TL-240 COLOR-CODING TITLE LABELS. Package of 240 self-stick 2x½" labels; asstd. colors. Keeps track of your reels. Sheets of 10. Wt. 2 oz.
913-4045.....Pkg. of 240 For 1.70

P

TL-180 REEL TITLE LABELS. Pkg. 180 white pressure-sensitive 2x½" labels. Write or type on them for identification of your recording titles.
913-4039. Wt. 5 oz....Pkg. of 180 For 1.43

R

TD-3 TAPE HEAD DEMAGNETIZER. Removes residual magnetism from recorder heads which can distort your tape recordings. Soft plastic shield for safe head contact; angled for easy reaching of head gaps. 3½x1¼" dia. For 110 VAC.
913-4012. Wt. 8 oz....Ea. 6.30 2-Up..5.36

S

TD-6 DELUXE HEAD DEMAGNETIZER. Heavy-duty demagnetizer removes residual magnetism from tape heads for better performance. Also "cleans" recorder parts to minimize tape drop-out. A "must" for the serious recording enthusiast. 4⅝x1¼" dia. U.L. Listed. 110-120 V, 50-60 Hz AC.
913-4015. Wt. 1 lb...Ea. 11.48 2-Up..9.77

T

TCP-12 TAPE SAFES. Set of 12, to store and protect 7" tapes. Molded plastic with hinge cover and dovetail groove. Includes wall mtg. bracket. Less reels. Wt. 8 lbs.
913-4011.....Ea. 18.90 2-Up.....16.17

W

TC7-2 TAPE STORAGE CANS. Pair of 7" dia. metal cans. Ribbed for stacking.
913-4009. Wt. 1 lb.....Pair 1.90
TC5-2. Same, for 5" reels.
913-4008. Wt. 14 oz.....Pair 1.25

X

TW-1 TAPE STROBE. Precision metal strobe checks speed accuracy, flutter and wow of 7½ and 3¾ ips recorders. Precision machined, with needle bearings. With instructions. Shpg. wt., 1 lb.
913-4099.....Ea. 11.60 2-Up.....9.65

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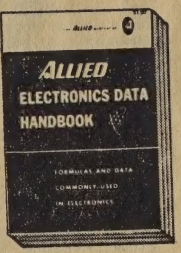

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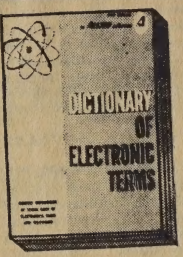

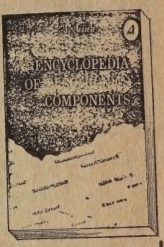

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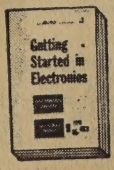

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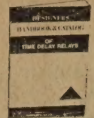

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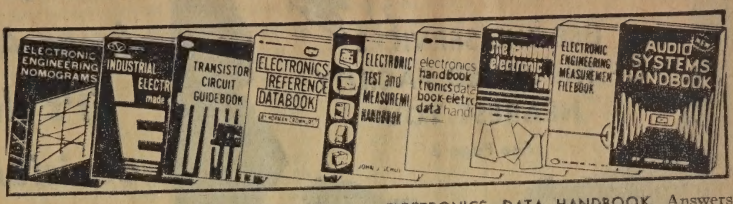

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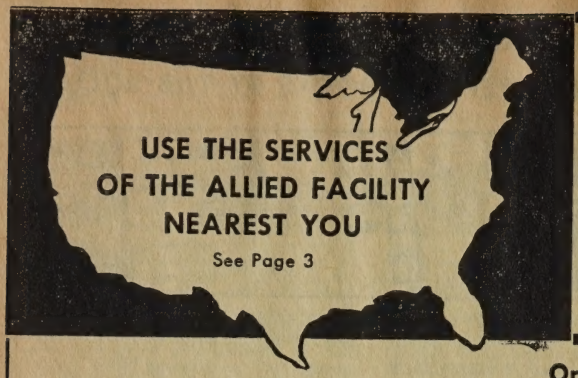

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If a "rush" order must be shipped immediately, call the Allied facility nearest you.

OPEN ACCOUNTS

We extend credit to Government Agencies and well-rated Industrial and Institutional accounts. Firms without a published rating may apply to Allied for a line of credit by submitting a financial statement with bank and trade references to our Industrial Credit Dept. Terms of payment are net, 10 days, E.O.M. and 1% carrying charge over 60 days.

MINIMUM OPEN ACCOUNT BILLING

Minimum order $5.00. Any order between $5.00 and $10.00 will have a $1.00 handling charge added.

C.O.D. ORDERS

All C.O.D. orders placed by Open Account customers will be accepted based upon a $10.00 minimum charge exclusive of all transportation charges and C.O.D. fees. No back orders will be made for C.O.D. items.

APO AND FPO ORDERS

APO and FPO shipments will be routed Parcel Post, maximum size 70 lbs. and 100 inches (length plus girth). For faster delivery, specify air. To estimate shipping charges, see chart on facing page.

PRICES AND SHIPMENTS

Catalog prices are net, F.O.B. Chicago, and are subject to change without notice. Orders are filled at prices in effect at time of shipment. If prices are reduced, you receive the benefit and pay the lower price.

We reserve the right to add any Federal, state or local taxes. Prices and terms in this catalog apply only to the United States, Puerto Rico and Canada.

Stock Nos. used with the letter "F" indicate direct factory shipment; merchandise is shipped F.O.B. factory direct to you.

ALLIED'S AIR PROGRAM

Allied Electronics has established an air freight program to improve delivery over conventional methods of transportation. The program provides 72-hour delivery after receipt of order to firms located in or near Boston, New York, Dallas, Denver, Phoenix, Houston, Los Angeles, Seattle, San Francisco and Washington, D.C.

QUOTATIONS AND BIDS

If you need bids or quotations to place an order, or if you want larger quantities than are listed in our Catalog, be sure to contact us. Prices and delivery information will be provided for you immediately. Please address requests for quotations to the attention of the "Bid Department—Operations".

DAMAGED MERCHANDISE

Since the terms of sale are F.O.B. Chicago, all claims for loss and damage are to be filed against the carrier by the consignee. This does not apply to shipments via Parcel Post or U.P.S., in which case you should write to us for instructions on handling the claim.

SERVICE AND REPLACEMENT GUARANTEE

All merchandise is guaranteed to be free of defects in material and workmanship for the period of time specified in the listing of the product. Where no time is specified, the guarantee is for 90 days. Wherever so indicated in our listing of the product, we will replace it. Wherever our listing does not specify, we will either replace it or repair it at our option. Item must be returned prepaid for our inspection.

MERCHANDISE RETURN

Allied's prior written authorization must be issued before merchandise is returned. Detailed instructions for returning merchandise will accompany the return authorization. A restocking charge may be deducted from your return. Non-catalog items may not be cancelled or returned.

EXPORT ORDERS

Minimum export order is $25 in U.S. currency, F.O.B. Chicago, Illinois. Write Allied Electronics Corporation, 2400 W. Washington Blvd., Chicago, Ill. 60612 for a complete quotation, including documentation, handling, and shipping charges.

Cash orders in U.S. dollars will be accepted for immediate processing. Please include an extra 20% (10% on orders over $500) to cover handling, documentation, and shipping charges. We will promptly refund any excess of payment over actual charges. Terms for payment on export orders are cash, irrevocable letter of credit or sight draft.

IF YOU WRITE TO US

Please include your purchase order number and our invoice number when writing to us on Open Account orders. If a cash order is concerned, include your original order papers (these are returned to you after your order is shipped) with Stock Nos. and descriptions of items.

GOVERNMENT PACKAGING IS AVAILABLE AT ALLIED

Complete Shipping Information

CASH ORDERS

Be sure to include all transportation and insurance charges. Allied will ship your order the best way possible. (See charts for Parcel Post charges, consult your local carrier for truck or express charges.) Minimum order $5.00. Any order between $5.00 and $10.00 will have a $1.00 handling charge added.

C.O.D. ORDERS

The minimum C.O.D. order is $50.00. An advance deposit of 20% of the total value is required with order.

FREIGHT AND EXPRESS

Items in this catalog with letter "U", "W" or "Z" in Stock No. designate unmailable items. These items are shipped via truck or express, all freight charges "Collect".

TRUCK SHIPMENTS

Truck is the most economical way to ship items weighing approximately 70 lbs. or more. Contact your local carrier for rates.

EXPRESS SHIPMENTS

Fastest way to ship unmailable items. For items weighing about 40 to 70 lbs., it's also economical. See your Express agent for rates.

AIR EXPRESS AND AIR FREIGHT SHIPMENTS

We will ship your order Air Freight or Air Express on your instructions. Consult your local Express office for Air Express charges and local airport for Air Freight charges.

ALLIED'S AIR PROGRAM

Allied Electronics has established an air freight program to improve delivery over conventional methods of transportation. The program provides 72-hour delivery after receipt of order to firms located in or near Boston, New York, Dallas, Denver, Phoenix, Houston, Los Angeles, Seattle, San Francisco and Washington, D.C.

INSURANCE

To protect you, we insure shipments (except freight and express, which are insured by the carriers). Allow for charges as follows:

$2.00 to $100.00.....40¢
$100.01 to $150.00.....50¢
$150.01 to $200.00.....60¢
Over $200.00 add 40¢ per $100.00

DAMAGED MERCHANDISE

Since the terms of sale are F.O.B. Chicago, all claims for loss and damage are to be filed against the carrier by the consignee. This does not apply to shipments via Parcel Post or U.P.S., in which case you should write to us for instructions on handling the claim.

HOW TO ESTIMATE PARCEL POST CHARGES

We limit Parcel Post Shipments to 40 lbs. and 72 inches length plus girth (maximum measurement around widest point of package). Estimate charges from table below.

Up to 16 oz., all zones, allow 6¢ for first 2 oz., 2¢ for each additional oz.

The post office charges a fraction of a pound as a full pound. For example, if the total weight is 4 pounds and 1 ounce to Zone 4, postage would be for 5 pounds ($1.05).

WEIGHT 1 Lb. & Not Exceeding	Local	1st & 2nd Zone up to 150 mi.	3rd Zone 150 to 300 mi.	4th Zone 300 to 600 mi.	5th Zone 600 to 1000 mi.	6th Zone 1000 to 1400 mi.	7th Zone 1400 to 1800 mi.	8th Zone Over 1800 mi.
2	$0.60	$0.65	$0.70	$0.75	$0.80	$0.90	$1.00	$1.05
3	.60	.75	.80	.85	.95	1.10	1.20	1.35
4	.65	.80	.85	.95	1.10	1.30	1.40	1.60
5	.70	.85	.90	1.05	1.20	1.45	1.65	1.90
6	.70	.85	1.00	1.15	1.35	1.60	1.85	2.10
7	.75	1.05	1.10	1.25	1.50	1.75	2.10	2.35
8	.75	1.10	1.15	1.35	1.60	1.90	2.30	2.60
9	.80	1.15	1.20	1.45	1.75	2.05	2.45	2.85
10	.80	1.20	1.30	1.55	1.90	2.20	2.65	3.10
11	.80	1.25	1.35	1.60	2.00	2.30	2.85	3.35
12	.85	1.30	1.45	1.70	2.10	2.45	3.05	3.55
13	.85	1.35	1.55	1.80	2.20	2.60	3.25	3.80
14	.90	1.40	1.60	1.90	2.35	2.75	3.45	4.00
15	.90	1.45	1.65	2.00	2.45	2.85	3.60	4.20
16	.95	1.55	1.75	2.05	2.55	2.95	3.80	4.40
17	1.00	1.60	1.80	2.15	2.65	3.10	3.95	4.60
18	1.00	1.65	1.90	2.20	2.75	3.20	4.15	4.80
19	1.05	1.70	2.00	2.30	2.85	3.35	4.30	5.00
20	1.05	1.75	2.05	2.40	2.95	3.50	4.50	5.20
21	1.10	1.85	2.10	2.45	3.05	3.65	4.65	5.40
22	1.15	1.90	2.15	2.55	3.15	3.75	4.85	5.60
23	1.15	1.95	2.20	2.60	3.25	3.90	5.00	5.80
24	1.20	2.00	2.25	2.65	3.35	4.05	5.15	6.00
25	1.20	2.05	2.30	2.75	3.45	4.15	5.35	6.20
26	1.20	2.10	2.35	2.85	3.55	4.30	5.50	6.40
27	1.25	2.15	2.40	2.90	3.70	4.45	5.65	6.60
28	1.25	2.20	2.45	2.95	3.80	4.60	5.80	6.80
29	1.30	2.25	2.50	3.05	3.90	4.70	5.95	7.00
30	1.30	2.30	2.55	3.10	4.00	4.85	6.10	7.20
31	1.35	2.35	2.65	3.20	4.10	5.00	6.25	7.40
32	1.40	2.40	2.70	3.30	4.20	5.15	6.45	7.60
33	1.40	2.45	2.75	3.35	4.30	5.25	6.60	7.80
34	1.45	2.50	2.80	3.40	4.40	5.40	6.75	8.00
35	1.45	2.55	2.85	3.45	4.50	5.55	6.90	8.20
36	1.45	2.60	2.90	3.55	4.00	5.65	7.10	8.40
37	1.50	2.65	3.00	3.65	4.70	5.75	7.25	8.60
38	1.50	2.70	3.05	3.70	4.80	5.90	7.45	8.80
39	1.55	2.75	3.10	3.80	4.90	6.05	7.60	9.00
40	1.55	2.80	3.15	3.85	5.00	6.15	7.75	9.20

Over 40 lbs. shipped truck or express. See information at left.

HOW TO ESTIMATE AIR PARCEL POST CHARGES

We will ship your order by Air Parcel Post on your instructions. Size and weight limitations are 70 pounds and 100 inches (length plus girth).

Wt. Lbs.	Zones 1, 2, 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	APO's and FPO's
To 1	$0.80	$0.80	$0.80	$0.80	$0.80	$0.80	
1-1½	.98	1.02	1.07	1.14	1.18	1.24	APO & FPO San Francisco, 80¢ per lb., plus 8¢.
1½-2	1.16	1.23	1.34	1.47	1.55	1.68	
2-2½	1.40	1.48	1.62	1.79	1.91	2.08	
2½-3	1.64	1.73	1.90	2.11	2.27	2.48	
3-3½	1.88	1.98	2.18	2.43	2.63	2.88	APO & FPO New York, 56¢ per lb., plus 22¢.
3½-4	2.12	2.23	2.46	2.75	2.99	3.28	
4-4½	2.36	2.48	2.74	3.07	3.35	3.68	
4½-5	2.60	2.73	3.02	3.39	3.71	4.08	
For Each Extra Lb.	Add 48¢	Add 50¢	Add 56¢	Add 64¢	Add 72¢	Add 80¢	

OWN YOUR OWN ALLIED RADIO SHACK STORE!

Get on the Road to Personal Profits With Your Own Franchised Allied Radio Shack Store

Join the growing numbers of successful Allied Radio Shack store owners who participate in a profitable association with the world's largest consumer electronics chain. Our professional staff, with fifty years of merchandising experience will help you find a location, plan your store and select merchandise. Our nationally-known brands contribute to fast turnover of twice the industry average and high gross profit margins. There is a one-time franchise fee—no long-term financial commitments, no royalty fees, no hidden management fees. A moderate investment covers your starting inventory, store fixtures, opening expense, and initial operating funds.

Call Collect or write to: A. Bernabei, Allied Radio Shack, 2617 W. 7th St., Ft. Worth Texas 76107.

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Stock No.	Type No.	Size	Replaces			EA.	PER BOX
			Ever-ready	Bur-gess	RCA		
910-5114	23B466	1.5V	950	2	V5036	.19	24/3.48
910-5117	23B468	1.5V	915	Z	VS034A	.10	72/5.79
910-5116	23B467	1.5V	935	1	VS035A	.17	24/3.36
910-5112	23B464	9V Rect.	216	2U6	VS323	.35	24/6.96
910-5125	23-481	9V Rn'd	206	L6	VS320	.49	24/9.38

SUPER-VALUE LONG-LIFE ALKALINE BATTERIES

THREE POPULAR 1½-VOLT SIZES

- For High-Drain Use • Instantaneous Service
- Last Up to 10 Times Longer Than Standard Batteries

You'll be amazed at the extra hours of service you can get from our long-life alkaline batteries. Designed for high drain-service applications, these alkaline cells outperform, out-last standard operating zinc-carbon flashlight batteries by up to 1000%. Alkaline cells cost less too. Compare by dividing the initial cost by the many extra hours of service provided. Long-life, high-power alkaline batteries mean instant service for flashguns, portable phonographs, appliances, intercoms, electric toys and games . . virtually anything that operates on batteries. Available in 1½-volt "D", "C", "AA". Shpg. wt. 10 oz. per package.

Stock No.	Type No.	Size	Volts	PER PKG. OF 2 (*Pkg. 4)	
				1-3	4-Up
910-5171	23B5001	"D"	1½	1.59	1.49
910-5172	23B5002	"C"	1½	1.39	1.29
910-5173	23B5003	"AA"	1½	1.89*	1.79*

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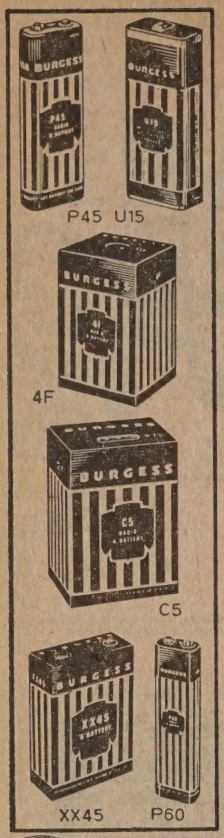
- 200% More Life Than Ordinary Batteries
- Polyethelene Seal Prevents Leakage When Discharged
- Three-Year Shelf Life Means They Stay Fresher Longer

Stock No.	Type No.	Size	Volts	Pack of 2	Pack of 4
910-5105	23-451	"D" Cell	1½	.79	.....
910-5106	23-452	"C" Cell	1½	.75	.....
910-5107	23-453	"AA" Cell	1½	.....	.98

Burgess "A", "B", and "C" Batteries



ZINC-CARBON "A" BATTERIES FOR ELECTRONIC USE

Stock No.	Mfr's Type	Price Each In Standard Pack		Price Each In Case Lots		Volts	Size	Wt., Lbs.	Replaces	
		Std. Pack	Price Each	Quantity Per Case	Price Each				Eveready	NE
737-0760	2F	1	1.75	6	1.22	1½	2 19/32x1 3/8x4 1/4"	¾	W353	11
737-0770	2FH(2FBP)	1	1.55	5	1.04	1½	2 5/8x1 11/32x4 1/8"	½	W711	700
737-0810	4F	1	1.65	12	1.15	1½	2 5/8x2 5/8x4 3/32"	1½	742	4
737-0880	422	1	1.50	6	1.00	3	2 5/16x2 23/32x1 11/32"	¼	750	704
737-0890	432	1	4.35	6	2.90	4½	1 31/32x2 1/32x2 1/4"	¼	751	705
737-0910	532	1	2.35	10	1.63	4½	2 15/32x1 3/16x2 23/32"	¼	703	706
737-0030	C5	1	1.75	6	1.23	7½	2 7/32x1 15/16x3 1/32"	¾	717	9
737-0400	F2BP	1	2.25	6	1.51	3	2 21/32x1 3/8x4 1/32"	1	W353	701
737-0410	F4BP	1	1.69	12	1.13	6	2 5/8x2 5/8x4"	1½	510S	915
737-0420	F4PI	1	1.65	12	1.15	6	2 21/32x2 21/32x4 1/8"	1½	744	6
737-0720	Z4	1	1.00	6	1.50	6	1 3/16x1 3/16x2 7/32"	¼	724	2

ZINC-CARBON "B" BATTERIES FOR ELECTRONIC USE

Stock No.	Mfr's Type	Price Each In Standard Pack		Price Each In Case Lots		Volts	Size	Wt., Lbs.	Replaces	
		Std. Pack	Price Each	Quantity Per Case	Price Each				Eveready	NE
737-0970	4156	1	2.35	5	1.61	22½	3 17/32x2 1/8x2 29/32"	1	763	710
737-0980	5156SC	1	6.95	5	4.63	22½	4 7/64x2 3/8x2 55/64"	1¾	768	721
737-0990	5308	1	4.35	5	3.05	45	4 1/16x2 9/16x5 1/8"	2½	762S	709
737-0020	B30	2	7.75	6	5.40	45	4 1/16x2 17/32x5 5/16"	2¼	484	207
737-0430	K10	1	2.50	6	1.67	15	1 1/4x7/8x1 17/32"	⅛	417	224
737-0440	K15	1	2.75	6	1.83	22½	1 1/4x7/8x2 9/32"	⅛	420	225
737-0450	K20	1	3.25	6	2.17	30	1 1/4x1 5/16x2 23/32"	¼	430	226
737-0460	K45	1	4.25	6	2.97	67½	2 11/16x1 3/4x2 1/4"	½	457	203
737-0490	M30	1	4.55	6	3.27	45	3 9/16x1 3/4x5 1/2"	2	482	202
737-0520	P45	1	3.85	6	2.70	67½	1 29/32x1 x5 9/32"	¾	477	211
737-0530	P60	1	4.55	6	3.27	90	1 29/32x1 x7 13/32"	1	479	214
737-0580	U10	1	1.50	6	1.00	15	1 x3 9/64x1 7/16"	1 oz.	411	208
737-0590	U15	1	1.75	12	1.17	22½	1 x3 9/64x1 31/32"	1 oz.	412	215
737-0600	U20	1	1.95	12	1.30	30	1 x3 9/64x2 17/32"	⅛	413	210
737-0610	U30	1	2.50	6	1.75	45	1 3/32x1 9/32x3 17/32"	⅛	415	213
737-0620	UX45	1	3.75	6	2.50	67½	1 7/32x3 1/32x3 31/32"	¼	416	217
737-0630	V45	6	3.95	12	2.77	67½	2 3/4x1 11/32x3 43/64"	1	468	200
737-0640	V60	1	4.50	6	3.15	90	3 23/32x1 9/32x3 11/16"	1	490	204
737-0660	XX15	1	3.50	6	2.33	22½	1 11/32x1 5/16x3 7/8"	¼	425P	....
737-0670	XX45	1	3.85	12	2.70	67½	2 3/4x1 11/32x3 43/64"	¾	467	200
737-0690	Y10	1	1.50	12	1.00	15	1 9/32x1 9/32x1 23/64"	1 oz.	504	220
737-0700	Y15	1	1.75	12	1.17	22½	1 9/32x1 9/32x1 31/32"	1 oz.	505	221
737-0710	Y20	1	3.25	6	2.17	30	1 13/16x1 9/32x1 13/32"	1 oz.	506	223
737-0730	Z30	1	7.25	6	4.95	45	3 x2 5/16x4 1/16"	1¼	738	205
737-0740	Z30NX	1	3.85	5	2.69	45	3 1/32x1 7/8x4 19/32"	1½	W350	711

RECHARGEABLE NICKEL-CADMIUM BATTERIES

High energy, compact, hermetically sealed nickel-cadmium batteries. May be recharged many times. Respond equally well to a trickle charge or a quick charge. "L" after Mfr's. Type No. indicates batt with solder lug terminals, others have pressure c tacts. *10-hour discharge rate (mA).

BUTTON CELLS

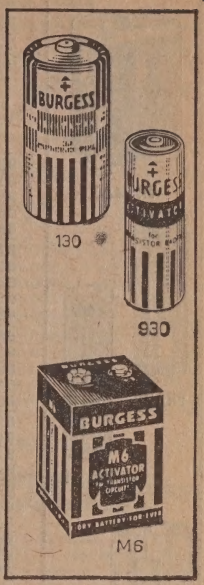
Stock No.	Mfr's Type	Volts	Size (Inches)	Weight (Oz.)	*	Replaces Size	Price Each In Standard Pack		Price Each In Case Lots	
							Std. Pack	Price Each	Quantity Per Case	Pric Eac
737-0050	CD1	1.25	29/64Dx7/32	2	2	N22	1	2.00	10	1.4
737-0060	CD2	1.25	39/64Dx15/64	2	5	N24	1	1.50	10	1.0
737-0170	CD8	1.25	63/64Dx15/64	2	10	N26	1	1.65	10	1.1
737-0180	CD8L	1.25	63/64Dx1/4	2	10	N26T	1	1.90	10	1.3
737-0070	CD3	1.25	63/64Dx9/32	2	15	N28	1	1.70	10	1.1
737-0080	CD3L	1.25	63/64Dx19/64	2	15	N28T	1	1.95	10	1.3
737-0090	CD4	1.25	63/64Dx11/32	2	22	N32	1	1.75	10	1.2
737-0100	CD4L	1.25	63/64Dx3/8	2	22	N32T	1	2.00	10	1.4
737-0110	CD5	1.25	1 45/64Dx19/64	2	45	N36	1	2.60	10	1.8
737-0120	CD5L	1.25	17/10Dx2 1/64	2	45	N36T	1	2.85	10	1.9
			CYLINDRICAL CELLS							
737-0130	CD6 (AA)	1.25	9/16Dx1 1/64	2	45	N	1	3.05	10	2.1
737-0140	CD6L (AA)	1.25	9/16Dx29/32	2	45	N	1	3.25	10	2.2
737-0190	CD9	1.25	35/64Dx31/16	3	90	N	1	6.25	10	4.3
737-0150	CD7 (D)	1.25	1 19/64Dx2 27/64	7	230	N	1	6.40	10	4.4
737-0160	CD7L (D)	1.25	1 19/64Dx2 25/32	7	230	N	1	6.60	10	4.6
737-0200	CD10 (D)	1.25	1 19/64Dx2 27/64	2	400	N	1	10.20	10	7.1
737-0210	CD10L (D)	1.25	1 19/64Dx2 49/64	2	400	N	1	10.40	10	7.2
737-0220	CD11 (D)	1.25	1 19/64Dx2 2/64	2	300	N	1	7.15	10	4.9
737-0230	CD12 (short C)	1.25	7/8Dx1 33/64	2	120	N	1	4.25	10	2.9
737-0240	CD13 (short C)	1.25	1 19/64Dx1 29/64	3	230	N	1	9.75	10	6.8
737-0250	CD14 (C)	1.25	1 1/64Dx1 61/64	4	190	.....	1	5.60	10	3.9
			NICKEL CADMIUM BATTERIES							
737-0260	CD21	6.1	1 1/16Dx1 17/32	12	15	Y5521	1	12.00	10	8.4
737-0270	CD22	6.1	1 1/16Dx1 31/32	12	22	Y5201	1	12.60	10	8.8
737-0272	CD23	6.1	1 51/64Dx1 55/64	12	45	.....	1	19.05	10	13.3
737-0280	CD24	9.7	1 1/16Dx2 2/32	12	15	Y5488	1	18.10	10	12.6
737-0290	CD25	9.7	1 1/16Dx3 7/32	12	22	.....	1	18.25	10	12.8
737-0300	CD25L	9.7	1 1/16Dx3 7/32	12	22	.....	1	18.25	10	12.8
737-0310	CD26	9.7	1 51/64Dx2 37/64	16	45	Y5407	1	30.50	10	21.3
737-0320	CD27	12.2	1 1/16Dx2 59/64	12	15	Y5196	1	21.70	10	15.7
737-0330	CD28	12.2	1 1/16Dx3 19/32	12	22	Y5386	1	23.25	10	16.2
737-0340	CD29	12.2	1 51/64Dx3 7/64	20	45	Y5511	1	36.15	10	25.2
737-0350	CD30	6.0	1 1/2x1 1/2x3 13/16	12	90	.....	1	39.20	10	24.7
737-0360	CD31	6.0	3 13/16x1 7/32x3 5/8	36	150	N70	1	47.25	10	32.9

Burgess Batteries, Lanterns and Flashlights

ZINC-CARBON BATTERIES FOR TRANSISTOR CIRCUITS, OTHER APPLICATIONS

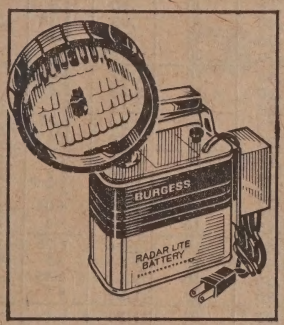
g-life zinc carbon batteries, most popular for able power, in most standard sizes. Designed use in industrial, electronic, transistor, and y other applications. Specially sealed to provide protection in handling and against corrosive leakage. Sturdy construction. Long, dependable service, even over a wide range of temperatures, plus peak performance at all times.

tock No.	Mfr's Type	Price Each In Standard Pack: Std. Pack	Price Each In Standard Pack: Price Each	Price Each In Case Lots: Quantity Per Case	Price Each In Case Lots: Price Each	Volts	Size	Wt., Lbs.	Replaces: Eveready	Replaces: NEDA
·0780	2MN6	1	.98	24	.65	9	1x$^{39}/_{64}$x1$^{7}/_{8}$" dia.	$^{1}/_{8}$	222	1604D
·0790	2N6	1	2.25	6	1.50	9	1$^{3}/_{8}$x1$^{3}/_{8}$x2$^{3}/_{4}$"	$^{1}/_{4}$	246	1602
·0800	2U6	12	.69	36	.49	9	1x$^{39}/_{64}$x1$^{7}/_{8}$"	$^{1}/_{4}$	216	1604
·0820	7	24	.20	72	.13	1$^{1}/_{2}$	1$^{3}/_{4}$x$^{13}/_{32}$" dia.	$^{1}/_{4}$	912	24F
·0830	130	12	.35	72	.23	1$^{1}/_{2}$	1$^{15}/_{16}$x$^{63}/_{64}$" dia.	$^{1}/_{2}$	1035	14
·0840	230	12	.35	72	.23	1$^{1}/_{2}$	2$^{25}/_{64}$x1$^{21}/_{64}$" dia.	$^{1}/_{2}$	1050	13
·0950	930	24	.25	144	.155	1$^{1}/_{2}$	1$^{31}/_{32}$x$^{35}/_{64}$" dia.	$^{1}/_{2}$	1015	15
·0750	2	50	.25	200	.163	1$^{1}/_{2}$	2$^{3}/_{8}$x1$^{21}/_{64}$" dia.	$^{5}/_{8}$	950	13F
·0010	A4	1	3.95	3	2.75	6	1$^{9}/_{32}$x1$^{9}/_{32}$x2$^{11}/_{32}$"	$^{1}/_{4}$	.....	.....
·0040	C6X	1	2.95	6	1.97	9	2$^{5}/_{16}$x1$^{1}/_{32}$x6$^{1}/_{16}$"	$^{3}/_{4}$	2356N	1612
·0370	D5	1	3.60	6	2.50	7$^{1}/_{2}$	2$^{9}/_{16}$x2x2$^{23}/_{32}$"	$^{7}/_{8}$	707	26
·0380	D6	1	2.50	6	1.67	9	2$^{9}/_{16}$x2x3$^{1}/_{32}$"	1	276	1603
·0390	D6S	1	7.20	6	4.80	9	2$^{1}/_{4}$x1$^{1}/_{4}$x7$^{29}/_{32}$"	1$^{1}/_{2}$	2671N	1608
·0470	L6	6	.89	12	.62	9	1$^{31}/_{32}$x$^{47}/_{64}$" dia.	$^{1}/_{8}$	206	1611
·0480	M6	1	1.95	12	1.36	9	1$^{13}/_{16}$x1$^{13}/_{16}$x2$^{7}/_{16}$"	$^{1}/_{2}$	266	1605
·0500	NE	6	.15	48	.095	1$^{1}/_{2}$	1$^{11}/_{64}$x$^{7}/_{16}$" dia.	$^{1}/_{8}$	904	910
·0510	P6	6	.98	24	.68	9	1$^{15}/_{16}$x1" dia.	$^{1}/_{4}$	226	1600
·0540	PM6	6	1.19	12	.80	9	1$^{15}/_{16}$x1" dia.	$^{1}/_{4}$	.....	1600D
·0550	PM8	1	1.50	12	1.05	12	2$^{7}/_{16}$x1" dia.	$^{1}/_{8}$	228	1810
·0650	XX9	1	3.10	6	2.15	9, 13$^{1}/_{2}$	1$^{9}/_{32}$x2$^{9}/_{32}$x2$^{17}/_{32}$"	$^{1}/_{4}$	239	1900
·0680	Y6	1	1.20	12	.83	9	$^{3}/_{5}$x$^{3}/_{5}$x1$^{9}/_{10}$"	$^{1}/_{8}$	.....	1606



BURGESS "EMERGENCY" LIGHT

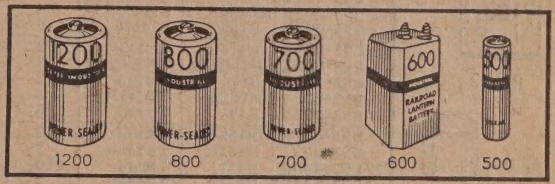
Dual-Unit" Construction
ompiete with Battery
Vorks on AC or DC Power



)EL TW6E. Instant light, matically triggered by interruption of AC power. s off automatically when r comes back on. Auto- turns light on the in- AC power fails. Plug six-foot extension cord ect to any 110-volt, 60- electrical outlet. Power- ealed beam. "Safety Glo" red head provides heavy light inten- Floodlight lens diffuses light over wide area. Steel clad multi- battery. Dual-unit 6-volt construction permits one-year shelf 15 hours of continuous light.

·0560. Complete With Battery. Shpg. wt. 6 lbs.... .....23.95
0559. Replacement Battery TW-1. Shpg. wt. 3½ lbs.....3.45

BURGESS INDUSTRIAL BATTERIES

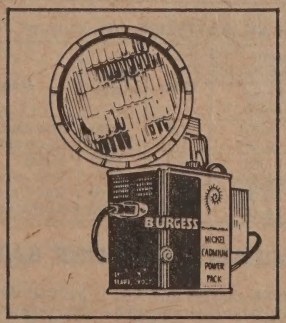


Excellent batteries are designed for industry's maximum service demands—long-life service on heavy-duty drain and long periods of use. Labeled "Not Designed for Retail Sales." *Indicates commerical equivalent. †Heavy-duty. Min. quantity 1 case.

Stock No.	Mfr's Type	Volts	*	Quantity	Wt., Lbs. Per Case	Per Case: 1-5	Per Case: 6-20
737-0960	1200	1$^{1}/_{2}$	D†	200	42	27.00	24.00
737-0940	800	1$^{1}/_{2}$	D	200	41-3/10	24.00	22.00
737-0930	700	1$^{1}/_{2}$	C	192	21	23.04	21.12
737-0920	600	6	#6	25	36-1/10	15.75	15.00
737-0900	500	1$^{1}/_{2}$	AA	192	7	17.67	16.70

"POWER FAILURE" LITE

Always at Full Power
Complete with Battery
Easy to Install



)EL TW633E. For airports, ce and fire departments, house, factories, large es. Always at full power use you leave recharger t all times. No power- n when at full charge. be recharged hundreds of s. Specially designed automatic relay turns on powerful sealed n the instant AC power fails—keeps rooms, corridors lighted hours. Offers the brightest light in a portable unit. Easy to all, complete with permanent mounting bracket and screws. justable connectors permits "aiming" beam in any direction.

·0570. Shpg. wt. 6 lbs.....63.95

BURGESS FLASHLIGHTS FOR GENERAL AND INDUSTRIAL APPLICATIONS

No. 363 No. 263 No. 368

INDUSTRIAL TWO-CELL FLASHLIGHT

NO. 363. Industrial flashlight with steel-reinforced reflector. Features flexible vinyl head, handy ring hanger, deeply recessed lens. Replaceable switch. Uses two No. 2 (Size "D") battery cells and PR2 lamp. Less batteries.
737-0860. Shpg. wt. 8 oz.....1.89

INDUSTRIAL "MAGNET" FLASHLIGHT

NO. 263. High-impact industrial model. Features powerful, permanent "Alnico" magnet with 15-pound grip. Deeply recessed lens. Comes with lamp No. PR2. Uses two No. 2 (size "D") battery cells (not included).
737-0850. Shpg. wt. 8 oz.....2.19

INDUSTRIAL FLASHLIGHT WITH SPARE BULB

NO. 368. Features specially designed "bullet" end-cap which contains spare bulb. Also has handy ring hanger, deeply recessed lens. Uses lamp No. PR2 (included) and two No. 2 (size "DD") battery cells (not included).
737-0870. Shpg. wt. 8 oz.....1.99

Burgess/Mallory Mercury Batteries

TR146X

TR133

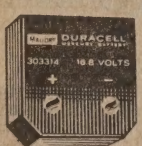
ZM 9B

RM42

RM640

RM625

TR 177

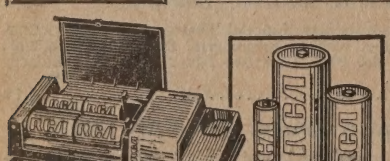

303314

For use in test equpment, walkie-talkies, portable radios, TV's and tape recorders, electrical toys and various other applications. Assure peak performance. "T" suffix indicates ½" tab on negative terminals; "T2" suffix indicates tabs on both ends. *Indicates capacity in milliampere hours. †With snap termina In order to provide our customers with the fast service available, we will ship either Burgess or Mall Mercury Batteries at our option, thus avoiding ann ing waits for back orders.

Stock No.	Burgess Type	Mallory Type	Price Each In Standard Pack		Price Each In Case Lots		Volts	Cap'y mAH*	Dia. x Ht., or HWD	Replac Everea
			Std. Pack	Price Each	Quantity Per Case	Price EACH				
853-0001	HG1	RM1	4	.95	40	.63	1.4	1000	5/8x2 1/32"	E1
853-0002	HG1R	RM1R	4	1.25	40	.83	1.35	1000	5/8x2 1/32"	E1N
853-0003	HG1RT	RM1RT2	4	1.30	40	.865	1.35	1000	5/8x2 1/32"	E1NT
853-0004	HG3	RM3R	4	1.95	20	1.30	1.35	2200	1x2 1/32"	E3
853-0005	HG4R	RM4R	4	2.50	20	1.67	1.35	3400	1 1/5x2 1/32"	E4
853-0006	HG4RT	RM4RT	4	2.55	20	1.67	1.35	3400	1 1/5x2 1/32"	E4T1
853-0007	HG12	RM12	2	1.50	10	1.00	1.4	3600	5/8x1 61/64"	E12
853-0008	HG12R	RM12R	2	1.95	10	1.30	1.35	3600	5/8x2"	E12N
853-0009	HG12RT	RM12RT	2	2.00	10	1.32	1.35	3600	5/8x2"	E12NT
853-0010	HG12RT2	RM12RT2	2	2.05	10	1.37	1.35	3600	5/8x1 61/64"	E12NT
853-0011	HG42	RM42	1	5.00	10	3.33	1.4	14000	1 1/2x2 3/8"	E42
853-0012	HG42R	RM42R	1	5.50	10	3.67	1.35	14000	1 1/2x2 3/8"	E42N
853-0013	HG42RT	RM42RT2	10	5.55	10	3.61	1.35	14000	1 1/2x2 3/8"	E42NT
853-0014	HG312	RM312	6	.35	60	.24	1.4	36	9/64x5/16"	E312
853-0015	HG400	RM400	6	.60	60	.33	1.4	75	29/64x9/64"	E400
853-0016	HG400R	RM400R	6	.95	60	.63	1.35	75	29/64x9/64"	E400N
853-0017	HG401	RM401	2	.95	24	.62	1.4	800	29/64x1 1/8"	E401
853-0018	HG401R	RM401R	2	1.25	20	.83	1.35	800	15/32x1 1/8"	E401N
853-0019	HG450R	RM450R	4	1.25	40	.83	1.35	350	29/64x9/16"	E450
853-0020	HG502R	RM502R	2	1.75	10	1.17	1.35	2400	1/2x1 31/32"	E502
853-0021	HG520	RM520	6	.30	60	.21	1.4	130	1/2x9/32"	E520
853-0022	HG575	RM575	6	.35	60	.24	1.4	100	.455x.129"	.....
853-0023	HG601R	RM601R	2	1.75	20	1.17	1.35	1800	5/8x1 5/32"	E601R
853-0024	HG625	RM625	4	.75	40	.49	1.4	350	5/8x1/4"	E625
853-0025	HG625R	RM625R	4	.95	40	.63	1.35	250	5/8x1/4"	E625
853-0026	HG625RT	RM625RT2	4	1.00	40	.67	1.35	250	5/8x1/4"	E625R
853-0027	HG640	RM640	4	.75	20	.50	1.4	500	5/8x7/16"	E640
853-0028	HG640R	RM640R	4	.95	20	.63	1.35	500	5/8x7/16"	E640N
853-0029	HG640RT2	RM640RT2	4	1.05	32	.72	1.35	500	5/8x7/16"	E640N
853-0030	HG675	RM675	6	.50	60	.335	1.4	160	29/64x1 3/64"	E675
853-0031	H113R	TR113R	2	2.95	10	1.97	4.05	250	2 1/32x3 3/64"	E113
853-0032	H114RT2	TR114RT2	2	3.35	10	2.22	5.4	250	2 1/32x1 1/16"	E114T
853-0033	H115	TR115	2	3.25	10	2.12	7	350	2 1/32x1 5/16"	E115
853-0034	H115R	TR115R	2	3.75	10	2.50	6.75	250	2 1/32x1 5/16"	E115N
853-0035	H126	TR126	6	2.25	24	1.50	8.4	600	3/4x2"	E126
853-0036	H132	TR132	2	1.75	10	1.17	2.8	1000	2 1/32x1 5/16"	E132
853-0037	H132R	TR132R	2	1.95	10	1.30	2.7	1000	2 1/32x1 5/16"	E132N
853-0038	H133	TR133	6	2.25	24	1.46	4.2	1000	2 1/32x2"	E133
853-0039	H133R	TR133R	2	2.50	10	1.67	4.05	1000	2 1/32x2"	E133N
853-0040	H134R	TR134R	2	2.95	10	1.97	5.4	1000	2 1/32x2 3/4"	E134N
853-0041	H135R	TR135R	2	3.50	10	2.34	6.75	1000	2 1/32x3 1/4"	E135N
853-0043	H136R	TR136R	2	3.95	10	2.63	8.1	1000	2 1/32x3 29/32"	E136N
853-0044	H137R	TR137R	10	4.50	10	2.93	9.45	1000	2 1/32x4 9/16"	E137F
853-0045	H146X	†TR146X	6	1.95	24	1.27	8.4	575	1x2 1/32x1 2 3/32"	E146X
853-0046	H146XBL	TR146XB	6	1.95	24	1.31	8.4	575	1x2 1/32x1 2 3/32"	E146X
853-0047	H163	TR163	2	2.50	10	1.67	4.2	500	2 1/32x1 5/16"	E163
853-0048	H164	TR164	6	2.25	24	1.47	5.6	500	2 1/32x1 3/4"	E164
853-0049	H164R	TR164R	2	2.75	10	1.79	5.4	500	2 1/32x1 3/4"	E164N
853-0050	H165	TR165	2	2.95	10	1.97	7.0	500	2 1/32x2 3/16"	E165
853-0051	H169	TR169	1	5.25	10	3.50	12.6	500	2 1/32x3 7/8"	E169
853-0052	H175	TR175	1	1.95	10	1.30	7.0	350	3 1/64x1 1/32"	E175
853-0053	H177	†TR177	6	2.25	24	1.47	9.8	160	35/64x1 29/32"	E177
853-0054	H-233	TR233R	1	4.00	10	2.67	4.05	2200	1 1/64x1 31/32"	E233N
853-0055	H-286	†TR286	6	2.25	12	1.50	8.4	750	1x1 15/16"	E286
853-0056	H289	†TR289	6	4.25	12	2.92	12.6	750	1x2 25/64"	E289
853-0057	HG9	ZM9B	24	1.00	48	.65	1.4	2400	1/2x1 31/32"	E9

MERCURY POWER-PAK BATTERIES (Av. shpg. wt., 6 oz.)

Stock No.	Burgess Type	Mallory Type	Price Each In Standard Pack		Volts	Cap'y mAH*	Use	Dia. x Ht., or HWD	Replac Everea
			Std. Pack	Price Each					
853-0058	302642	302642	1	8.00	7.0	2400	Fire alarm	1 1/4x2 21/32"	E3026
853-0059	HG302651	302651	1	6.90	1.35	14000	Electronic	1 1/4x2 3/8"	E3026
853-0060	HG302904	302904	1	11.00	5.4	3400	Meter	1 9/32x2 29/32"	E3029
853-0061	HG302905	302905	1	12.60	6.75	3400	Test eqpt.	1 9/32x3 1/32"	E3029
853-0062	HG302908	302908	1	18.00	10.8	3400	Rad't'n eqpt.	1 9/32x5 1/2"	E3029
853-0063	HG303314	303314	1	16.00	16.8	2400	Radio, Lantern	1 7/32x6 1/64"	303314



RCA RECHARGEABLE ALKALINE BATTERIES & CHARGE

MODEL BC-16 CHARGER. Recharges any AA, C and D alkaline rechargeable batteries such as RCA types VS1515, VS1514 and VS1513 at right. Designed to completely recharge batteries in a 14 to 18 hour period. Positive action terminals hold batteries securely for sure connections. Pays for itself in battery costs saved. 9¾x4¾x2¾". AC.
902-3700. Shpg. wt. 1 lb.....8.95

MODEL VS1515, 1514, 1513 BATTERIES. rectly interchangeable with carbon-zinc alkaline primary AA, C and D cells. E lent charge retention of up to 50 cycles

Stock No.	Mfr's Type	V	Amp. Hrs.	Size	Wt. Oz.	Pl PK
902-3703	VS1515	1½	.3	"AA"	1	2.
902-3702	VS1514	1½	1	"C"	2½	3.
902-3701	VS1513	1½	2	"D"	5	3.

Allied Electronics Constant Inventory Turnover Assures You of Fresh Batter

Fuses and Holders and Circuit Breakers

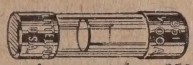
LITTELFUSE

TYPE 3AB MEDIUM LAG FUSES

ies 314000. Steatite enclosed arc-quench- powder-filled fuses. ■U.L. Recog. to 15 Medium time lag. Shatter-proofed against ick shorts. For amplifiers, rectifiers, ra- s, etc. Max. volts 250, except *125. 1¼x¼". 2 oz. Complete type 3AB (amp) A, e.g. 3AB ⅛A. SOLD IN MULTIPLES OF 5 ONLY.

† mp	Stock No.	EACH 5-95	100-495	500-Up	† Amp	Stock No.	EACH 5-95	100-495	500-Up
	845-0250	.16	.13	.104	5	845-0264	.14	.12	.09
	845-0251	.16	.13	.104	6	845-0265	.14	.12	.09
	845-0252	.16	.13	.104	8	845-0269	.14	.12	.09
	845-0253	.16	.13	.104	10	845-0271	.14	.12	.09
	845-0254	.16	.13	.104	12	845-0272	.15	.12	.10
	845-0255	.15	.12	.10	15	845-0273	.15	.12	.10
	845-0259	.15	.12	.10	20*	845-0274	.15	.12	.10
	845-0262	.15	.12	.10	25*	845-0275	.19	.16	.124

TYPE 8AG FAST-ACTION INSTRUMENT FUSES



ies 361000. High-speed action for the otection of delicate equipment. Ideal microammeters, galvanometers, milli- meters, wattmeters, thermocouples, ltmeters, test equipment, small rectifiers and power tubes. 250 lts max. *125 volts. 1x¼". 2 oz. SOLD IN MULTIPLES OF 5.

500	845-0429	1.20	1.00	.80	3/8	845-0437	.11	.10	.076
200	845-0430	.50	.44	.336	1/2	845-0438	.11	.10	.076
100	845-0431	.45	.38	.30	1	845-0439	.08	.07	.05
32	845-0432	.40	.33	.26	1½	845-0440	.08	.07	.05
16	845-0433	.25	.21	.16	2	845-0441	.08	.07	.05
10	845-0434	.17	.15	.116	3*	845-0442	.08	.07	.05
8	845-0435	.17	.15	.116	5*	845-0443	.08	.07	.05
4	845-0436	.11	.10	.076					

MICROFUSES

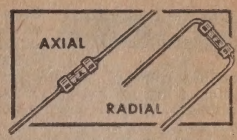
pe 273000. Submin. plug-in fuses with low res. d high-speed action. Glass cap for visible indica- n. Short-circuit interrupting capacity, 125 volts, 000 amps DC. Blowing specs: 100%, 4 hrs. min.; 200%, 5 sec. ax. Holders below. †Mfr's type is Micro (amp) A, e.g. Micro 1/500 ¼x1½". 2 oz. SOLD IN MULTIPLES OF 5 ONLY.

† mp	Stock No.	EACH 5-95	100-495	500-Up	† Amp	Stock No.	EACH 5-95	100-495	500-Up
500	845-0010	1.03	.86	.68	4/10	845-0026	.86	.72	.57
200	845-0011	1.03	.86	.68	½	845-0027	.86	.72	.57
100	845-0012	1.03	.86	.68	6/10	845-0028	.86	.72	.57
64	845-0013	1.03	.86	.68	7/10	845-0029	.86	.72	.57
32	845-0014	1.03	.86	.68	8/10	845-0031	.86	.72	.57
20	845-0015	.86	.72	.57	1	845-0032	.86	.72	.57
16	845-0016	.86	.72	.57	1½	845-0035	.86	.72	.57
10	845-0017	.86	.72	.57	2	845-0036	.86	.72	.57
8	845-0018	.86	.72	.57	3	845-0038	.86	.72	.57
10	845-0022	.86	.72	.57	4	845-0040	.86	.72	.57
4	845-0023	.86	.72	.57	5	845-0041	.86	.72	.57
10	845-0024	.86	.72	.57					

FUSEMASTER RACK ASSORTMENT

pe 094047. Rack displays 300 fuses. Sixty in- vidual compartments for easy self-service. Holds dex card on back of rack. Ideal for servicemen, boratories, etc. With 100 fuses, inventory con- ol backboard, pressure-sensitive blank inventory bels, mounting screws. 100 fuses includes: YPE 3AG—ten ¼-amp; ten ½-amp, five 1- mp; five 2-amp; five 5-amp. TYPE 3 AG SLO- LO-ten ¼-amp; five ½-amp; five 1-amp; five 2- mp; five 3-amp; ten 5-amp. TYPE C—ten 3/10- mp. TYPE N—five 3/10-amp; five 4/10-amp; five ½-amp fuses. 15-0523. Shpg. wt. 2 lbs. 16.57

PICOFUSE MICROMINIATURE FUSES



For micro-circuits of 125 volts or less where short circuit may be 300 amps at 125 VDC requiring fast action. Fuses can be encapsulated. Blow specifications: 100%. Four hours min.; 200%. 5 seconds max. 7/32x5/64". Shpg. wt., 1/5 gram, 2 oz. ORDER IN MULTIPLES OF 5.

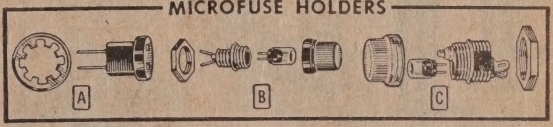
SERIES 275000 AXIAL LEADS					SERIES 276000 RADIAL LEADS				
Amp	Stock No.	EACH 5-95	100-495	500-Up	Amp	Stock No.	EACH 5-95	100-495	500-Up
1/8	845-0044	.43	.36	.28	1/8	845-0060	.43	.36	.28
1/4	845-0045	.43	.36	.28	1/4	845-0061	.43	.36	.28
3/8	845-0046	.43	.36	.28	3/8	845-0062	.43	.36	.28
1/2	845-0047	.43	.36	.28	1/2	845-0063	.43	.36	.28
3/4	845-0048	.37	.31	.248	3/4	845-0064	.37	.31	.248
1	845-0049	.37	.31	.248	1	845-0065	.37	.31	.248
2	845-0053	.37	.31	.248	2	845-0069	.37	.31	.248
3	845-0055	.37	.31	.248	3	845-0071	.37	.31	.248
4	845-0056	.37	.31	.248	4	845-0072	.37	.31	.248
5	845-0057	.37	.31	.248	5	845-0073	.37	.31	.248

3AG INDICATING FUSES

Series 334000. Medium acting fuses employ a silver plated pin which extends from end when fuse is blown. Pin acts as a visual indication or may be used to actuate an alarm or light. Rating: ¾-5A, 125 V; 6-20 A, 32 V. All types carry 110% of rating four-hours minimum; 135%. One-hour maximum. Mfr's type is "Indicating" followed by Amps. Shpg. wt., 2 oz.

3/4	845-0279	.47	.39	.31	6	845-0289	.50	.42	.336
1	845-0280	.38	.32	.25	8	845-0290	.50	.42	.336
1-1/2	845-0281	.38	.32	.25	10	845-0291	.50	.42	.336
2	845-0282	.38	.32	.25	12	845-0292	.50	.42	.336
3	845-0285	.38	.32	.25	15	845-0293	.50	.42	.336
4	845-0287	.38	.32	.25	20	845-0294	.50	.42	.336
5	845-0288	.38	.32	.25					

MICROFUSE HOLDERS

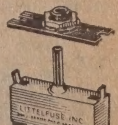


Stock No.	Mfr's Type	Fig.	Description	EACH 1-99	100-499	500-999
845-0076	281001	A	Miniature P/C Mtg.	.29	.24	.19
845-0077	281002	B	Front Panel	.72	.60	.48
845-0078	282001	B	Front Panel Alum.	1.31	1.09	.87
845-0079	282002	B	Rear Panel Alum.	1.24	1.03	.82
845-0080	282007	B	R/F Shielded	2.27	1.89	1.51
845-0081	282008	B	R/F Shielded	2.22	1.85	1.48
845-0083	284004	C	2½-7 V Indicating	2.21	1.84	1.47
845-0084	284005	C	7-16 V Indicating	2.21	1.84	1.47
845-0085	284006	C	16-32 V Indicating	2.21	1.84	1.47
845-0082	284003	C	100-125 V Indicating	1.55	1.29	1.03
845-0086	284107	C	12-22 V R/F Shielded Ind.	7.82	6.52	5.21
845-0087	284108	C	23-33 V R/F Shielded Ind.	8.83	7.36	5.88
845-0088	284109	C	34-45 V R/F Shielded Ind.	8.83	7.36	5.88
845-0089	284110	C	46-60 V R/F Shielded Ind.	8.83	7.36	5.88
845-0090	284111	C	61-80 V R/F Shielded Ind.	8.83	7.36	5.88
845-0091	284112	C	81-90 V R/F Shielded Ind.	8.83	7.36	5.88
845-0092	284113	C	91-125 V R/F Shielded Ind.	6.07	5.06	4.04

MANUAL RESET CIRCUIT BREAKERS

TABLE OF CIRCUIT BREAKERS

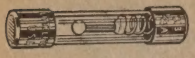
Stock No.	Mfr's Type	* (Amps)	† (Amps)	Stock No.	Mfr's Type	* (Amps)	† (Amps)	EACH 1-99	100-499	500-999
15-0509	81502.5	1.65	2.89	845-0501	815.650	0.49	0.86	.96	.80	.64
15-0510	8152.75	1.92	3.33	845-0502	815.800	0.60	1.05	.96	.80	.64
15-0511	815003	2.10	3.67	845-0503	815001	0.65	1.14	.96	.80	.64
15-0512	8153.25	2.20	3.85	845-0504	8151.25	0.93	.163	.96	.80	.64
15-0513	815004	2.50	4.37	845-0505	81501.5	1.00	1.75	.96	.80	.64
15-0514	81504.5	3.00	5.25	845-0506	8158.75	1.20	2.10	.96	.80	.64
15-0515	815005	3.25	5.68	845-0507	815002	1.40	2.45	.96	.80	.64
15-0516	815006	3.90	6.82	845-0508	8152.25	1.50	2.62	.96	.80	.64
15-0517	815007	4.14	7.25					.96	.80	.64



Manual reset circuit breakers for applications in most industrial and commercial equipment. Provide quick overload protection and ambient temperature compensation using separate bimetal elements for each function. Heavy duty precious metal contacts are used throughout the range of currents. "Trip free" feature prevents the contacts from being manually held closed when overload occurs. Molded phenolic base prevents warping. Available in 17 *hold current ratings from 0.49 amps through 4.14 amps. †Breakers with hold current ratings. of 0.165 amp through 4.14 amp are ■U.L. recog. Mounting adaptor included. 1 45/64x1 7/32x2 7/32". Shpg. wt. ½ oz.

Fuses and Accessories

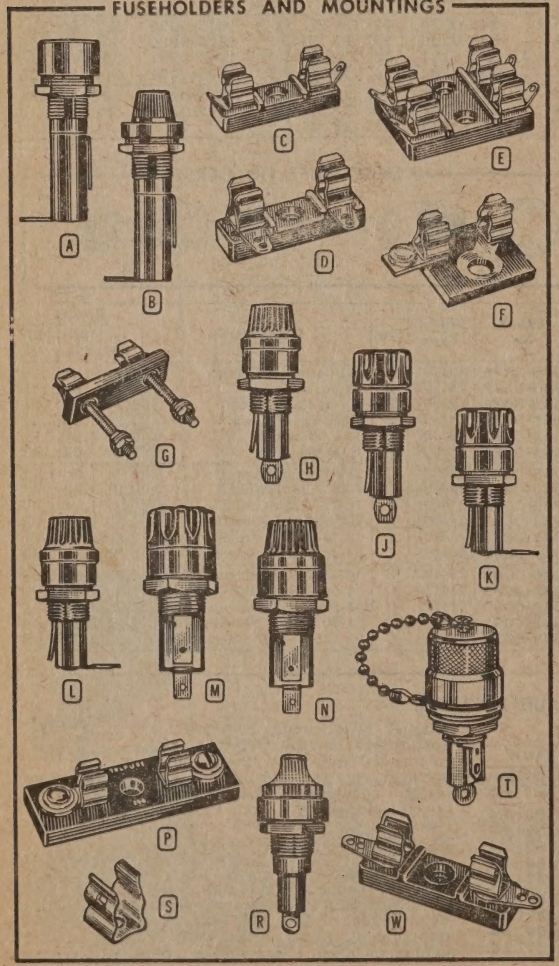
TYPE 3AG SLO-BLO FUSES



Series 313000. Have high time-lag to withstand heavy surges, yet blow quickly on short-circuits. Excellent where high inductive or capacitive surges or heavy starting currents are present. Blowing specifications: 110% of rating, 4 hrs. minimum; 135%, 1 hour maximum; 200%, 5 seconds minimum. Employ anti-fatigue construction—compound element, with spring and resistor. Fuses rated up to 5 amps are ■U.L. Recog. 125 V max. except *32 V max. ‡Mfr's type is 3AG (amp) ASB, e.g. 3AG 1/100 ASB. 1¼x¼". 2 oz. **Sold only in multiples of 5.**

‡ Amp	Stock No.	EACH 5-95	100-495	500-Up	‡ Amp	Stock No.	EACH 5-95	100-495	500-Up
1/100	845-0209	.34	.28	.224	1-2/10	845-0228	.23	.19	.152
1/32	845-0210	.34	.28	.224	1-1/4	845-0229	.23	.19	.152
1/16	845-0211	.25	.21	.164	1-1/2	845-0230	.23	.19	.152
1/10	845-0212	.25	.21	.164	1-6/10	845-0231	.23	.19	.152
1/8	845-0213	.25	.21	.164	2	845-0232	.23	.19	.152
15/100	845-0214	.25	.21	.164	2-1/2	845-0233	.18	.15	.12
.175	845-0215	.25	.21	.164	2-8/10	845-0234	.18	.15	.12
3/16	845-0216	.25	.21	.164	3	845-0235	.18	.15	.12
2/10	845-0217	.25	.21	.164	3-2/10	845-0236	.18	.15	.12
1/4	845-0218	.25	.21	.164	4	845-0237	.18	.15	.12
3/10	845-0219	.25	.21	.164	5	845-0238	.18	.15	.12
3/8	845-0220	.25	.21	.164	6-1/4*	845-0239	.18	.15	.12
4/10	845-0221	.25	.21	.164	7*	845-0240	.18	.15	.12
1/2	845-0222	.25	.21	.164	8*	845-0242	.18	.15	.12
6/10	845-0223	.25	.21	.164	10*	845-0243	.18	.15	.12
7/10	845-0224	.25	.21	.164	15*	845-0244	.18	.15	.12
3/4	845-0225	.25	.21	.164	20*	845-0245	.18	.15	.12
8/10	845-0226	.25	.21	.164	25*	845-0246	.18	.15	.12
1	845-0227	.25	.21	.164	30*	845-0247	.18	.15	.12

FUSEHOLDERS AND MOUNTINGS



TYPE 3AG STANDARD FUSES

Series 312000. For short time-lag applica tions. Ideal for radios, amplifiers, trans mitters, etc. Diagonal alignment of fus element assures accurate blowing eve when element is expanded by heat. Completely unaffected by hig operating temperatures. Blowing specifications: 110% of ratin 4 hours min.; 135%, 1-hour max.; 200%, 10 sec. max. ■U.L. Reco 250 V max. except *125, †32 V. ‡Complete Mfr's type is 3AG (amp A, e.g. 3AG 1/100 A. 1¼x¼". 2 oz. **Sold only in multiples of 5.**

‡ Amps	Stock No.	EACH 5-95	100-495	500-Up	‡ Amps	Stock No.	EACH 5-95	100-495	500-Up
1/100	845-0100	.45	.38	.30	2	845-0115	.08	.07	.05
1/32	845-0101	.40	.33	.264	2-1/2	845-0116	.08	.07	.05
1/16	845-0102	.17	.15	.116	3	845-0141	.08	.07	.05
1/8	845-0103	.17	.15	.116	4	845-0143	.10	.08	.06
15/100	845-0104	.17	.15	.116	5	845-0144	.10	.08	.06
3/16	845-0128	.17	.15	.116	6	845-0145	.10	.08	.06
2/10	845-0106	.17	.15	.116	8*	845-0105	.14	.12	.10
1/4	845-0107	.11	.10	.076	4†	845-0101	.08	.07	.05
3/10	845-0131	.11	.10	.076	5†	845-0102	.06	.05	.03
3/8	845-0132	.11	.10	.076	6†	845-0103	.06	.05	.03
1/2	845-0110	.11	.10	.076	7-1/2†	845-0200	.06	.05	.03
6/10	845-0134	.11	.10	.076	10†	845-0201	.06	.05	.03
3/4	845-0135	.11	.10	.076	15†	845-0202	.06	.05	.03
1	845-0113	.08	.07	.05	25†	845-0173	.06	.05	.03
1-1/2	845-0114	.08	.07	.05	30†	845-0204	.06	.05	.03

FUSE MOUNTINGS AND HOLDERS

Fuse extractor panel mount posts and mounting, provide a quick safe, simple method of mounting fuses. Shpg. wt., 2 oz.

INDUSTRIAL—FOR 3A AND 3AB

Stock No.	Mfr's Type	Fig.	Description	EACH 1-99	100-499	500-99
845-0298	341001	A	Screw slot	.57	.48	.38
845-0299	342001	B	Thumb knob	.57	.48	.38
845-0401	342012	H	Extractor post	.41	.35	.28
845-0402	342014	J	Miniature fuse post	.41	.35	.28
845-0400	342004	K	Miniature fuse post	.48	.40	.32
845-0404	342022	L	Miniature fuse post	.48	.40	.32
845-0407	342028	K	Quick Connect 3/16" Term.	.49	.41	.32
845-0408	342038	M	Quick Connect 3/16" Term.	.49	.41	.32
845-0409	342048	L	Quick Connect 3/16" Term.	.49	.41	.32
845-0410	342058	N	Quick Connect 3/16" Term.	.49	.41	.32
845-0423	350218	D	Single Fuse Mounting	.19	.16	.13
845-0424	350288	W	Single Fuse Mounting	.19	.16	.13
845-0425	353001	G	Panel-type mounting	.56	.47	.38
845-042o	356001	P	Screw terminals	.38	.32	.25
845-0427	357001	C	Lug terminals	.19	.16	.13
845-0428	357002	E	Double fuse mounting	.35	.30	.24
845-0296	101001	S	Phosphor bronze clips	.04	.03	.02

FOR 8AG

845-0444	372001	B	Thumb knob	.57	.48	.38
845-0446	383002	F	"Meter-back" mounting	.37	.31	.24
845-0447	387001	C	Lug terminals	.19	.16	.13
845-0448	387002	E	Double fuse mounting	.35	.30	.24

MILITARY—MIL-F-19207A (*RF Shield)

Stock No.	Mfr's Type	MIL No.	Fig.	Post Description	EACH 1-99	100-499	500-99
845-0406	342025	FHN20G	K	3AG miniature	1.36	1.14	.9
845-0405	342024	FHN26G2	H	3AG miniature	1.32	1.10	.8
845-0297	340255	FHN26G2*	T	3AG miniature	4.77	3.98	3.1
845-0403	342021	FHN26W	M	3AG waterproof	3.20	2.67	2.1
845-0445	372003	FHN31G2	B	8AG extractor	2.65	2.21	1.7

INDICATING TYPES—INDUSTRIAL *Fused circuit V 20A.

Stock No.	Type or MS No.	*Volt Range	Fig.	Knob Color	EACH 1-99	100-499	500-99
845-0411	344006	2½-7	R	Amber	2.80	2.33	1.86
845-0412	344012	7-16	R	Amber	2.80	2.33	1.86
845-0413	344024	16-32	R	Amber	2.80	2.33	1.86
845-0414	344125	100-125	R	Clear	1.80	1.50	1.20
845-0415	344250	200-250	R	Clear	1.80	1.50	1.20

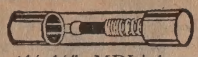
INDICATING TYPES—MILITARY—MIL-F-19206A

845-0422	FHL-17G2	90-300	R	Clear	2.21	1.85	1.48
845-0416	FHL-18G2-1	12-22	R	Amber	3.32	2.77	2.22
845-0417	FHL-18G2-2	23-33	R	Amber	3.32	2.77	2.22
845-0418	FHL-18G2-3	34-45	R	Amber	3.32	2.77	2.22
845-0419	FHL-18G2-4	46-60	R	Amber	3.32	2.77	2.22
845-0420	FHL-18G2-5	61-80	R	Amber	3.32	2.77	2.22
845-0421	FHL-18G2-6	81-90	R	Amber	3.32	2.77	2.22

■Recognized Under the Component Program of Underwriter's Laboratories, In

Bussmann Fuses, Mountings and Holders

MDL AND MDX FUSETRON FUSES



ents needless blows. Operates instan- ously on high overloads. Thermal nt operates slowly on low overloads. volts max. except *125 volts max. Size, 1¼x¼". MDL† have er time lag than MDX‡. ■U.L. Recog. 2 oz. Sold in Multiples of 5.

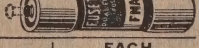
mp	Stock No.	EACH 5-95	100-495	500-Up	Amp	Stock No.	EACH 5-95	100-495	500-Up
	740-0729	.26	.22	.166	8/10	740-0738	.26	.22	.166
	740-0730	.26	.22	.166	1	740-0739	.26	.22	.166
	740-0734	.26	.22	.166	2*	740-0744	.26	.22	.166
0†	740-0721	.35	.30	.22	3-2/10*†	740-0748	.19	.16	.12
	740-0722	.35	.30	.22	4*†	740-0750	.19	.16	.12
	740-0723	.26	.22	.166	5*†	740-0752	.19	.16	.12
†	740-0724	.26	.22	.166	6¼*†	740-0753	.19	.16	.12
	740-0725	.26	.22	.166	8*†	740-0757	.19	.16	.12
00†	740-0726	.26	.22	.166	10*†	740-0760	.19	.16	.12
1000†	740-0727	.26	.22	.166	15*†	740-0766	.19	.16	.12
	740-0728	.26	.22	.166	20*†	740-0769	.19	.16	.12
†	740-0731	.26	.22	.166	25*†	740-0772	.19	.16	.12
	740-0732	.26	.22	.166	30*‡	740-0775	.19	.16	.12
†	740-0733	.26	.22	.166	1¼*‡	740-0858	.28	.24	.179
†	740-0735	.26	.22	.166	1½*‡	740-0859	.28	.24	.179
†	740-0736	.26	.22	.166	1-6/10‡	740-0860	.28	.24	.179
	740-0737	.26	.22	.166	2‡	740-0861	.28	.24	.179
10†	740-0740	.25	.21	.16	3‡	740-0862	.19	.16	.12
	740-0741	.25	.21	.16	3-2/10‡	740-0863	.19	.16	.12
	740-0742	.25	.21	.16	4‡	740-0864	.19	.16	.12
10†	740-0743	.25	.21	.16	5‡	740-0865	.19	.16	.12
†	740-0745	.19	.16	.12	6¼‡	740-0866	.23	.19	.147
10*†	740-0746	.19	.16	.12	7‡	740-0867	.23	.19	.147
	740-0747	.19	.16	.12					

FUSETRON FNM FIBRE TUBE FUSES

il-element, slow-blowing fuses prevent illess blows resulting from high start- currents or sudden surges. Fuse link ates only on high overloads or short-circuits. Thermal cut-out tions on low overloads, slowly, giving a long time-lag. Protec- is afforded against short-circuits or continued overloads. 250 ax. 1½x1³⁄₃₂". ■U.L. Recog. 2 oz. Sold in Multiples of 10.

np	Stock No.	EACH 10-70	80-Up	Amp	Stock No.	EACH 10-70	80-Up
)	740-0089	.37	.32	3½	740-0106	.37	.32
)	740-0090	.37	.32	4	740-0108	.37	.32
)	740-0091	.37	.32	4½	740-0109	.37	.32
)	740-0092	.37	.32	5	740-0110	.37	.32
	740-0093	.37	.32	6¼	740-0115	.37	.32
)	740-0094	.37	.32	7	740-0120	.37	.32
)	740-0095	.37	.32	10	740-0125	.37	.32
	740-0096	.37	.32	12	740-0130	.37	.32
	740-0101	.37	.32	15	740-0135	.37	.32

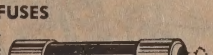
FNA VISUAL INDICATING FUSE



ve, with indicating pin; actuates sig- when in Buss Signal Fuse Block. in Multiples of 10. *Dual tube.

p	Stock No.	EACH 10-20	30-40	50-Up	Amp	Stock No.	EACH 10-20	30-40	50-Up
)	740-0023	.93	.67	.56	3½	740-0032	.93	.67	.56
)	740-0024	.93	.67	.56	4	740-0033	.93	.67	.56
)	740-0025	.93	.67	.56	4½	740-0034	.93	.67	.56
)	740-0026	.93	.67	.56	5	740-0035	.93	.67	.56
	740-0027	.93	.67	.56	6¼	740-0036	.93	.67	.56
)	740-0028	.93	.67	.56	7	740-0037	.93	.67	.56
)	740-0029	.93	.67	.56	10	740-0038	.93	.67	.56
	740-0030	.93	.67	.56	12*	740-0039	1.04	.75	.62
	740-0031	.93	.67	.56	15*	740-0040	1.04	.75	.62

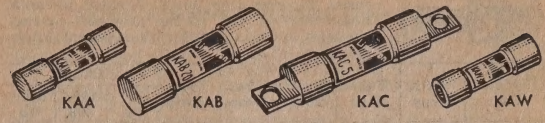
GLD INDICATING FUSES



uates a signal when used in HKA fuse- der or Signal Fuse Block. Fiber tube h silver-plated indicating pin that ends when fuse is blown. Dual-tube struction in sizes larger than 5 amps cannot be used in HKA eholder. Rated 125 V, except 8 amp and over, which are 32 V. :1¼". Wt. 2 oz. Sold in Multiples of 5.

ips	Stock No.	EACH 5-95	100-495	500-Up	Amps	Stock No.	EACH 5-95	100-495	500-Up
¼	740-0236	.50	.42	.34	6	740-0259	.55	.46	.35
	740-0237	.40	.33	.256	8	740-0264	.55	.46	.35
½	740-0238	.40	.33	.256	10	740-0269	.55	.46	.35
	740-0239	.40	.33	.256	12	740-0274	.55	.46	.35
	740-0244	.40	.33	.256	15	740-0279	.55	.46	.35
	740-0249	.40	.33	.256	20	740-0284	.55	.46	.35
	740-0254	.40	.33	.256					

TRON RECTIFIER FUSES



High interrupting capacity and very fast clearing which restricts let-through current and energy to very low values. Give safe short-circuit protection for systems with fault current to 200,000 amperes at 600 volts or less. Test specifications: carry 100% of rating; open at 1000 seconds between 120% and 180% of rating; open within 1 second at 250% of rating. In Table below, size is overall length by diameter, except * overall length by width, including terminals.

KAA SERIES (Max. Volts, 130. 1½x1³⁄₃₂".)

Amps	Stock No.	EACH 1-24	25-Up	Amps	Stock No.	EACH 1-24	25-Up
½	740-0501	1.17	.82	8	740-0520	1.17	.82
1	740-0502	1.17	.82	10	740-0523	1.17	.82
2	740-0505	1.17	.82	12	740-0526	1.17	.82
3	740-0508	1.17	.82	15	740-0529	1.17	.82
4	740-0511	1.17	.82	20	740-0532	1.17	.82
5	740-0514	1.17	.82	25	740-0535	1.17	.82
6	740-0517	1.17	.82	30	740-0538	1.17	.82

KAW SERIES (Max. Volts, 130. 1½x1³⁄₃₂".)

2	740-0655	1.17	.82	5	740-0664	1.17	.82
3	740-0658	1.17	.82	7	740-0667	1.17	.82
4	740-0661	1.17	.82	10	740-0670	1.17	.82

KAB SERIES (Max. Volts, 250. 2x⁹⁄₁₆"; *3½x1⁷⁄₃₂".)

1	740-0559	1.34	.99	10	740-0580	1.34	.99
2	740-0562	1.34	.99	12	740-0583	1.34	.99
3	740-0565	1.34	.99	15	740-0586	1.34	.99
4	740-0568	1.34	.99	20	740-0589	1.34	.99
5	740-0571	1.34	.99	25	740-0592	1.34	.99
6	740-0574	1.34	.99	30	740-0595	1.34	.99
8	740-0578	1.34	.99	70*	740-0602	1.34	.99

KAC SERIES (Max. Volts, 600. 2⁷⁄₈x⁹⁄₁₆".)

1	740-0623	1.80	1.33	10	740-0634	1.80	1.33
2	740-0626	1.80	1.33	12	740-0637	1.80	1.33
3	740-0629	1.80	1.33	15	740-0640	1.80	1.33
5	740-0632	1.80	1.33	30	740-0643	1.80	1.33

GMW SUBMINIATURE PRONG-TYPE FUSES AND HOLDERS

Type GMW subminiature prong-type fuse rated 125 V maximum; fault current 300 A maximum. Opens at 200% within 10 seconds or less. Size, 0.27-in. diameter, ¼-in. long. Designed for Type HWA holder. Use Type AF knob for waterproof installation. *With Type AF knob. †Without Type AF knob. Av., 2 oz.

GMW Fuse HWA Holder AF Knob

Amps	Stock No.	EACH 10-90	100-490	500-Up	Amps	Stock No.	EACH 10-90	100-490	500-Up
1/10	740-0442	.56	.47	.38	1½	740-0447	.56	.47	.38
¼	740-0443	.56	.47	.38	2	740-0448	.56	.47	.38
½	740-0444	.56	.47	.38	3	740-0453	.56	.47	.38
¾	740-0445	.56	.47	.38	4	740-0458	.56	.47	.38
1	740-0446	.56	.47	.38	5	740-0463	.56	.47	.38

Stock No.	Description	EACH 10-90	100-490	500-Up
740-0499	Type HWA *Holder, fits all Type GMW fuses	.72	.60	.48
740-0500	Type HWA †Holder, fits all Type GMW fuses	.64	.53	.42
740-0014	Type AF Knob, fits Type HWA holder	.09	.08	.06

FUSE BLOCKS FOR TRON FUSES

Blocks for clip-mounted fuses have beryllium copper clips on bakelite base; blocks for bolt-down types—studs on bakelite base.

Stock No.	Mfr's Type	No. Poles	For Series	EACH 1-49	50-Up
740-2015	4515	1	KAA 1-30 AMP	.60	.50
740-2020	4525	2	KAA 1-30 AMP	1.15	.96
740-2031	4535	3	KAA 1-30 AMP	1.70	1.42
740-1088	4386	1	KAB 1-30 AMP	.86	.72
740-1062	4287	2	KAB 1-30 AMP	1.70	1.42
740-1037	3959	3	KAB 1-30 AMP	2.66	2.22
740-0948	3531	1	KAB 35-60 AMP	6.50	5.41
740-0950	3604	3	KAB 35-60 AMP	6.34	5.28
740-0949	3595	1	KAC 1-30 AMP	1.58	1.31
740-0947	3528	2	KAC 1-30 AMP	3.15	2.62
740-0946	3525	3	KAC 1-30 AMP	4.73	3.94

Bussmann Fuses, Mountings and Holders

LAMP INDICATING FUSEHOLDERS

For panel mounting ¼x1 and ¼x1¼-inch fuses. Bayonet type knob. Molded phenolic body. Strong coil spring provides contact pressure at ends of fuse. Transparent knob. Av. shpg. wt. 2 oz.

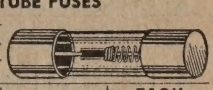
Stock No.	Mfr's. Type	Fuse Size	Circuit Voltage	Max. Amp.	Type Lamp	EACH 1-99	EACH 100-499	EACH 500-Up
740-0491	HKL-X	¼x1¼"	90-250	20	Neon	1.81	1.51	1.21
740-0497	HKX	¼x1¼"	22-33	20	Incand.	2.96	2.47	1.98
740-0494	HKT	¼x1¼"	13-22	20	Incand.	2.96	2.47	1.98
740-0495	HKU	¼x1¼"	4-6	20	Incand.	2.96	2.47	1.98
740-0490	HKL	¼x1"	90-250	20	Neon	1.81	1.51	1.21

FUSE MOUNTINGS AND HOLDERS (Av. shpg. wt., 2 oz.)

Stock No.	Mfr's. Type	For Fuses	EACH 1-99	EACH 100-499	EACH 500-Up
740-0498	HPC	13/32x1½"	.68	.56	.48
740-0488	HCM	9/32x1¼"	.62	.52	.44
740-0492	HKP	¼x1¼"	.43	.36	.29
740-0489	HJM	1x¼"	.43	.36	.29
740-2001	4405	1¼x¼"	.20	.17	.14

FUSETRON MDR GLASS TUBE FUSES

Dual-element fuses give two-way protection. Fuse link operates instantaneously. 250-V max. 1½x13/32". *U.L. Recog. 2 oz. Sold in Multiples of 10.



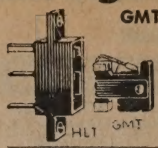
Amp.	Stock No.	EACH 10-70	EACH 80-Up	Amp.	Stock No.	EACH 10-70	EACH 80-Up
1/10	740-0800	.41	.35	½	740-0805	.41	.35
2/10	740-0802	.41	.35	6/10	740-0806	.41	.35
3/10	740-0803	.41	.35	8/10	740-0807	.41	.35
4/10	740-0804	.41	.35				

STANDARD FUSE BLOCKS

Available from 1-12 poles. Clips of strong spring bronze, albaloy plated with laminated black phenolic base. Highly resistant to corrosion with great gripping strength. Types 3823 and 3828 have soldered terminals on small base. Mtg. holes for #6 screw. Type 3833 has screw terminals on full base. Mtg. holes for #6 screw.

Stock No.	Mfr's. Type	Base Dimension	No. Poles	EACH 1-99	EACH 100-499	EACH 500-Up
740-0951	3823-1	½x1 5/8"	1	.24	.20	.14
740-0952	3823-2	1 1/8x1 5/8"	2	.45	.38	.25
740-0953	3823-3	1 3/4x1 5/8"	3	.70	.58	.39
740-0954	3823-4	2 3/8x1 5/8"	4	.88	.73	.49
740-0955	3823-5	3x1 5/8"	5	1.08	.90	.60
740-0956	3823-6	3 5/8x1 5/8"	6	1.26	1.05	.70
740-0957	3823-7	4 1/4x1 5/8"	7	1.44	1.20	.80
740-0958	3823-8	4 7/8x1 5/8"	8	1.62	1.35	.90
740-0959	3823-9	5 1/2x1 5/8"	9	1.84	1.54	1.02
740-0960	3823-10	6 1/8x1 5/8"	10	2.04	1.70	1.14
740-0961	3823-11	6 3/4x1 5/8"	11	2.25	1.88	1.25
740-0962	3823-12	7 3/8x1 5/8"	12	2.45	2.04	1.36
740-0971	3828-1	½x1 3/8"	1	.24	.20	.14
740-0972	3828-2	1 1/8x1 3/8"	2	.45	.38	.25
740-0973	3828-3	1 3/4x1 3/8"	3	.70	.58	.39
740-0974	3828-4	2 3/8x1 3/8"	4	.88	.73	.49
740-0975	3828-5	3x1 3/8"	5	1.08	.90	.60
740-0976	3828-6	3 5/8x1 3/8"	6	1.26	1.05	.70
740-0977	3828-7	4 1/4x1 3/8"	7	1.44	1.20	.80
740-0978	3828-8	4 7/8x1 3/8"	8	1.62	1.35	.90
740-0979	3828-9	5 1/2x1 3/8"	9	1.84	1.54	1.02
740-0980	3828-10	6 1/8x1 3/8"	10	2.04	1.70	1.14
740-0981	3828-11	6 3/4x1 3/8"	11	2.25	1.88	1.25
740-0982	3828-12	7 3/8x1 3/8"	12	2.45	2.04	1.36
740-1000	3833-1	25/32x2 3/8"	1	.40	.33	.26
740-1001	3833-2	1 11/16x2 3/8"	2	.86	.66	.52
740-1002	3833-3	2 13/32x2 3/8"	3	1.20	.99	.78
740-1003	3833-4	3 1/32x2 3/8"	4	1.60	1.32	1.04
740-1004	3833-5	4 13/32x2 3/8"	5	2.00	1.65	1.30
740-1005	3833-6	5 5/16x2 3/8"	6	2.40	1.98	1.56
740-1006	3833-7	6 7/32x2 3/8"	7	2.80	2.31	1.82
740-1007	3833-8	7 1/8x2 3/8"	8	3.20	2.64	2.08
740-1008	3833-9	8 1/32x2 3/8"	9	3.60	2.97	2.34
740-1009	3833-10	8 15/16x2 3/8"	10	4.00	3.30	2.60
740-1010	3833-11	9 27/32x2 3/8"	11	4.40	3.63	2.86
740-1011	3833-12	10 3/4x2 3/8"	12	4.80	3.96	3.12

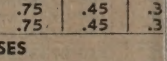
GMT SIGNAL INDICATING FUSES



For multiple mounting of fuses in limi space, for protection of communication equ ment, business machines, computers, etc. 1 13/32" mounting space. Colors indicate ampere rating. Shpg. wt. ⅓-lb. per 100.

Amps	Stock No.	Color of Ind.	EACH 1-99	EACH 100-499	EACH 500-U
18/100	740-0410	Yellow	.75	.45	.3
¼	740-0411	Violet	.75	.45	.3
½	740-0412	Red	.75	.45	.3
65/100	740-0413	Black	.75	.45	.3
¾	740-0414	Brown	.75	.45	.3
1	740-0415	Gray	.75	.45	.3
1⅓	740-0416	White	.75	.45	.3
2	740-0417	Orange	.75	.45	.3
3	740-0422	Blue	.75	.45	.3
5	740-0427	Green	.75	.45	.3
7½	740-0432	Black-White	.75	.45	.3
10	740-0437	Red-White	.75	.45	.3

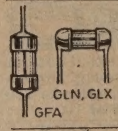
AGC AND MTH FUSES



Low-resistance fuses with high-speed action to protect delicate meters and test equipment. Carry 110% of rated current; open in 1 hour or less at 135%. 250 volts maximum. *U.L. Re Size, 1¼x¼". *Type MTH. 2 oz. Sold in Multiples of 5.

Amp	Stock No.	EACH 5-19	EACH 20-99	EACH 100-199	Amp	Stock No.	EACH 5-19	EACH 20-
¼	740-0015	1.00	.60	.50	2	740-0019	.70	.42
½	740-0016	1.00	.60	.50	3	740-0020	.70	.42
1	740-0017	.70	.42	.375	4*	740-0893	.85	.50
1½	740-0018	.70	.42	.375	5*	740-0094	.85	.50

TRON PIGTAIL FUSES



For use on circuits of 125 volts or less wi available fault current is not over 50 am Figures in type No. indicate ampere rati Leads are of #24 tinned copper wire for rati 1/100 thru 5 amp—#18 tinned copper fo thru 15 amp. Sold in Multiples of 10 Only.

Stock No.	Mfr's. Type GFA-	EACH 10-99	EACH 100-499	EACH 500-Up	Stock No.	Mfr's Type	EACH 10-99	EACH 100-499	5 U
740-0160	1/100	7.80	4.70	3.90	740-0310	GLN 1/100	2.19	1.31	1
740-0161	1/32	7.80	4.70	3.90	740-0311	GLN 1/32	1.84	1.10	
740-0162	1/20	7.80	4.70	3.90	740-0312	GLN 1/20	1.84	1.10	
740-0163	1/16	7.80	4.70	3.90	740-0313	GLN 1/16	1.84	1.10	
740-0164	1/10	7.80	4.70	3.90	740-0314	GLN 1/10	1.84	1.10	
740-0165	⅛	7.80	4.70	3.90	740-0315	GLN ⅛	1.84	1.10	
740-0166	15/100	7.80	4.70	3.90	740-0316	GLN 3/10	1.84	1.10	
740-0167	2/10	7.80	4.70	3.90	740-0317	GLN 4/10	1.84	1.10	
740-0168	¼	7.80	4.70	3.90	740-0324	GLN 7	1.84	1.10	
740-0169	3/10	7.80	4.70	3.90	740-0329	GLN 8	1.84	1.10	
740-0170	4/10	7.80	4.70	3.90	740-0335	GLN 15	1.84	1.10	
740-0171	½	7.80	4.70	3.90	740-0361	GLX15/100	2.37	1.43	1
740-0172	6/10	7.80	4.70	3.90	740-0362	GLX 2/10	2.37	1.43	1
740-0173	¾	6.90	4.10	3.50	740-0363	GLX ¼	2.37	1.43	1
740-0174	1	6.90	4.10	3.50	740-0364	GLX ½	2.37	1.43	1
740-0175	1½	6.90	4.10	3.50	740-0365	GLX 6/10	2.37	1.43	1
740-0180	2	6.90	4.10	3.50	740-0366	GLX ¾	2.37	1.43	1
740-0185	3	6.90	4.10	3.50	740-0367	GLX 1	2.37	1.43	1
740-0190	4	6.90	4.10	3.50	740-0368	GLX 1½	2.37	1.43	1
740-0195	5	6.90	4.10	3.50	740-0369	GLX 2	2.37	1.43	1
740-0201	7	6.90	4.10	3.50	740-0374	GLX 3	2.37	1.43	1
740-0204	8	6.90	4.10	3.50	740-0379	GLX 4	2.37	1.43	1
740-0209	15	6.90	4.10	3.50	740-0384	GLX 5	2.37	1.43	1

DEARBORN 3-WIR CIRCUIT MONITOR 501

Tests whether proper grou is available from three-w AC outlets. Simply plug i three-wire receptacle. Lig indicate: Circuit Okay; proper Ground; Impro Neutral; Reverse Polar Reversed Ground and Pow Power is Off. Compact, easy use anywhere.
768-9090. Wt. 6 oz.....5

MINITEC TYPE 152-002 MINI-BREAKER*

Converts Edison base fuse box into a circuit breal Built-in time delay for starting loads and surges. S ply replace fuse with breaker of proper rating. 3
768-0991. 15 Amp. 1-9.....1.79 10-Up.....1
768-9092. 20 Amp. 1-9.....1.79 10-Up.....1
768-9093. 30 Amp. 1-9.....1.79 10-Up.....1

*Recognized Under the Component Program of Underwriters' Laboratories, I

Circuit Breakers by Wood Electric

SINGLE-POLE THERMAL TYPES

MODEL 507 MILITARY TYPE

itically designed to meet the requirements of L-C-5809D and Drawing MS25244 for AC and C circuits. Interrupts over 2000 amps. Maxi-um operating voltages are 250 volts AC and volts DC. Units carry indefinitely 116% of ted load with ultimate trip at 138%. Trip time at 200% is approx. seconds. Size, 1¾x3¾x1". Shpg. wt., 1½ oz.

Stock No.	Mfr's Type	Amps	EACH			
			1-9	10-24	25-99	100-Up
989-6505	507-205-101	5	8.10	6.75	5.85	5.18
989-6524	507-507-101	7.5	8.10	6.75	5.85	5.18
989-6507	507-210-101	10	8.10	6.75	5.85	5.18
989-6510	507-215-101	15	8.10	6.75	5.85	5.18
989-6512	507-220-101	20	8.10	6.75	5.85	5.18
989-6514	507-225-101	25	8.10	6.75	5.85	5.18
989-6516	507-230-101	30	8.10	6.75	5.85	5.18
989-6518	507-235-101	35	8.10	6.75	5.85	5.18
989-6520	507-240-101	40	8.10	6.75	5.85	5.18
989-6522	507-250-101	50	8.10	6.75	5.85	5.18

MODEL 112 TOGGLE TYPE

ombination switch and circuit breaker. Car-es 100% of rated load indefinitely, with ulti-ate trip at 135%. Tripping time at 200%, 3 c. Interruption, over 3000 amps. For 250 AC, 32 VDC. 2x¾x1¼". Shpg. wt., 2 oz.

989-6130	112-205-101	5	4.68	3.90	3.38	2.99
989-6154	112-507-101	7.5	4.68	3.90	3.38	2.99
989-6133	112-210-101	10	4.68	3.90	3.38	2.99
989-6136	112-215-101	15	4.68	3.90	3.38	2.99
989-6139	112-220-101	20	4.68	3.90	3.38	2.99
989-6142	112-225-101	25	4.68	3.90	3.38	2.99
989-6145	112-230-101	30	4.68	3.90	3.38	2.99
989-6148	112-235-101	35	4.68	3.90	3.38	2.99
989-6151	112-240-101	40	4.68	3.90	3.38	2.99
989-6152	112-250-101	50	4.68	3.90	3.38	2.99

MODEL 109 PUSH-PULL TYPE

eatures push-pull button for opening or losing circuits. For 250 VAC, 32 VDC. Car-es 100% rated load indefinitely, trips at 35%. Trip time at 200%, 12 sec. Interruption, ver 5000 amps. 2x¾x1¼". Wt., 2 oz.

Stock No.	Mfr's Type	Amps	EACH			
			1-9	10-24	25-99	100-Up
989-6063	109-205-101	5	4.41	3.68	3.19	2.83
989-6090	109-507-101	7.5	4.41	3.68	3.19	2.83
989-6066	109-210-101	10	4.41	3.68	3.19	2.83
989-6069	109-215-101	15	4.41	3.68	3.19	2.83
989-6072	109-220-101	20	4.41	3.68	3.19	2.83
989-6075	109-225-101	25	4.41	3.68	3.19	2.83
989-6078	109-230-101	30	4.41	3.68	3.19	2.83
989-6081	109-235-101	35	4.41	3.68	3.19	2.83
989-6084	109-240-101	40	4.41	3.68	3.19	2.83
989-6087	109-250-101	50	4.41	3.68	3.19	2.83

MODEL 111 PUSH-PULL TYPE

eatures same specifications as Model 109 above, but with faster rip time at 200% of only 1 second. Shpg. wt., 2 oz.

989-6116	111-201-101	1	9.50	7.92	6.86	6.07
989-6117	111-202-101	2	9.50	7.92	6.86	6.07
989-6118	111-203-101	3	9.50	7.92	6.86	6.07
989-6119	111-204-101	4	9.50	7.92	6.86	6.07

MODEL 374 PUSH-TO-RESET TYPE

or economical low current protection. But-on extends to indicate overload. Operates to 50 VAC, 32 VDC. Carries 100% of rated oad, with ultimate trip of 135%. Trip time, 25 seconds at 200%. Interruption over 2000%. Size, 1⅜x1 1/16x1⅜". Shpg. wt., 1½ oz.

989-6486	374-201-101	1	2.77	2.31	2.00	1.77
989-6487	374-202-101	2	2.77	2.31	2.00	1.77
989-6488	374-203-101	3	2.77	2.31	2.00	1.77
989-6489	374-204-101	4	2.77	2.31	2.00	1.77

MODEL 375 PUSH-TO-RESET TYPE

Same specifications as above, but with faster trip time of only 12 seconds at 200% and will interrupt 300 amps. Wt., 1½ oz.

989-6490	375-205-101	5	1.71	1.43	1.24	1.09
989-6491	375-207-101	7	1.71	1.43	1.24	1.09
989-6492	375-210-101	10	1.71	1.43	1.24	1.09
989-6496	375-215-101	15	1.71	1.43	1.24	1.09
989-6501	375-220-101	20	1.71	1.43	1.24	1.09

MAGNETIC TYPES

MODEL 130 SINGLE-POLE DC TYPE

For up to 50 VDC. Includes switch for aux. circuit. Carries 100% of rated load indefinitely, with ultimate trip at 120%. Trip time at 200%, approximately 15 milliseconds. Interrupts over 2000 amps at 50 volts DC. Size, ¾x2x2½". Shpg. wt., 4½ oz.

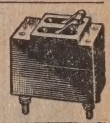
Stock No.	Mfr's Type	Amps	EACH			
			1-9	10-24	25-99	100-Up
989-6258	130-201-101	1	9.38	7.82	6.77	5.99
989-6259	130-202-101	2	9.38	7.82	6.77	5.99
989-6260	130-203-101	3	9.38	7.82	6.77	5.99
989-6261	130-204-101	4	9.38	7.82	6.77	5.99
989-6262	130-205-101	5	9.38	7.82	6.77	5.99
989-6264	130-207-101	7	9.38	7.82	6.77	5.99
989-6267	130-210-101	10	9.38	7.82	6.77	5.99
989-6273	130-215-101	15	9.38	7.82	6.77	5.99
989-6279	130-220-101	20	9.38	7.82	6.77	5.99
989-6285	130-225-101	25	9.38	7.82	6.77	5.99
989-6290	130-230-101	30	9.38	7.82	6.77	5.99
989-6295	130-235-101	35	9.38	7.82	6.77	5.99
989-6300	130-240-101	40	9.38	7.82	6.77	5.99
989-6310	130-250-101	50	9.38	7.82	6.77	5.99

MODEL 122 SINGLE-POLE AC TYPE

(Not illustrated.) Similar to Model 130 above, except no auxiliary switch. Designed for 60 Hz AC, up to 250 volts. Will carry 100% of rated load indefinitely, with ultimate trip at 125%. Trip time at 200% is approximately 5 seconds. Interrupts over 1000 amps at 250 volts AC. Size, ¾x2x2½". Shpg. wt., 4½ oz.

989-6179	122-201-101	1	7.20	6.00	5.20	4.60
989-6180	122-202-101	2	7.20	6.00	5.20	4.60
989-6181	122-203-101	3	7.20	6.00	5.20	4.60
989-6182	122-204-101	4	7.20	6.00	5.20	4.60
989-6183	122-205-101	5	7.20	6.00	5.20	4.60
989-6185	122-207-101	7	7.20	6.00	5.20	4.60
989-6188	122-210-101	10	7.20	6.00	5.20	4.60
989-6193	122-215-101	15	7.20	6.00	5.20	4.60
989-6198	122-220-101	20	7.20	6.00	5.20	4.60
989-6204	122-225-101	25	7.20	6.00	5.20	4.60
989-6210	122-230-101	30	7.20	6.00	5.20	4.60
989-6215	122-235-101	35	7.20	6.00	5.20	4.60
989-6221	122-240-101	40	7.20	6.00	5.20	4.60
989-6232	122-250-101	50	7.20	6.00	5.20	4.60

MODEL 190 TWO-POLE AC TYPE



For use up to 250 volts, 60 Hz AC. Both poles are interlocked and operate simultaneously. Carries 100% of rated load indefinitely, ultimate trip at 125%. Trip time at 200%, approx. 5 seconds. Interrupts over 1000 amps at 250 volts. 1½x2x2½". Wt., 9 oz.

Stock No.	Mfr's Type	Amps	EACH			
			1-9	10-24	25-99	100-Up
989-6336	190-201-101	1	18.63	15.53	13.46	11.90
989-6337	190-202-101	2	18.63	15.53	13.46	11.90
989-6338	190-203-101	3	18.63	15.53	13.46	11.90
989-6339	190-204-101	4	18.63	15.53	13.46	11.90
989-6340	190-205-101	5	18.63	15.53	13.46	11.90
989-6343	190-207-101	7	18.63	15.53	13.46	11.90
989-6346	190-210-101	10	18.63	15.53	13.46	11.90
989-6351	190-215-101	15	18.63	15.53	13.46	11.90
989-6356	190-220-101	20	18.63	15.53	13.46	11.90
989-6361	190-225-101	25	18.63	15.53	13.46	11.90
989-6366	190-230-101	30	18.63	15.53	13.36	11.90
989-6371	190-235-101	35	18.63	15.53	13.46	11.90
989-6376	190-240-101	40	18.63	15.53	13.46	11.90
989-6386	190-250-101	50	18.63	15.53	13.46	11.90

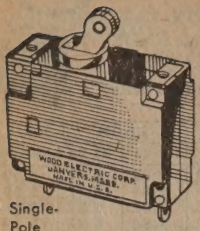
MODEL 220 THREE-POLE AC TYPE

For use up to 250 volts, 60 Hz AC. All three poles are interlocked and operate simultaneously. Carries 100% rated load indefinitely, with ultimate trip at 125%. Trip time; 200%, 5 sec. Interrupts over 1000 amps at 250 V. 2⅜x2x2½". Shpg. wt., 14 oz.

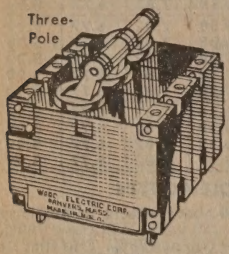
989-6411	220-201-101	1	28.71	23.93	20.74	18.34
989-6412	220-202-101	2	28.71	23.93	20.74	18.34
989-6413	220-203-101	3	28.71	23.93	20.74	18.34
989-6414	220-204-101	4	28.71	23.93	20.74	18.34
989-6415	220-205-101	5	28.71	23.93	20.74	18.34
989-6417	220-207-101	7	28.71	23.93	20.74	18.34
989-6420	220-210-101	10	28.71	23.93	20.74	18.34
989-6425	220-215-101	15	28.71	23.93	20.74	18.34
989-6430	220-220-101	20	28.71	23.93	20.74	18.34
989-6435	220-225-101	25	28.71	23.93	20.74	18.34
989-6440	220-230-101	30	28.71	23.93	20.74	18.34
989-6445	220-235-101	35	28.71	23.93	20.74	18.34
989-6450	220-240-101	40	28.71	23.93	20.74	18.34
989-6460	220-250-101	50	28.71	23.93	20.74	18.34

Wood and Heinemann Circuit Breakers

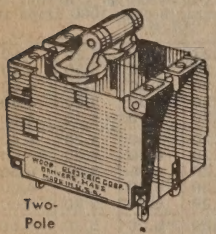
WOOD MINI-MAG HYDRAULIC-MAGNETIC CIRCUIT-BREAKERS



Single-Pole



Three-Pole



Two-Pole

Compact, lightweight, ruggedly-constructed units designed to fully protect circuits carrying up to 30 amperes at up to 250 volts, 60 Hz AC. They are accurately calibrated to easily carry 100% of rated load and to trip at between 101% and 125% of load. Trip-timing range at 200% of rated load is from 2 to 20 seconds.

In operation, a spring-loaded iron piston sealed in a silicone-fluid-filled nonmagnetic metal tube is energized by the load current, attracting the armature and opening the breaker contacts. The fluid produces a time-delay on moderate overloads. On heavy overloads the piston moves virtually instantaneously to give immediate circuit interruption. Operation is unaffected by ambient conditions. Terminals accept soldered, snap-on, crimped, or screw connections.

Humidity Resistance, meets MIL-STD-202 and MIL-STD-170. Dielectric Strength, 1100 VDC. Reset Time, instantaneous. Voltage Drop, 1.5 volts at 1 amp or more. Shock and Vibration, tested per MIL-STD-202. Operating Temperature, −40°C to +85°C. Insulation Resistance, 100 megs at 500 VDC. All parts fungus resistant. 2¼x2x1½". Av. shpg. wt. 1 oz.

Breaker Caps for Color Coding. Specify Color: Black, Brown, Red, Orange, Yellow, Green, Blue, Gray or White.
989C6699. 1-9.....Each .07
10-24.....Each .06
25-99.....Each .05

SINGLE-POLE

Stock No.	Mfr's Type	Amps	EACH 1-9	10-25	26-99	100-
989-6528	511-201-101	1	5.38	4.49	3.89	3.4
989-6529	511-202-101	2	5.38	4.49	3.89	3.4
989-6530	511-203-101	3	5.38	4.49	3.89	3.4
989-6531	511-204-101	4	5.38	4.49	3.89	3.4
989-6532	511-205-101	5	5.38	4.49	3.89	3.4
989-6534	511-207-101	7	5.38	4.49	3.89	3.4
989-6537	511-210-101	10	5.38	4.49	3.89	3.4
989-6541	511-215-101	15	5.38	4.49	3.89	3.4
989-6546	511-220-101	20	5.38	4.49	3.89	3.4
989-6551	511-225-101	25	5.38	4.49	3.89	3.4
989-6556	511-230-101	30	5.38	4.49	3.89	3.4

TWO-POLE

989-6582	518-201-101	1	14.02	11.09	10.13	8.9
989-6583	518-202-101	2	14.02	11.09	10.13	8.9
989-6584	518-203-101	3	14.02	11.09	10.13	8.9
989-6585	518-204-101	4	14.02	11.09	10.13	8.9
989-6586	518-205-101	5	14.02	11.09	10.13	8.9
989-6588	518-207-101	7	14.02	11.09	10.13	8.9
989-6591	518-210-101	10	14.02	11.09	10.13	8.9
989-6596	518-215-101	15	14.02	11.09	10.13	8.9
989-6601	518-220-101	20	14.02	11.09	10.13	8.9
989-6606	518-225-101	25	14.02	11.09	10.13	8.9
989-6611	518-230-101	30	14.02	11.09	10.13	8.9

THREE-POLE

989-6637	525-201-101	1	22.09	18.41	15.95	14.1
989-6638	525-202-101	2	22.09	18.41	15.95	14.1
989-6639	525-203-101	3	22.09	18.41	15.95	14.1
989-6640	525-204-101	4	22.09	18.41	15.95	14.1
989-6641	525-205-101	5	22.09	18.41	15.95	14.1
989-6643	525-207-101	7	22.09	18.41	15.95	14.1
989-6646	525-210-101	10	22.09	18.41	15.95	14.1
989-6651	525-215-101	15	22.09	18.41	15.95	14.1
989-6656	525-220-101	20	22.09	18.41	15.95	14.1
989-6661	525-225-101	25	22.09	18.41	15.95	14.1
989-6666	525-230-101	30	22.09	18.41	15.95	14.1

HEINEMANN HYDRAULIC-MAGNETIC CIRCUIT BREAKERS

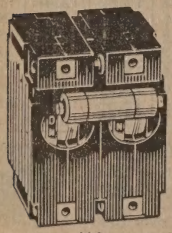
AMI

Dimensions in Inches	H	W	D
AM1	2.53	0.76	2.00
JA2	2.00	1.50	1.84
SM3	1.50	0.63	1.38
SM333	1.50	1.88	1.38

SERIES AM CIRCUIT BREAKERS

Guaranteed to hold rated load indefinitely and trips at 125% of rated load. Temperature stable. Inherent fungus and moisture resistant. Typical time delay at 200% is 2-20 sec. *With aux. swit for time delay; †without aux switch. Specify 1, 5, 10, 20, 30 or 50 Amps. Av. wt. 2 oz.

Stock No.	Mfr's Type	No. Poles	Volts	EACH 1-9	10-24	50-99	100-Up
809C5202	AM1-B2	1	65DC*	9.52	6.17	5.60	5.04
809C5204	AM1-B3	1	65DC†	7.91	5.12	4.65	4.19
809C5206	AM1-A2	1	250AC 60Hz*	9.52	6.17	5.60	5.04
809C5208	AM1-A3	1	250AC 60Hz†	7.91	5.12	4.65	4.19
809C5226	AM2-B3	2	65DC	21.08	13.64	12.40	11.16
809C5228	AM2-A3	2	250AC 60Hz	21.08	13.64	12.40	11.16
809C5230	AM3-A3	3	250AC 60Hz	32.98	21.34	19.40	17.46
809C5232	AM3-C3	3	250AC 400Hz	40.63	26.29	23.90	21.51



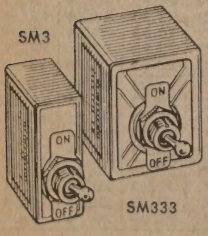
JA2

SERIES JA CIRCUIT BREAKERS

Excellent where equipment size and weight must be kept as small as possible. Temperature stable, always carries 100% of rated load. Inherent fungus and moisture resistant. Tested for shock and vibration per MIL-STD-202 req. Guaranteed to trip at 125% load. Typical time delay at 200% of rated load is 2-20 sec. Terminals accept crimp-typ screw-type or soldered connections. Perfect whe a large number of circuits centrally controlled fro a small, consolidated panel are required. Speci pivot action cleans contacts every time they a opened or closed. Specify 1, 3, 5, 10, 20 or 30 Amps. 4 o

Stock No.	Mfr's Type	No. Poles	Volts	EACH 1-9	10-49	50-99	100-Up
809C5250	JA1-B3	1	50DC	7.01	4.54	4.13	3.71
809C5252	JA1-A3	1	250AC 60Hz	7.01	4.54	4.13	3.71
809C5254	JA2-B3	2	50DC	18.23	11.79	10.73	9.65
809C5256	JA2-A3	2	250AC 60Hz	18.23	11.79	10.73	9.65
809C5258	JA3-A3	3	250AC 60Hz	28.73	18.59	16.90	15.21
809C5260	JA3-A3	3	250AC 400Hz	34.09	22.05	20.05	18.05

SM3



SM333

SERIES SM SUBMINIATURE MILITARY CIRCUIT BREAKERS

Fully sealed, lightweight, subminiature. Engineered for severe environmental service. Designed to MIL-C-39019 and MIL-STD-242 requirements. Easy installation, single hole mounting for single- or multi-pole models. Fully magnetic operation, guaranteed to hold rated load indefinitely—at an temperature. Typical time delay at 125% is 5-4 seconds. Solder-type terminals. Approved by NAS for aerospace applications. Specify 1, 3, 5, 10, 15 o 20 Amps. Av. shpg. wt. 1 oz.

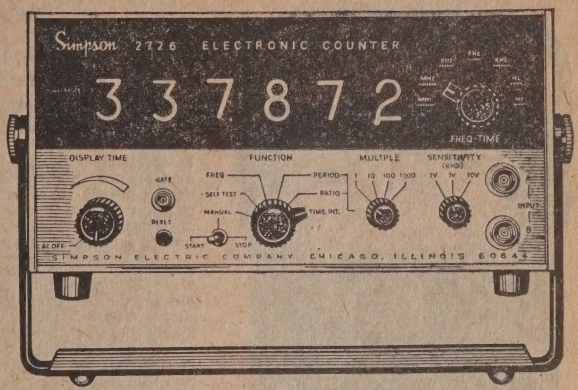
809C5280	SM3	1	50DC	22.14	14.33	13.03	11.72
809C5282	SM3	1	250AC 60Hz	22.14	14.33	13.03	11.72
809C5284	SM33	2	50DC	40.16	25.99	23.63	21.26
809C5286	SM33	2	250AC 60Hz	40.16	25.99	23.63	21.26
809C5288	SM333	3	250AC 60Hz	57.29	37.07	33.70	30.33
809C5290	SM333	3	250AC 400Hz	57.29	37.07	33.70	30.33

Digital Test Equipment

MODEL 2726 SIX-DIGIT FREQUENCY COUNTER—DIRECT READOUTS TO 32 MHZ

Simpson

- Solid-State, Using Newest Integrated Circuits for Reliability
- Crystal-Controlled Internal Clock for Accuracy and Stability
- Automatic Overrange Permits Resolution Up to Eight Digits
- Baffle and Filter Minimize Reflections for Effective Display



ueral-purpose six-digit electronic counter is a real help in oratories, production, servicing, and digital systems for ustrial control. Provides numerical display of average fre-ncies from 5 Hz to 32 MHz in 6 time bases. Also measures e intervals, period, and frequency ratio; totalizes pulses over tandard time range. Features automatic overrange capability owing as much as nine-digit resolution.

lid-state design with monolithic integrated circuits provides utmost in accuracy, stability, and reliable performance. ont panel switch selects six time bases from 0.1 msec to 10 onds, precisely controlled by internal crystal-controlled ck. Display time is adjustable from approximately 5 displays second to "hold," which can be held indefinitely. All func-ns are controlled at front panel, including manual stop/start ntrol and self-testing circuitry.

ngle switch selects all functions; no plug-in adapters needed. second switch selects the six time bases/frequency ranges. adouts include decimal point for easy reading. Readouts cold-gas glow tubes with 200,000-hour rated life. Accuracy within ±0.001%, ±1 digit, over temperature range of +15°C +55°C. Complete specifications shown at left. Top-quality components are used roughout to assure accuracy. All internal parts are mounted on a single PC board easy access to test points. Special baffle and filter minimize reflections for most ective digital display. Metal case, 4x8¼x11". For 115 or 230 V, 50-60 Hz AC; 20 tts. Can be used with Rack Mount Kits, below.

19-2762. Shpg. wt. 8 lbs. **575.00**

FREQUENCY COUNTER SPECIFICATIONS

Frequency Range: 5 Hz to 32 MHz in 6 ranges. **Period Range:** Single period, 100 μsec to 0.2 sec. Multiple period, 100 nsec to 0.2 sec. **Frequency Ratio:** Single, 1 to 1.999999×10^6. Multiple, 0.001 to 1.999999×10^6. **Time Interval:** 100 μsec to 1.99999×10^6 sec. **Totalization:** 0.0 to 1.999999×10^6 counts. **Accuracy:** ±0.001% ±1 digit. **Temperature Range:** +15° C to +55° C. **Number of Full-Time Digits:** Model 2726, six. Model 2725, five. **Time Base:** 0.00001, 0.0001, 0.001, 0.01, 0.1, 1.0, and 10.0 seconds. **Display Time:** Variable 0.2 seconds to Hold. **Input Sensitivity:** Channel A, 0.1 V rms maximum. Channel B, 0.1 V rms 200 Hz to 2 MHz; 0.3 V rms 5 Hz to 200 Hz. **Input Impedance:** Channel A, 1 megohm shunted by 30 pF. Channel B, 500k ohms shunted by 30 pF. **Maximum Input Voltage:** 230 V rms on 0.1 to 1.0 volt range. **Power Requirements:** 115/230 VAC ±10%, 50-60 Hz, approx. 20 watts.

MODEL 2725 FIVE-DIGIT FREQUENCY COUNTER

me as above, but five-digit display. Maximum Readings: Frequency Ratio, 1 to 9999x10⁵; Time interval, 300 μsec to 1.9999x10⁵; Totalization, 0 to 1.9999x10⁵. mplete specifications shown at left.

19U2725. Shpg. wt. 8 lbs. **525.00**

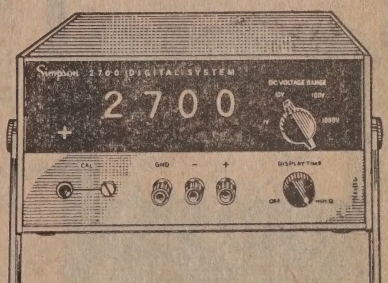
MODEL 2700 FOUR-DIGIT VOLTMETER WITH UP TO 110% OVERRANGE

- Four DC Ranges for Precise Measurements from .0001 to 999.9 Volts
- Pushbutton on Front Panel for Convenient, Accurate Calibration Checks
- Change in Indication Less Than .05° for 20° C Change in Temperature
- Sampling Rate Continuously Variable from 5 Readings Per Second to "Hold"

olid-state DC digital voltmeter offers four-digit readout with ±0.05% (±1 digit) ccuracy over a temperature range of +20° to +30° C. Has fully automatic polarity lection and indication; linear to 110% overrange. Convenient pushbutton front nel calibration check. Ranges: DC Volts; 000.1 to 999.9; 00.01 to 99.99; 0.001 to 999; .0001 to .9999. Response Time: 5 seconds maximum, to reach rated accuracy ter 0 to full range step change. Sampling Rate: variable from 5 readings per second "hold." Input: 10.2 megohms on all ranges. Resolution; 100 μV on 1,000-volt nge. Stable FET input. Virtually unaffected by temperature: change in indication less than .05% for 20° C change in temperature. Cold gas glow readout tubes have 00,000-hour life. Heavy-duty metal case, 4x8¼x11". For 115/230 V, 50-60 Hz AC.

19U2700. Shpg. wt. 8 lbs. **615.00**

Digital Voltmeter



LUG-IN MODULES. Add capabilities to Model 2700 DC voltmeter above. Shpg. wt. lb.

19-2701. Resistance Module. Ranges: 1k, 10k ohms, 100k ohm, 10 megohm. . **100.00**
19-5103. DC Current Module. Ranges: 1, 10, 100 mA, 1 amp. **100.00**
19-5102. AC Voltage Module. Ranges: 1, 10, 100, 1000 VAC. **200.00**

ACK MOUNTING KIT. For Model 2700, 2725 or 2726. Standard 5¼x19" panel.

19-2702. Shpg. wt. 1 lb. **20.00**

-UNIT RACK MOUNTING KIT. For two model 2700, 2725 or 2726 units. 5¼x19".

19-2703. Shpg. wt. 1½ lbs. **25.00**

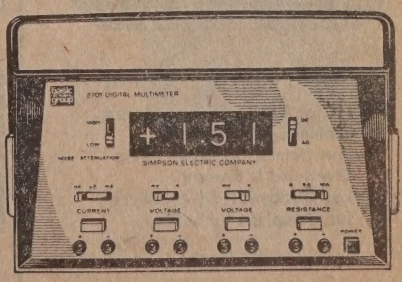
MODEL 2701 DIGITAL MULTIMETER

- Eliminates Scale Interpolation Errors for Improved Accuracy and Precision
- Wider Range Selection Than Conventional VOM's, with Input Impedance of a VTVM
- Three-Digit Readout, With Polarity Sign and Automatic Switching Decimal Point
- Has 6 Ranges AC/DC Volts; 9 Ranges AC/DC Current; 8 Ranges Resistance

ersatile new digital multimeter provides accurate numerical displays of voltage, rrent and resistance. Features ultra-convenient operation—simply set the magni-de switch, then press the button—reading appears as a three-digit number complete ith decimal point and polarity sign. Decimal point automatically switches over ree decade ranges, eliminating the possibility of scale interpolation error. Offers ider selection of ranges than conventional VOM's, yet has the input impedance of a TVM. AC, DC Volts, 0.01-9.99, 10.0-99.9, 100-999 mV; 1.00-9.99, 10.0-99.9; 100-00 volts. AC, DC Current: 100-999 nA; 1.00-9.99, 10.0-99.9, 100-999 μA; 1.00-9.99, 0.0-99.9, 100-999 mA. Resistance: 10.0-99.9 100-999 ohms; 1.00-9.99, 10.0-99.9, 00-999 k ohms; 1.00-9.99, 10.0-99.9, 100-999 megohms. Accuracy: ±1.5% of read-g, ±0.2% full range. Temperature range: −10° to +35° C. Solid-state with inte-rated circuits. 100,000 hour cold-gas glow readout tubes. Metal case, 5½x10x10". 05-130 V, 60 Hz AC.

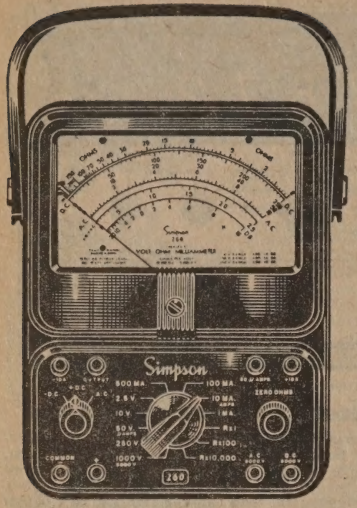
19U2704. Shpg. wt. 14 lbs. **835.00**

Digital Multimeter



Simpson World Famous 260® Family of VOM'

CHOOSE AN INDIVIDUAL 260 INSTRUMENT WITH FEATURES AND ACCURACIES TO MEET YOUR EXACT ELECTRONIC NEEDS



FAMOUS 260-6 VOM

New External Access Fuse and Battery Compartment
Functional Controls for Operating Convenience
Easy-to-Read 2-color Scales
Polarity Reversing Switch

REVISED 260-6 SETS NEW STANDARDS

- New Range Offerings Provide Increased Operating Versatility
- New Precision Taut-Band Movement Is Fully Shock-Resistant
- Meter Movement Is Varistor-Protected Against Overloads
- Sensitivity 20,000 Ohms per Volt DC, 5000 Ohms per Volt AC

260-6. Battery-operated portable VOM is ideal for use where quick, accurate electrical checks must be made. Engineered for accuracy and operating ease in a wide variety of applications. Ruggedly constructed and known for its reliability.

Excellent linearity, stability. Modified full-wave bridge rectifier gives accurate AC measurements. Precision movement is of shock-resistant taut band construction for longer life. Varistor-protected against meter overloads. Self-shielded movement cannot be affected by magnetic fields—a famous Simpson feature.

Easy-to-read two-color scales. Polarity-reversing switch for ease of making DC measurements.

Handle also serves as convenient stand. S complete specifications below. Takes c tional "Add-A-Testers" below.

With batteries, leads, and operating ma ual. Size, 7x5¼x3⅛". Shpg. wt. 5 lbs.
919-0253 ..... 65.

260-6RT. Same features as above but wi roll top protective case.
919-0257 ..... 71.

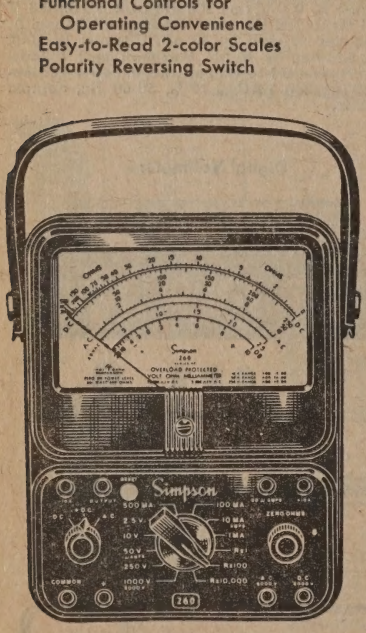
260-6M. Same features as 260-6 but wi mirrored dial to eliminate parallax erro in reading.
919-0254 ..... 67.

260-6MRT. Same features as 260-6 but wi roll top case and mirrored dial.
919-0255 ..... 73.

BURNOUTPROOF MODEL 260-5P

- Circuit Breaker Reset Button Pops Out to Indicate Overload
- Taut-Band Movement • Self-Shielding • Polarity Switch

260-5P. A highly versatile meter that is virtually "burnoutproof." Can be of particular value in situations where the instrument may be used by inexperienced students or new trainees. Also ideal for exploring unfamiliar equipment. Reset button on built-in circuit breaker pops out to indicate overload and protect circuits. Button cannot be reset while overload is present. All ranges protected except tho not feasible in a portable instrument—1,0 and 5,000 volts DC and AC; 10 amp. D Has many deluxé quality features inclu ing taut band meter construction, polari reversal, and self-shielded movement. S complete specifications below. Size, 7x5 x3⅛". Shpg. wt. 5 lbs.
919-0256 ..... 97.

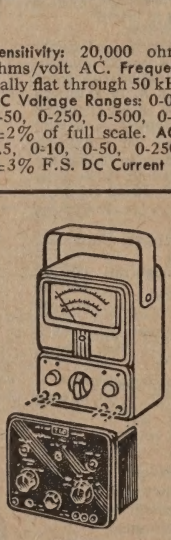


"GOOF-PROOF" 260-5P

Ideal for Use by Inexperienced Trainees and Students
Button Cannot be Reset While Overload Is Present
Takes Optional Add-A-Testers for Complete Versatility

260/270 SERIES SPECIFICATIONS

Sensitivity: 20,000 ohms/volt DC, 5,000 ohms/volt AC. **Frequency Response:** Essentially flat through 50 kHz. **Scale Length:** 4.2". **DC Voltage Ranges:** 0-0.25, 0-1, 0-2.5, 0-10, 0-50, 0-250, 0-500, 0-1000V; accurate to ±2% of full scale. **AC Voltage Ranges:** 0-2.5, 0-10, 0-50, 0-250, 0-500, 0-1,000V; ±3% F.S. **DC Current Ranges:** 0-50 μA (250 mv drop), ±1½% F.S. 0-1, 0-10, 0-100, 500 mA, ±2% F.S. 0-10 A (250 mv drop ±2% F.S. **Decibel Ranges** (1 mW-600 ohm −20 to +10, −8 to +22, +6 to +3 +20 to +50. **Resistance Ranges:** R x 1: 2000 (12 ohm center), ±2.5° of arc. R x 10 0-200 k (1200 ohm center), ±2.0°. R 10,000: 0-20 meg (120 kilohms center), ±2.0



ACCESSORIES FOR SIMPSON VOM'S

VERSATILE PLUG-IN "ADD-A-TESTER" ADAPTERS

Eliminates the need for separate testers. Simply plug into any 26 261, 270, 250, or 255 VOM on these pages (except those with ro top cases). 4⅜x5 1/16x3 7/16". Av. wt. 2 lbs.
919-0650. 650 Transistor Tester. I_{co} range, 0-100 μA 44.0
919-0651. 651 DC VTVM. 0-.5, 1.0, 2.5, 10, 25, 50, 100, 500 ranges. Impedance, 10 megohms 52.0
919-0652. 652 Temp. Tester. −50 to +250 F in 2 ranges ... 49.0
919-0653. 653 Ammeter. 0.25 to 25A ranges; 50 Hz-3 kHz .. 30.0
919-0654. 654 Audio Wattmeter. 17 microwatts to 100 watts. Loa ranges, 4, 8, 16, and 600 ohms 34.0
919-0655. 655 Attenuator. 2.5-250,000 μV decade steps 30.0
919-0656. 656 Battery Tester 30.0

PROBES/LEADS

Can be used with any VOM shown on these two pages.
919-0508. Type 00508. 25 kV DC probe. Shpg. wt. ½ lb... 17.0
919-0509. Type 00509. 50 kV DC probe. Shpg. wt. ½ lb... 17.0
919-7500. Type 07500. Banana plugs, alligator clip leads, colo coded pair. Shpg. wt. 1 lb 2.7

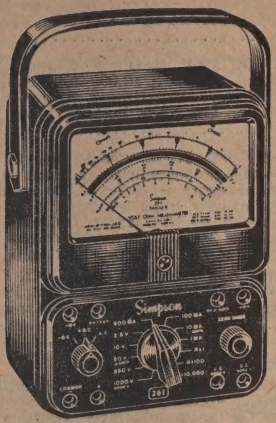
CARRYING CASES

Fit any VOM shown on these two pages.
919-0805. Type 00805. Vinyl. Shpg. wt. 2 lbs 14.0
919-1818. Type 01818. Leather. Shpg. wt. 2 lbs 11.0
919-0549. Type 00549. Vinyl, with space for tools, leads, or acce sories. Shpg. wt. 2 lbs 20.0

for Precision and Highest Reliability

Simpson

SIMPSON FINE QUALITY SPECIALTY VOM'S FOR EXTRA-DEPENDABLE PERFORMANCE



261-2 HIGH-ACCURACY VOM

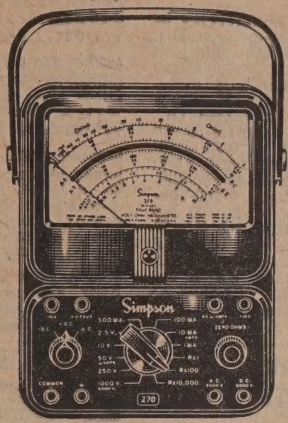
- Special Calibration Circuit
- Easy-to-Read Mirror Scale
- Varistor-protected Movement

This instrument has features and ranges specifically designed for applications requiring higher accuracies. Special calibration circuit for maintaining increased accuracy. Easy-to-read mirror scale and knife-edge pointer reading end effectively errors caused by parallax.

Accuracy achieved is ±1.5% DC, ±3% AC, ±2° of arc on R x 1, ±1.5° of arc on R x 100 and R x 10k. Complete specifications at left except as noted here.

Self-shielded annular meter movement that is varistor protected to 200,000% overload. Supplied complete with batteries, test leads, and operator's manual. Size, 7x5¼x3⅛". Shpg. wt. 5 lbs.

919-0260. 261-2.....73.00
919-0261. 261-2RT. As above but with roll top protective case.....79.00



270-4 EXTRA-ACCURATE VOM

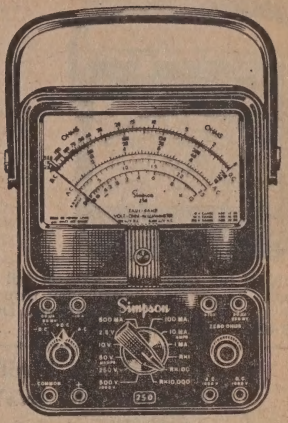
- Protected Taut-Band Movement
- Special Calibration Circuit
- Anti-parallax Mirror Scale

In addition to all the fine features and ranges of the 260-6M, this instrument includes enough more to make it the most accurate VOM in the 260® series. Has top-rated components to give the highest accuracy and special calibration circuits to maintain it.

Accuracy is to ±1.25% DC, ±2% AC, ±1.5° of arc on R x 1, ±1° of arc on Rx 100 and R x 10k. Complete specifications on opposite page except as noted here.

Mirror scale and knife edge pointer. Protected taut band movement. Varistor-protected against meter overloads. Polarity-reversing switch for DC. With batteries, test leads, and manual. 7x5¼x3⅛".

919-0270. 270-4. Shpg. wt. 5 lbs.....78.00
919-0271. 270-4RT. As above but with roll top protective case.....84.00



250 FOR SOLID-STATE USE

- Low Loading on Current Ranges
- Special 0-50 mV DC Range
- Precision Taut-Band Movement

Precision instrument is designed specifically for use in testing solid-state circuitry and other low-voltage, low-current applications. Compact and rugged, this VOM is designed to provide quick and accurate electrical checks with operating case.

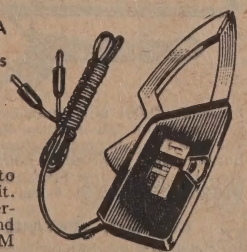
Voltage drop on current ranges is just 50 mV; results in less circuit loading for testing conditions closer to actual operating conditions. Has added 0-50 DC millivolt range for greater convenience and low-voltage accuracy required on today's complex solid-state equipment.

Includes self-shielded taut band meter movement that's varistor-protected to 200,000% overloads. Complete with batteries, test leads, and operator's manual. Size, 7x5¼x3⅛". Shpg. wt. 4 lbs.

919-0250.....70.00

AMP-CLAMP 150 CLAMP-ON AC AMMETER FOR MEASUREMENTS ON CLOSED CIRCUITS

- Measures AC Current to 300 A
- Attaches Easily to Most VOMs
- Voltage Limiter to Protect Meter Movements



Permits measuring AC currents up to 300 amps without opening the circuit. Greatly increases the range and versatility of the 250, 255, 260, and 270 series VOM's and any other VOM having a 2.5 or 3-volt scale.

Offers AC current measurement in six ranges—5, 10, 25, 50, 100, 250 A—on a 2.5-volt scale; 6, 12, 30, 60, 120, 220, 300 A on a 3.0-volt scale; on VOM's having 5,000 ohms/volt sensitivity. Accuracy is ±3% of full scale.

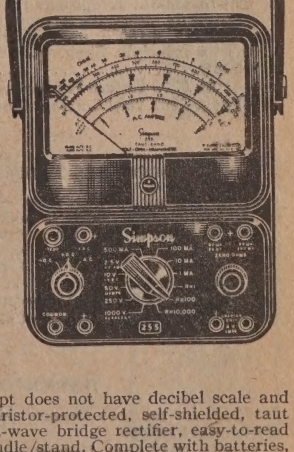
All metal parts except the tip of the split core are insulated with lexan polycarbonate housing. Has voltage-limiting zener diodes across the output to guard against shocks and meter movement overloading. Thumb-wheel selector switch. Conversion chart built into handle to prevent miscalculation. Easy to handle and use, entire unit weighs just 12 oz. Rugged high-impact plastic case. Complete with detachable 4-ft. meter leads and plugs. Size, 7¾x3x1 1/16". Shpg. wt. 1 lb.

919-0150.....30.00

255 VOM AND TEMPERATURE TESTER

Thermocouple Temperature Range 100° to 1050°F.

- Plus Full VOM Functions



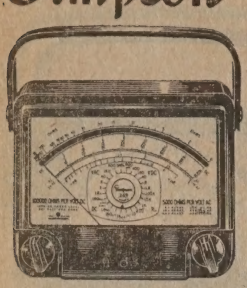
Designed specifically for the serviceman in fields such as gas appliance servicing and installation, electrical utilities, and heating service and in-installation.

Has thermocouple lead and temperature scale for determining temperatures over a range of +100° to +1050°F. Also has 0-50 mV DC range and low 50 mV drop on current measurements to aid solid-state circuit testing.

Has other VOM features except does not have decibel scale and 0-10 A AC current range. Varistor-protected, self-shielded, taut band movement. Modified full-wave bridge rectifier, easy-to-read two-color scales, convenient handle/stand. Complete with batteries, leads, prods, 5-ft. thermocouple lead, and operator's manual. Size, 7x5¼x3⅛". Shpg. wt. 4 lbs.

919-0251.....90.00

Simpson 7" VOM's and Laboratory Test Equipment



MODEL 269-3 7" MICROAMMETER VOM

Features sensitivity of 100,000 ohms-per-volt DC, 5000 ohms AC. Shielded meter with new, highly sensitive taut-band movement has large 7" mirror scale. Offers 33 ranges: DC, 0-16-160 μA; 0-1.6-16-160 mA; 0-1.6-8 A; 0-1.6-8-40-160-400-800-1600-4000 volts. AC, 0-3-8-40-160-400-800 V. Ohms, 0-200-20k-200k; Megs, 0-2-20-200. AF V, 0-3-8-40-160. dB (1 mW -600 ohms), −12 to +45.5 in 4 ranges. Accuracy: DC, ±2% of full scale; AC, ±3% of full scale; DC ohms, 2.5° of arc length. Response: essentially flat thru 50 kHz. 6x8x3". "Adjust-A-Vue" handle. With leads, 4000-volt DC probe, batteries.
919-0264. Shpg. wt. 6 lbs. **98.00**

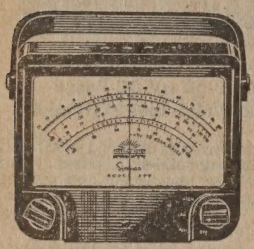
MODEL 262-3 DC/AC VOM. Has 33 ranges, varistor protected mo ment. 20,000 ohms/volt DC, 5000 ohms/volt AC. 7 DC rang 0-4000 V; 6 AC ranges, 0-800 V; 2 μA ranges, 0-160 DC; 2 a ranges, 0.8 DC; 4 dB ranges, −12 to +45.5; 6 resistance rang 0-50 megs. Accuracy: ±3% DC, ±4% AC, ohms 2.5° of arc. 6x7¼x
919-0262. Shpg. wt. 6 lbs. ..... **83.**

MODEL 263 DUAL-SENSITIVITY DC/AC VOM. Offers 64 ranges. Du sensitivity: 20,000/10,000 ohms/volt DC; 10,000/5000 ohms A Diode protection, external battery compartment. Accuracy: ±1½% of full scale; AC, ±3%. Test leads, batt. 6x7¼x4".
919-0263. Shpg. wt. 4 lbs. ..... **97.**

HIGH-VOLTAGE PROBES FOR 7-INCH-SCALE VOM'S. Heavily in lated and protected. High-voltage probes extend range and versa ity of VOM. Read accurate measurements to 40,000 volts w Model 269-3 VOM (described at left). Shpg. wt. 2 lbs.
919-0119. 0119. Extends range of 269-3 VOM to 16,000 volts. **17.**
919-0157. 0157. Extends range of 269-3 VOM to 40,000 volts. **17.**
919-0158. 0158. Extends range of 263 VOM to 30,000 volts. **17.**

MODEL 5262 CARRYING CASE FOR 7-INCH SCALE VOM'S. "Ev Redy" vinyl carrying case for Model 269-3 or Model 262-3. Provi good protection for your instruments while in storage or in transpo
919-5262. Shpg. wt. 2 lbs. ..... **14.**

ACCURATE TEMPERATURE MEASURING INSTRUMENTS



MODEL 389-3L TEMPERATURE METER

MODEL 385-3L TEMPERATURE METER

MODEL 388-3L THERM-O-METER

Takes accurate readings from −50° to +1000°F on 7" scale. Measures the temperature of practically anything. Can be used with gases, liquids and solids. Iron-constantan thermocouple. Compensation circuit corrects for room temperature. Has 7½-ft. probe (Type 0190). Provision for 3 probes. Permits readings in 3 different areas by rotating switch. Accuracy, ±1½ scale divisions. Size, 6x7 15/16x2 15/16". With battery. Shpg. wt. 6 lbs.
919-0388. ..... **84.00**
919-0187. 0187 Surface-Temperature Probe. Wt. 1 lb. **12.00**
919-0190. 0190 General-Purpose Probe. Shpg. wt. 1 lb. **7.50**
919-5262. 5262 Vinyl Carrying Case. Shpg. wt. 1 lb. **14.00**

MODEL 389-3L TEMPERATURE METER

Similar to 388-3L, except uses thermistor sensing element and has dual ranges for measuring temperatures between—50°F and +100°F, and between +100°F and +250°F. Accuracy, ±2°F. Employs thermistor principle. Shpg. wt. 6 lbs.,
919-0389 ..... **79.00**
919-0790. 0790 Surface-Temperature Probe. 1 lb. **9.00**
919-5262. 5262 Vinyl Carrying Case. Shpg. wt. 1 lb. **14.00**

MODEL 385-3L TEMPERATURE METER

Provides accurate readings from −50° to +70°F. Reliable thermistor sensing element. Scale is calibrated in Fahrenheit and Centigrade. Reads up to 15 ft. away with lead supplied. Accuracy, ±1°F, center scale. Accommodates 3 leads. This permits 2 or 3 readings (for comparison) by rotating a switch. 5⅞x3x2½". 2 lbs.
919-0385 ..... **45.00**
919-0789. 0789 Free Air Temperature Probe. 1 lb. **12.00**
919-8073. 8073 Vinyl Carrying Case. Shpg. wt. 1 lb. **12.00**

THERMISTOR LEADS

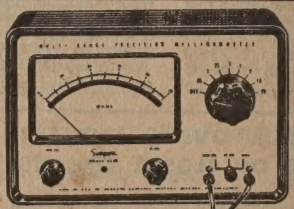
Designed for use with Simpson Model 385-3L and Model 389-3L temperature testers.
919-0008. 0010 15-Ft. Thermistor Lead. ½ lb. **9.00**
919-0216. 0216 30-Ft. Thermistor Lead. 1 lb. **10.00**
919-0415. 0415 50-Ft. Thermistor Lead. 1½ lbs. **11.00**
919-0417. 0417 150-Ft. Thermistor Lead. 4½ lbs. **18.00**

MODEL 2785 IMPEDANCE BRIDGE

Precision multi-purpose bridge accurate measurments of capa tance, inductance, resistance a "Q". Ideal for use in research a development labs, incoming inspection of components, prod tion line testing and adjustme classroom demonstrations. Lo slide rule dial and sensitive g vanometer permit fast and ea measurements with high accura

Built-in oscillator operates standard 1 kHz test frequen Frequencies from 50 Hz to 20 k may be used with external oscil tor. Coverage: resistance, 0.05 ohms to 11 megohms. Accura ±1.0%, ±2.5% on lowest and highest ranges. Inductance, 0.5 to 110 H. Accuracy, ±1.5%, ±2.5% on lowest and highest rang Capacitance, 5 pF to 1100 μF. Accuracy, ±1.0%, ±2.5% on high range. Tan d and Q measurements: Q x 1, tan d x 0.01, tan d x Accuracy, ±5% of full scale. Front panel controls for all tes

Test voltages: DC on resistance ranges, 1 kHz (with internal gen ator) for inductance and capacitance. Uses two 9 V batteries. Me case, 11 3/16x8 5/8x6 1/16". Batt., leads, detailed manual.
919T2785. Shpg. wt. 12 lbs. ..... **350.**



MODEL 1699 MULTI-RANGE MILLIOHMMETE

Designed for precise measu ment of low resistance valu Checks contact resistance relays, switches, etc. duri inspection and productio Makes resistance measu ments of motor commutato slip rings, coils, auto cabl connectors, starting mot leads. Battery-operated portability. Temperatu compensated. Shielded met spring-load sapphire jewe

Sensitivity: 0.001 ohm (smallest scale division). **Accuracy:** ±1% full scale on all ranges. **Ranges:** .05-.1-.25-.5-1-5-10-50 ohm **Readout:** 7" analog meter, single arc, 90° dial; mirrored, 100-divisi linear scale, knife-edge pointer. **Transistors:** two 2N2716. Wi Kelvin-type clip test leads; manual; batteries. 11⅜x7⅜x3¼".
919T1699. Shpg. wt. 9 lbs. ..... **175.**

CURRENT, VOLTAGE SECONDARY STANDARDS

Precision standards have large 5½" meters, high damping fact and high torque for maximum accuracy. Models 1700, 1702, 170 and 1704 feature ceramic rotary switch with silver contacts f range change. Model 1701 has separate set of 3-way binding pos for each range. Model 1704 has special 0.026-ohm test leads. A models are temperature compensated for operation from +15°C +35°C. Accurate to 0.5% full scale at 25°C. All have steel cas with etched aluminum panel, 11⅜x7⅜x3¼". All have case-to-ci cuit dielectric breakdown of at least 3 kV rms. *Indicates 10 ohms per volt sensitivity, †200 ohms per volt sensitivity.

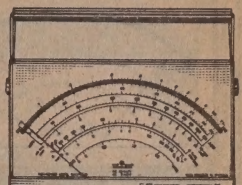
Stock No.	Model	Function	DC Range	Wt.	EACH
919T1700	1700*	Voltmeter	0 to 1500	6 lbs.	185.00
919T1701	1701	Ammeter	0 to 75	8 lbs.	195.00
919T1702	1702	Milliammeter	0 to 1500	6 lbs.	185.00
919T1703	1703	Microammeter	0 to 1500	6 lbs.	190.00
919T1704	1704†	Millivoltmeter	0 to 1500	6 lbs.	190.00

Accu-Log® and Pocket-Size VOMs

Simpson

MODEL 202 ACCU-LOG VOM

- Consistently High Accuracy Anywhere on the Scale . . ±2% DC, ±3% AC
- Taut Band Suspension Insures Long Life
- Features Two Low-Power Ohmmeter Ranges



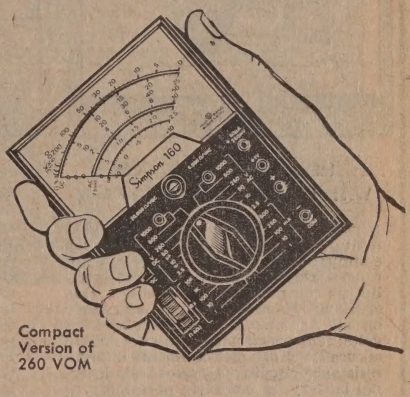
Precision VOM gives consistent high accuracy anywhere on the scale. The special quasi-logarithmic scale provides percent-of-reading accuracy of ±2% DC and ±3% AC at every point on the readout scale yet permits easy zero adjustment with linear portion at low end. Two-way overload protection using both varistor diodes and fuse. Has 20 overlapping ranges for convenient operation, including two low-power ohmmeter ranges. Rugged taut band suspension movement is shock-resistant and self-shielding; cannot develop error-causing friction. Mirror scale for easy reading. External access to battery compartment. Sensitivity: 20,000 ohms/volt DC; 5000 ohms/volt AC, maximum DC current insertion drop, 0.3 volts. RANGES: DC Volts: 30-330 mV, 0.1-1.1 V, 1-11 V, 10-110 V, 30-330 V, and 100-1100 V. AC Volts: 1-11 V, 10-110 V, 30-330 V, 100-1100 V. DC. Current: 10-110 μA, 0.1-1-1.1 mA, 1-11 mA, 10-110 mA, 0.1-1.1 A. Resistance: Rx1, 10, 1000, 10k, 100k. Decibels: zero to +23 dB. Overall size, 6¾x7¾x3¾". Includes batteries. Shpg. wt. 5 lbs.

919-0202.....100.00

919-0577. Type 00577 Vinyl Carrying Case. With space for test lead storage. 1 lb.....17.00

POCKET-SIZE MODEL 160 HANDI-VOM

- Taut Band Meter Movement is Varistor Protected, Self-Shielding
- Recessed Range Selector Switch
- 0.25 DC Voltage Range for Accurate Measurements in Solid-State Circuits
- Accuracy, ±2% DC, ±3% AC



Compact Version of 260 VOM

Has the same top-quality features of the famous Model 260 VOM, plus extended range coverage for accurate transistor servicing measurements—all in a rugged compact case only 3⅝" wide.

Self-shielded taut band meter movement assures high repeatability and freedom from external magnetic fields. 1-volt plug-in jack permits fast, easy transistor measurements. Diode overload protection. Also has recessed range selector switch; separate battery compartment.

50-millivolt drop at 50A. Ranges: 0 to .25, 1.0, 2.5, 10, 50, 250, 500, 1000 VDC at 20,000 ohms/volt sensitivity. 0 to 2.5, 10, 50, 250, 500, 1000 VAC at 5000 ohms/volt. Current Ranges: 0 to 50 μA, 0 to 1, 10, 100, 250, 500 mA. Ohmmeter Ranges: 1, 10, 100, 1k, 10k ohms (30 ohms center scale). Accuracy: AC, ±3% of full scale; DC, ±2% of full scale.

Overall size, 2¼x3⅝16x5⅝16". With test leads, batteries, and operating manual. Shpg. wt. 6 lbs.

919-0160.....55.00

919-2055. Type 2055 Probe-Tip Test Leads. Shpg. wt. 1 lb.....3.00

Type 2929 Carrying Case. Vacuum-formed. Has space for VOM, test leads, probes. **919-2929.** Shpg. wt. 2 lbs.....11.00

Type 2225 Carrying Case. Leather. Has space for VOM test leads, probes. **919-2225.** Shpg. wt. 2 lbs.....11.00

GENERAL-PURPOSE "MICRO-TESTERS"

All "Micro-Testers are 5⅞x3x2½" except "Midgetester"

Model 372-2 Ohmmeter. 3", 85 μA meter. Ranges: 0-500-5K-50K-500K ohms; 0-5, 0-50 megs. Batteries, leads. Accuracy, ±3° linear arc length. **919-0372.** Shpg. wt. 3 lbs.....39.00

Model 362-2 Low Ohmmeter. Reads 0-5-25 ohms. Accuracy, ±3° of linear arc. Leads. 3 lbs. **919-0362**.....39.00

Model 373 DC Milliammeter. 0-1-5-10-25-50-100-250-1000 mA. Accuracy ±3% full scale. 3 lbs. **919-0373**.....39.00

Model 374 DC Microammeter. 0-50-100-250-500-1000 μA. With external resistors, can be used as 10K ohms/V voltmeter. Accuracy ±3% F.S. **919-0374.** Shpg. wt. 3 lbs.....39.00

Model 375 DC Ammeter. 0-1-2.5-5-10-25 amps. Accuracy, ±3% full scale. 3 lbs. **919-0375**.....39.00

Model 370 AC Ammeter. Ranges: 0-1-2.5-5-10-25 amperes. Current transformer. For 60 Hz AC only. Less leads. Accuracy, ±5% full scale. 3 lbs. **919-0370**.....39.00

355 VOM Midgetester. Miniature VOM with 10K ohms per volt AC-DC sensitivity. 100-μA meter. Ranges: AC-DC V, 0-3-12-60-300-1200; 0-10K-100K ohms. 0-1-10 megs. Essentially flat to 10 KHz. Accuracy: VDC, ±3% full scale; VAC, ±5%. Only 4½x2¾x1". With batteries and leads. Shpg. wt., 2 lbs.

919-0355.....50.00

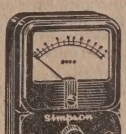
919-6355. Leather Case. Shpg. wt. 8 oz.....6.00

919-8600. Extra Leads. Shpg. wt. 6 oz.....3.00

240-4"Hammeter"VOM. 1000 ohms per volt AC-DC. VDC, 0-15-75-300-750-3000. VAC, 0-15-150-750-3000. Ohms: 0-3000-300,000. DC current: 0-15-150-750 mA. Accuracy: VDC, ±3% full scale; VAC, ±4% full scale. With batteries and leads. **919-0240.** Shpg. wt. 3 lbs.....45.00

390 Volt-Amp-Wattmeter. For 60 Hz AC units. Ranges: VAC, 0-150-300; amps, 0-3-15; watts, 0-300-600-1500-3000. Accuracy, ±3% full scale, or better. 3" meter. With break-in plug and leads. Shpg. wt., 4 lbs.

919-0390.....70.00

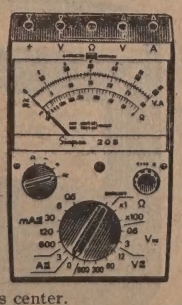


Model 372-2

Model 355

MULTI-RANGE VOLT-OHM-MILLIAMMETER

Compact and rugged, yet accurate enough for the most precise requirements. Has common linear AC/DC scale, built-in current transformer, continuity test provision and encapsulated movement. Can combine voltage source and load readings. Illuminated meter. 6x3⅝x1 1/16". Shpg. wt. 2 lbs.



Model 208. Sensitivity: 10,000 ohms/volt. DC Volts: 0-0.6-3-12-60-300-600. AC Volts: 0-12-60-300-600. AC and DC Current: 0-0.6-3-30-120-600 mA, 0-3 A. Ohms: x1 and x100, both with 115 ohm center.

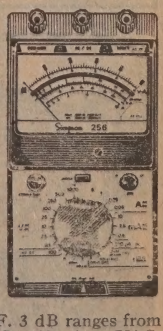
919-0208.....72.50

Model 209. Sensitivity: 1600 ohms/volt. DC Volts: 0-0.6-12-60-300-600. AC Volts: 0-12-60-300-600. Current: 0-120-600 mA, 0-12 A DC; 0-6-30-120-600 mA, 0-3-12 A AC. Ohms: x1 and x100, both with 43 ohms center.

919-0209.....68.00

919-0578. Carrying Case. Shpg. wt. 8 oz.....11.00

MULTI-TESTERS FOR PORTABLE USE



Capacitance and high megohm ranges. Overload protection on ranges below 100 V. Protected movement. 8½x4⅜x3⅜".

Model 256. Ranges: 0-0.1, 0.5, 2.5, 10, 25, 100, 250, 500, 1000, 5000 VDC, 0-0.5, 2.5, 10, 25, 100, 250, 500, 1000, 5000 VAC. DC μA, 0-100; AC/DC mA, 0-0.5, 2.5, 10, 50; AC/DC A, 0-0.25, 1, 5. Ohms: x1, x1k, x10k, x1 meg. Capacitance: 100 pF, 2000 pF to 5 μF. 7 dB ranges from −34 to +56 dB. Sensitivity: 25k ohms/VDC; 2k ohms/VAC.

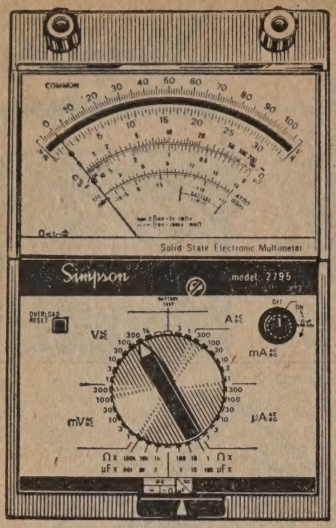
919-0256. Shpg. wt. 5 lbs.....105.00

Model 257. Ranges: 0-0.1, 0.5, 2.5, 10, 25, 100, 250, 1000, 5000 VDC. 0-10, 50, 250, 1000 VAC. DC Current: 0-10, 50, 250 μA, 0-1, 5, 25, 100 mA, 0-1 A. Ohms: x1, x1k, x100k, x10 meg. Capacitance: 2000 pF to 5 μF. 3 dB ranges from −8 to +50 dB. Sensitivity: 100k ohms/VDC; 20k ohms/VAC.

919-0252. Shpg. wt. 5 lbs.....95.00

Simpson

FET VOM'S FOR REDUCED CIRCUIT LOADING



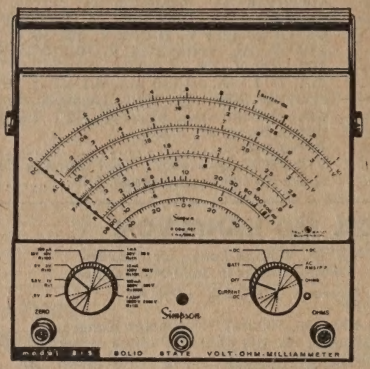
NEW! SOLID-STATE VOM WITH LABORATORY ACCURACY

MODEL 2795. Ultra-precision FET VOM features 68 switch-selected ranges, plus complete overload portection on all ranges through a front-panel, push-button-controlled circuit breaker. Has excellent 10-megohm input impedance on all AC and DC ranges above 10 volts; reduces circuit loading for highly accurate voltage measurements in high-resistance circuits. Operates from internal battery for complete portability.

Taut-band meter with mirrored scale. Temperature compensated for superior 1% accuracy on both AC and DC scales. Ideal for transistor applications, checking relay circuits, measuring voltage drop across low resistances, and general laboratory and experimental work.

Ranges: AC-DC Voltages: 0-1-3-10-30-100-300 mV, 0-1-3-10-30-100-300-1000 volts; AC-DC Current: 0-1-3-10-30-100-300 μA, 0-1-3-10-30 ma, 0-0.1-0.3-1-3 amps; Resistance: Rx1 (10 ohms at center scale), Rx10, Rx100, Rx1000, Rx10,000, Rx100,000; Capacitance: (mid-scale values) 100, 10, 0 μF; 100, 10, 1 nF; Temperature: 18°C from ambient, 180°C from ambient (IC thermocouple-type input. Requires only 1 mV for full-scale deflection on voltage ranges; only 1 μA for full-scale deflection on current ranges. 8⅝x5¾x4¹⁵⁄₁₆". With batteries, test leads, and manual.

919-2795. Shpg. wt. 4¼ lbs.... **230.00**
919-5123. Type 22923 18°C Probe **26.00**
919-5124. Type 22924 180°C Probe **26.00**
919-5127. Type 22927 Case..... **20.00**



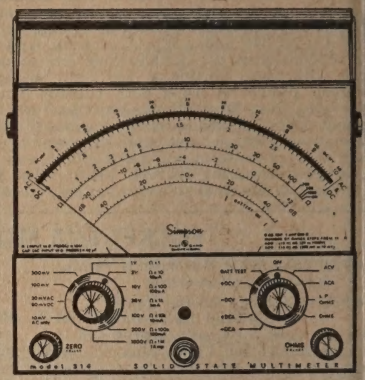
SOLID-STATE VOM WITH 11-MEGOHM DC IMPEDANCE

MODEL 313. Battery-portable FET VOM ideal for servicemen, technicians, engineers. Gives FET accuracy and low circuit loading for voltage measurements in high-resistance circuits. Has large 7" meter with easy-to-read scale that reduces reading errors. Multi-position range and function-selector knobs reduce setup error. Other controls include zero adjust, ohms adjust, and on-off indicator.

Input impedance is an excellent 11 megohms on DC, with 1 megohm contained in probe; 10 megohms on AC. Has 8 DC voltage ranges, 0.3 through 1000 full scale; 8 AC voltage ranges, 0.3 through 1000 full scale; 5 DC current ranges, 0.1 mA through 1 amp full scale; 7 resistance ranges, 0 through 20 megohms full scale. Accuracy: DC, ±3% of full-scale on all ranges; AC ±3% of full scale on all ranges at 100 Hz. Temperature accuracy: 25°C ±10°C for zero shift of 1° of arc. Overall frequency response: ±0.5 dB from 20 Hz to 20 kHz for 10, 30, and 100 volt ranges.

Operates from one 9-volt battery—life expectancy is approximately 300 hours. Mechanical power on-off indicator. Battery check position on function switch. Resistance ranges are protected against overload—field-effect transistors will not be damaged should line voltage be accidentally applied. 6¾x7¾x3¾". With batteries, probe, manual.

919-0313. Shpg. wt. 5 lbs..... **125.00**



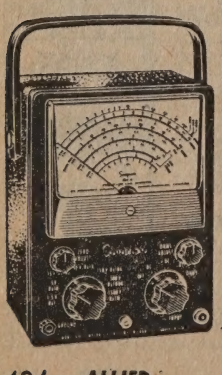
NEW! SOLID-STATE VOM WITH LOW-POWER OHMS RANGES

MODEL 314. Has low AC and DC voltage ranges plus 7 low-power ohmmeter ranges for accurate readings in solid-state circuits without damage to transistors and integrated circuits. Also measures AC and DC current down to 10 μA. Has 10-megohm input impedance on all voltage ranges for negligible circuit loading and highly accurate voltage readings in high-resistance circuits.

Large 7" meter with big easy-to-read dial reduces reading errors to further increase test accuracy. Convenient battery compartment allows replacement of battery without opening VOM case. Has on-off indicator that prevents accidental drain on battery for longer life. Ranges: DC Volts, 0-0.15-0.1-0.3-1-3-10-30-100-300-1000; AC Volts, 0-0.01-0.03-0.1-0.3-1-3-10-30-100-300-1000; AC-DC Current, 0-0.01-0.1-1-10-100-1000 mA; Resistance, Rx1 (10-ohm center), Rx10, Rx100, Rx1k, Rx10k, Rx100k, Rx1meg; dB, −40 to +60. Accuracy: DC, ±2%; AC, ±3%. AC frequency response, 30 Hz to 100 kHz. X10 switch position transforms input impedance to 100 megohms.

Although VOM is ideal for testing semiconductor circuits, it can be used with equal facility in vacuum tube circuits. Tests TV, FM, AM circuits, makes wide-range voltage, current, resistance, decibel measurements. 6¾x7¾x3¾". With batteries, leads, manual.

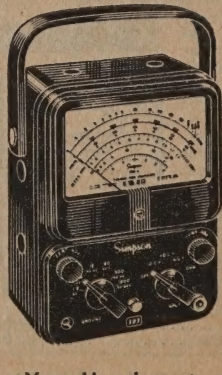
919-0314. Shpg. wt. 5 lbs..... **150.00**



AC-DC VTVM WITH 22-MEG INPUT IMPEDANCE

MODEL 311-3. DC input impedance of 22 megs for high-accuracy voltage measurements. Direct rms, p-p read-out. Ranges: AC/DC V, 0-1.5-5-15-50-150-500-1500. Ohms: 0-1k-10k-100k; 0-1-10-100-1000 megs. AF V, 0-1.5-5-15-50-150-500-1500, ±5%, 30 Hz-110 kHz. P-P, 0-4-14-40-140-400-1400-4000 V. DC V, ±3% of full scale; AC V, ±5%. DC res., ±3° of linear arc. 4½" meter. DC-AC-ohms probe. 7½x5⅝x4½". 117 VAC. Shpg. wt. 8 lbs.

919U0311. ..... **91.00**
919-0732. 0732 High-V Probe. Extends DC to 30 kV. Shpg. wt., 1 lb.... **17.00**
919-0731. 0174 High-Frequency Probe. To 250 MHz. Shpg. wt. 1 lb..... **16.00**



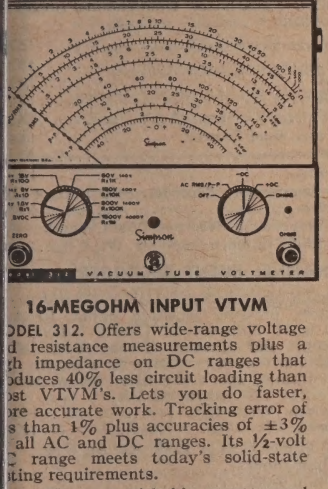
NEW! AC-DC VTVM WITH LOW 6-VOLT RANGE

MODEL 303-2. Helps you solve vi
tually any servicing problem. An e
cellent 10-megohm input impedan
on all ranges lets you measure vol
age in high-resistance circuits wit
out loading them. Ranges: AC rm
DC, 0-1.2-6-12-60-300-1200; A
Volts, 0-1.2-6-12-60; Resistanc
0-1k (10-ohm center), 10k, 10
ohms, 1 meg, 10 megs. 1000 megs
dB −20 to +63. Accuracy: D
±3%; AC, ±5%. 7x5¼x3⅛". Wi
probe. 117 VAC.

919-0303. Shpg. wt. 6½ lbs. **92.0**
919-0306. With roll-top case. **97.0**
919-0074. Hi-V Probe. 1 lb... **17.0**
919-0073. RF Probe. 1 lb..... **11.7**

Simpson

EST EQUIPMENT FOR SPEED, ACCURACY



16-MEGOHM INPUT VTVM

ODEL 312. Offers wide-range voltage d resistance measurements plus a gh impedance on DC ranges that oduces 40% less circuit loading than ost VTVM's. Lets you do faster, ore accurate work. Tracking error of s than 1% plus accuracies of ±3% all AC and DC ranges. Its ½-volt C range meets today's solid-state iting requirements.

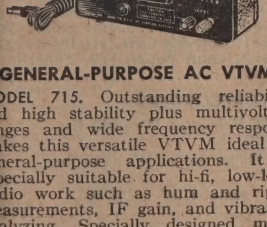
rge 7" meter with big, easy-to-read ales for more accurate readings. Con- ols include multiposition range selec- r, function selector, zero adjust, and ms adjust. Special circuit protects eter against burnout.

anges: AC-DC Volts, 0-0.5-1.5-15-50- 0-500-1500; AC p-p Volts, 0-4-14-40- 0-400-1400-4000; Resistance, X1, 10, X100, X1000, X10k, X100k (all th 10 ohms center). Response: ±3%, Hz to 3 MHz. Accuracy: ±3% of ll scale on all voltage ranges; 3° of c on all resistance ranges. Size, 6¾x 4x3¾". For 105-125 volts, 60 Hz AC. **9-0312.** Shpg. wt. 5 lbs.....**95.00**

9-0152. Model 0152 RF Probe. Fre- ency range of 10 kHz to 250 MHz. sable to 40 volts rms. Wt. 1 lb. **11.75**

9-0155. Model 0155 High Voltage obe. Shpg. wt. 1 lb.....**17.00**

9-0577. Model 0577 Case. Vinyl, with om for lead storage. Wt. 2 lbs. **17.00**



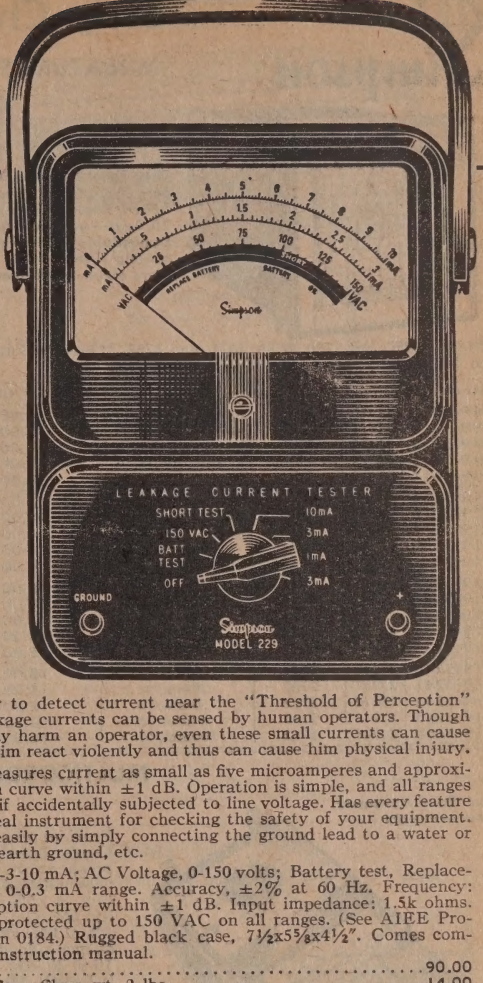
GENERAL-PURPOSE AC VTVM

ODEL 715. Outstanding reliability nd high stability plus multivoltage anges and wide frequency response akes this versatile VTVM ideal for eneral-purpose applications. It is specially suitable for hi-fi, low-level udio work such as hum and ripple easurements, IF gain, and vibration nalyzing. Specially designed meter cale provides dB markings on both the oltage range positions and the meter cale. Ranges: AC Volts, 0-0.01-0.03- .1-0.3-1-3-10-30-100-300 rms; dB, −52 o +52 dBm (zero dBm 1 mW in 600 hms). Accuracy, ±5%. 5½x7½x3". With leads. 117 VAC.

919-0715. Shpg. wt. 5 lbs.....**84.00**

AC CURRENT LEAKAGE TESTER

- Measures AC Current to Five Microamperes
- Detects Short Circuits and Near Shorts
- Tests Current Above the "Threshold of Perception"



MODEL 229. Accurate instrument designed to test 120-volt AC appliances and electrical equipment in accordance with proposed U.S. Standards Committee Specification C101.1 for alternating-current leakage tests. Ruggedly built for use on production line, "in-field" servicing, or anywhere there is a need for quick, accurate checks for possible electrical short-circuits. Designed especially to detect current near the "Threshold of Perception"—the point where small leakage currents can be sensed by human operators. Though this low level cannot normally harm an operator, even these small currents can cause trouble, for they can make him react violently and thus can cause him physical injury.

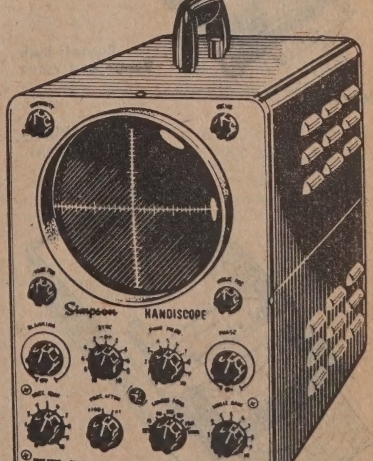
This sensitive instrument measures current as small as five microamperes and approximates the normal perception curve within ±1 dB. Operation is simple, and all ranges are protected from damage if accidentally subjected to line voltage. Has every feature necessary to make it the ideal instrument for checking the safety of your equipment. Can be set up quickly and easily by simply connecting the ground lead to a water or gas pipe, powerline ground, earth ground, etc.

Ranges: AC Current, 0-0.3-1-3-10 mA; AC Voltage, 0-150 volts; Battery test, Replace-Good. Resolution, 5 μA on 0-0.3 mA range. Accuracy, ±2% at 60 Hz. Frequency: Approximates normal perception curve within ±1 dB. Input impedance: 1.5k ohms. Overload protection: Fully protected up to 150 VAC on all ranges. (See AIEE Proceedings, Volume 69, Section 0184.) Rugged black case, 7½x5⅝x4½". Comes complete with leads, batteries, instruction manual.

919-0229. Shpg. wt. 5 lbs.....**90.00**

919-0805. Leather Carrying Case. Shpg. wt. 2 lbs.....**14.00**

ALL-PURPOSE 5" "HANDISCOPE"



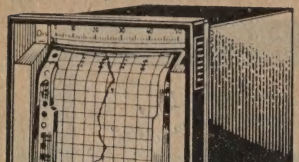
MODEL 466. Ideal for general-purpose applications in FM and AM radio and TV servicing, plus a wide variety of industrial uses. Compact, portable and so lightweight (only 19 pounds) that it can be used for any shop or field use. Speeds up and improves quality of repair work. It is a deluxe instrument in every respect, with outstanding reliability, high stability, and rugged durability.

Has horizontal push-pull amplification for the X axis, vertical push-pull amplification for the Y axis, and an intensity modulation input for the Z axis. Response of vertical amplifier: 15 Hz to 100 kHz, flat within ±1 dB; 6 dB down at 250 kHz; usable to 1 MHz. Vertical sensitivity: 30 mV rms/inch. Response of horizontal amplifier: 15 Hz to 20 kHz; flat within ±1 dB; 6 dB down at 100 kHz. Horizontal sensitivity: 0.7 volt rms/inch. Input: 0.1 meg. Sweep range: 15 Hz to 80 kHz. Max. input: 400 volts. Z-axis sensitivity: 20 volts rms. 1V p-p calibrating voltage. 7⅞x12¼x16⅛". Handle. With input cable, manual. 117V, 50-60 Hz AC.

919U0466. Shpg. wt. 29 lbs....**190.00**

Simpson Strip-Chart Recorders

MINIATURE STRIP-CHART RECORDERS



Easy Panel Mounting in only 3¾x3¾" of Panel Space. Records up to full 30 Days—unattended. Dependable Inkless Recording System. Taut-Band Meter Movement.

CHART PAPER. For 2750, 2755, 2671, and 2762. *10-channel marking for Model 2755. In pkgs. of 10 rolls. Shpg. wt. 2 lbs.

Stock No.	Type	For Model	Time	BOX OF 10 RLS.
919-5010	22310	2750	30 div.; 20mm/hr.	18.00
919-5011	22311	2750	50 div.; 20mm/hr.	18.00
919-5012	22312	2750	30 div.; 30mm/hr.	18.00
919-5013	22313	2750	50 div.; 30mm/hr.	18.00
919-5014	22314	2750	30 div.; 60mm/hr.	18.00
919-5015	22315	2750	50 div.; 60mm/hr.	18.00
919-5016	22316	2750	30 div.; 100mm/hr.	18.00
919-5017	22317	2750	50 div.; 100mm/hr.	18.00
919-5080	22380	2755	*20mm/hr.	18.00
919-5081	22381	2755	*30mm/hr.	18.00
919-5082	22382	2755	*60mm/hr.	18.00
919-5083	22383	2755	*100mm/hr.	18.00
919-5037	23237	2761	20mm/hr.	18.00
919-5238	23238	2761	30mm/hr.	18.00
919-5239	23239	2761	60mm/hr.	18.00
919-5240	23240	2761	100mm/hr.	18.00
919-5241	23241	2762	20mm/hr.	18.00
919-5242	23242	2762	30mm/hr.	18.00
919-5243	23243	2762	60mm/hr.	18.00
919-5244	23244	2762	100mm/hr.	18.00

MODEL 2750 LOW-SPEED RECORDERS

Recording accuracy is 1.5% of full scale. Taut Band meter m ment provides continuous readout on edgewise scale. Switch s tion of two built-in chart speeds. Gearboxes are easily i changeable for dual speed combinations from 20/120mm per to 100/600mm per hour. Operates on 115 V 60 Hz synchro motor which requires only 2.2 VA. Snap-off glass window prov easy access to chart paper and gearboxes. Dual channel ranges available. Av. shpg. wt. 4 lbs.

919C2746. 0-10 DC μA.....167
919C2747. 0-50 DC μA.....153
919C2748. 0-100 DC μA.....147
919C2749. 0-500 DC μA.....142
919C2744. 0-1 DC mA.....140
919C2745. 0-1/0-1 DC mA. Dual Channel.....165
919C2750. 0-50 DC mV.....142
919C2752. 0-150 AC Volts.....148
919C2761. Model 2761 Temperature Recorder. −50°F to +25 in 3 ranges. Shpg. wt. 4 lbs.....190
919T2762. Model 2762 Temperature Recorder. Dual Channel. −4 to +60°F or +50° to +250°F on both channels. Wt. 4 lbs..210

2755 10-CHANNEL EVENT RECORDER

Rugged event recorder simultaneously records ON/OFF status o separate events on inkless, pressure sensitive paper. Respo time of event recorders is 10 milliseconds. Charts indicate cisely when an event occurs and duration of that event. M driver permits continuous unattended operation for a month. speeds, 20/120mm/hour; optional gear trains listed below. Mo in 3.60" square panel hole. 115 VAC 60 Hz 2.2 VA.

919-2755. 110 VAC Channels. Wt. 4 lbs.....175
919-2756. 24 VDC Channels. Wt. 4 lbs.....175

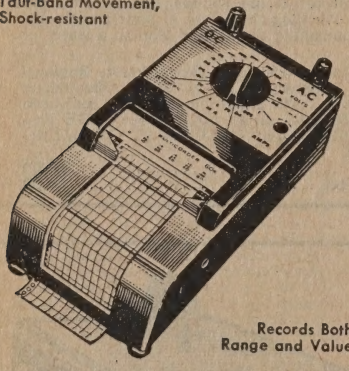
SPECIAL GEAR UNITS. For Model 2750 or 2755. Av. wt. 8 oz.

919-5001. 22301. 30/180mm/hour.....7
919-5002. 22302. 64/360mm/hour.....7
919-5003. 22303. 100/600mm/hour.....7

MULTICORDER CHART RECORDERS

MODEL 605 MULTICORDER

Taut-Band Movement, Shock-resistant



Provides record on pressure-sensitive paper. Chart Speed: 1/3/12 in./hr. with impressions every 2 seconds; 30/60/90 in./hr. with optional gear unit. Accuracy: indication, ±1.5%; recording, ±2.5%. Sensitivity: 666 ohms/volt. Temperature influence: 1% of true value max. for 10° change. Frequency influence: flat, 15-10,000 Hz; ±2.5% 10 to 20 kHz. Ranges: DC: 0-12-30-60 mV; 0-3-15-60-300-600 V; 0-1.5-3-6-30 mA; 0-.15-1.2-6 amps. AC: 0-6-30-150-300-600 V; 0-3-15-60-300 mA; 0-1.2-6 amps. 9¾x4¾x4". 115 V, 60 Hz AC. With test leads, two rolls of chart paper. Shpg. wt. 5½ lbs.

919-0620.....215.00

Type 0682 Gear Unit. 30/60/90 inch/hour.
919-0682. Wt. 5 oz.....33.75

Type 02611 Ever-Ready Vinyl Carrying C
919-2611. Wt. 2 lbs.....27

Type 02614 Chart Paper. 2.3"x50'.
919-2614. Wt. 2 oz.....Roll 2

Package of 10 Rolls Paper. 2 lbs.....19

Type 06529 DC Shunt. 120-300-600 an 0.5%.
919-6529. Wt. 2 lbs.....20

Type 06531 DC Shunt. 12-30-60 amps; 0.
919-6531. Wt. 1 lb.....15

Type 02461 AC Clip-On Current Transfor 30-120-600 amps. Turn ratio, 2000:1.
919-2461. Wt. 2 lbs.....25

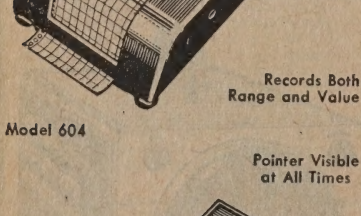
Type 02462 AC Clip-On Current Transfor 30-150-600 amps. Turn ratio, 10,000:1.
919-2462. Wt. 2 lbs.....40

Records Both Range and Value

Model 604

MODEL 604 VOLT-AMP-MILLIAMP-MICROAMP RECORDER

Pointer Visible at All Times



Gives permanent record of range and measured value, without ink, on pressure-sensitive paper. High torque, shock resistant taut-band movement. Chart speed: 1/3/12 in./hr. with impressions every 2 seconds. Chart paper: 2.3"x50'. Sensitivity: 20,000 ohms/volt DC; 5000 ohms/volt AC. Accuracy: recording, ±2.5%; indication, ±1.5% (45-65 Hz sine wave on AC). Temp. influence 1% of true value for 10°C change. Frequency response, flat from 15 to 10,000 Hz; ±2.5% 10K-20K Hz. Ranges: DC, 0-0.1, 0.5, 2.5, 10, 25, 100, 250, 500 V.; 0-250 μA; 0-1, 5, 25 mA; 0-0.1, 0.25, 1 a AC, 0-0.2 mA; 0-10, 25, 100, 250, 50 8½x9¼x17⅞". Self-starting, synchron motor for 115 V, 60 Hz AC. 6 lbs.

919U0615.....200

Type 0682 VOM Special Gear Unit. Abo with 30/60/90 in./hr. chart speed. Wt., 4
919-0682.....30
919-2611. Carrying Case. 1½ lbs.....27
919-2612. Chart Paper. Wt. 2 lbs. in of 10 rolls.....19

SERIES 603 FOUR-SPEED CHART RECORDERS

Four chart speeds—1½, 6, 12 or 18 in. per hour. Accurate taut-band meter movement with pointer visible at all times. Easy access swing-away cover locks in open position. 22⅝x4¾x7½". Self-starting, synchronous motor for 115 V, 60 Hz AC.

4 Chart Speeds—1½, 6, 12, or 18 in/hr

Model 603

0-50 DC Microammeter. Wt., 2½ lbs.
919-0602.....107.00

0-100 DC Microammeter. Wt., 2½ lbs.
919-0603.....102.00

0-250 DC Microammeter. Wt., 2½ lbs.
919-0604.....98.00

0-15 DC Voltmeter. Wt., 2½ lbs.
919-0607.....97.00

0-150 DC Voltmeter. Wt., 2½ lbs.
919-0608.....96

0-1 DC Milliammeter. Wt., 2½ lbs.
919-0601.....90

0-5 AC Voltmeter. Wt., 2½ lbs.
919-0600.....102

0-150 AC Voltmeter. Wt., 2½ lbs.
919-0605.....102

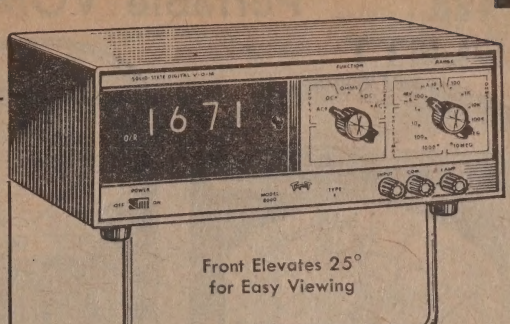
0-300 AC Voltmeter. Wt., 2½ lbs.
919-0606.....104

919-0013. Takeup Reel. Wt. 4 oz.....15
919-0014. Carrying Case. 1½ lbs.....20

Chart Paper. Wt., 1 lb.
919-0012.....Box of 6 Rolls 13.

TRIPLETT Digital Multimeter

NEW! MODEL 8000 TABLE-TOP 3½-DIGIT DIGITAL MULTIMETER



- Fast Response and 0.1% DC Accuracy with Virtually No Kickback Current
- Compact, Rugged Low-Profile Design
- Shielded Case with Modular Construction
- Protective Circuitry Prevents Damage
- Three Gas-filled Read out Tubes with Decimal Point, Automatic 50% Over-range
- Auto-Polarity for DC Measurements
- High AC Accuracy, Nearly Perfect Linearity

ompact table-top digital multimeter gives precise measurement of C voltage and current, resistance, and rms value of sinusoidal ltages and currents. Suitable for use in laboratory, production e, education, or general purpose applications. Measurements e displayed with excellent resolution in the decimal number sys- m, by three gas-filled readout tubes. Also, the numeral "1" is splayed for over-range measurements. Readout display includes movable decimal point, automatic over-range indication, auto- larity for DC functions.

esigned for quick response, with virtually no kickback current o internally generated current from VOM input circuit) to affect easuring accuracy; allows voltage measurements in high resistance rcuits at stated accuracy. Offers high AC accuracy with nearly rfect linearity and 10-megohm input resistance. Low-profile sign in shielded case with modular construction for easy operation d maintenance; weighs only 9¼ lbs. All solid-state, using premi- n type printed circuit boards. Steel sheet material is used for ain chassis and internal module covers to provide extra strength d isolation from interference fields.

rotective circuitry prevents damage to tester when voltages as gh as 1000 volts AC or DC are applied as inputs on any of the lectable ranges. Has as much as 50% over-range (1500 count); mple rate of six times per second.

Powered by 115 or 230 (±10) volts AC, 50/60 Hz, 12 watts. Stored metal leg elevates the front panel approximately 25° for table-top use. Handsome etched aluminum panel clearly marks all ranges and functions. Size, 4⅛x10⅝x8⅞".

956-8001. Shpg. wt. 10 lbs. **575.00**

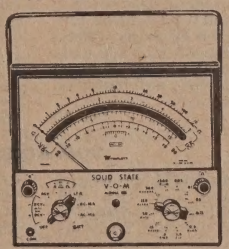
956-8000. Model 8000-A. Same as above, with instant replay memory circuit; retains readings indefinitely for later comparison with real time reading **630.00**

SPECIFICATIONS

DC Volts: 0-0.1-1.0-10-100-1000 volts with accuracy of ±0.1% of reading, ±1 digit; temperature coefficient, ±.01%/°C (0° to 40° C); input resistance, 10 megohms on all ranges. **AC Volts:** 0-0.1-1.0-10-100-1000 volts with accuracy of ±0.2% of reading, ±1 digit (up to 10 V), ±0.3% ±1 digit for 100 and 1000 V ranges; input impedance, 10 megohms. **Resistance:** 0-100-1k-10k-100k ohms with accuracy of ±0.2% of reading, ±1 digit; 0-1-10 megohms with accuracy of ±0.3% of reading, ±1 digit. **AC Current:** 0-10 μA, 0-0.1-1.0-10-100 mA, 0-1 amp with accuracy of ±0.4% of reading, ±1 digit, to 10 kHz; full scale voltage drop of 100 mV on all ranges. **DC Current:** 0-10 μA, 0-0.1-10-100 mA, 0-1 amp with accuracy of ±0.2% of reading, ±1 digit; 100 mV drop. **Rejection:** AC common mode, greater than 80 dB at 60 Hz; series mode, greater than 40 dB. **Sample Rate:** 6 times per second. **Over-range:** 50% (1500 count).

NEW! SOLID-STATE VOLT-OHM-MILLIAMMETERS

MODEL 801 SOLID-STATE 7½-INCH VOM



- VTVM Performance— VOM Portability
- FET's for Stability
- 11 Meg DC Input, 10 AC
- One-Probe Operation

Solid-state VOM offering high input impedance and wide frequency response; ideal for lab and service use. Measures DC voltage, resistance, AC/DC current and AC rms voltage. Colored ranges and combined AC/DC voltage scales ensure easy reading. A single compact probe is used for all functions; built-in slide switch places a 1-meg resistor in series on DC voltage readings. Frequency compensated from 50 Hz to 50 kHz. Temperature range, 0° to 120° F. Accuracy: ±2% DC, ±3% AC. Overvoltage protected and fused. Polarity reversing on voltage, resistance tests. Internally shielded; will operate in high noise conditions. Only two arcs for all voltage and current ranges; linear AC scale. Uses three 4.2 V, 1 "D" battery. 8x7x5".

RANGES: DC Volts: 0-.05-.15-0.5-1.5-5-15-50-150-500-1500 volts; accuracy, ±2% full-scale except 1500 V, ±3% input resistance, 11 megs; 40 dB AC rejection filter. **AC Volts:** 0-.005-.015-.15-0.5-1.5-5-15-50-150-500-1500 volts; accuracy, ±3%; input, 10 megs. **AC/DC Current:** 0-5-15-50-150-500 μA, 0-1.5-5-15-50-150-500-1500 mA; accuracy, ±3% DC, ±4% AC; voltage drop, 45 mA. **Resistance:** Two circuits, conventional using 1½-volt power (X1, X10, X100, X1k, X10k, X100k, X1 meg) and low power, 35 mA (X0.1, X1, X10, X100, X1k, X10k, X100k, X1 meg); 10 ohms center on X0.1; Accuracy, 3 degrees of DC arc. **Decibels:** −50 to +66 dB.

956-0801. Shpg. wt. 7 lbs. **200.00**

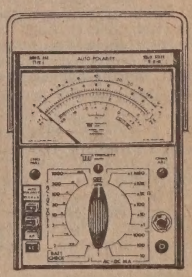
956-3890. 10-2467 Leather Carrying Case. 3 lbs. **31.00**

956-3797. 79-292 High Voltage Probe. 1 lb. **25.20**

956-3798. 79-289 RF Detector Probe. 4 lbs. **9.50**

956-0013. 91-620 Shunt Adapter. For 5/15 amp readings. **10.00**

MODEL 602 TYPE 1 AUTO-POLARITY 4½" VOM



- Fast Set-up and Reading
- High Input Resistance— 11 Megohms DC, 10 AC
- Direct Decibel Measurement
- Overload Protected, Fused

Loaded with features for time-saving operation. Auto-polarity cuts set-up time for simplified trouble-shooting where polarity is known or not significant; eliminates need for continually switching leads. Indicator is adjusted for zero, zero null; therefore, pointer parallax can be neglected. Circuit uses same amplifier for all functions; high degree of feedback insures linear tracking scales on AC and DC. Only two voltage scales for all AC/DC current and voltage ranges. Sensitivity of 0.3 V full-scale on AC and DC. High input resistance—11 megohms DC, 10 megohms AC. Feedback assures automatic compensation of the movement for temperature. Overload protected and fused; zero center galvanometer. Size, 3⅜x5⅛x6½".

RANGES: DC Volts: 0-0.3-1-3-10-30-100-300-1000 volts with ±3% accuracy except 1000 V range, ±4%; input resistance, 11.12 megohms; pushbutton for polarity determination. **AC Volts:** 0-0.3-1-3-10-30-100-300-1000 volts with ±3% accuracy except 1000 V range, ±4%; frequency compensation on all ranges except 300 and 1000 V; frequency range, 50 Hz to 50 kHz; input resistance, 10 megohms on all ranges. **Resistance:** X1, X10, X100, X1k, X10k, X1 meg; 1.5 volts open circuit on all ranges: maximum power applied to device under test, 57 mW; center scale, 10 ohms; measurement range, 0.2 ohm to 1000 megohms; accuracy, 3% of DC voltage arc. **AC/DC Current:** 0-1-10-100-1000 mA; accuracy, ±4%.

956-0602. Shpg. wt. 9 lbs. **100.00**

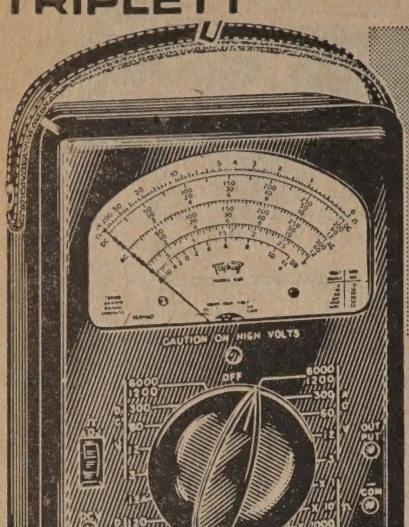
956-0370. 101-793 Leather Case. 3 lbs. **15.40**

956-3795. 79-270 High Voltage Probe. 4 lbs. **26.50**

956-3788. 79-264 RF Probe. Shpg. wt. 4 lbs. **9.50**

TRIPLETT

Portable VOM's and Accessories



MODEL 630 VOM

- Single Selector Minimizes Chance of Incorrect Settings and Burnouts
- 5000 Ohms per Volt AC Sensitivity and 20,000 Ohms per Volt DC
- 4 Resistance Ranges from 0.1 Ohm to 100 Megs

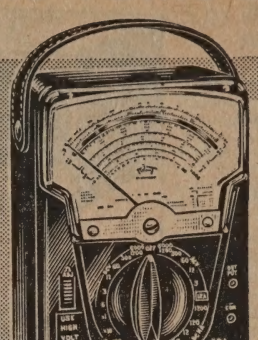
Popular streamlined tester with long meter scales for easy reading. Features 20,000 DC, 5000 AC ohms/volt sensitivity. Single 20-position switch selects both circuit and range—minimizes chance of incorrect settings and burnouts. Fuse-protected ohmmeter circuit prevents burnout. Spring-backed instrument jewels for extra ruggedness and accuracy.

DC accuracy is ±2% on all ranges. AC response, 5 Hz to 50 kHz. Ranges: DC and AC volts; 0-3-12-60-300-1200-6000; DC current, 0-60 μA, 0-1.2-12-120 mA, 0-12 amps. Resistance, 0-1000-10,000 ohms and 0-1-100 megs. dB, —20 to +77 in 6 ranges; output volts, 0-3-13-60-300-1200. Jack with condenser in series with AC ranges. Sizes, 7½x5½x3⅞". Supplied complete with batteries, alligator clips, and test leads. Shpg. wt., 2 lbs.

956-5656.....**64.00**

MODEL 630A-2 VOM. As above, but with ½% precision multiplier resistors for ±1½% accuracy on DC readings; ±3% accuracy on AC readings. 4½" mirrored scale. With leads, clips, and batteries. Shpg. wt., 5 lbs.

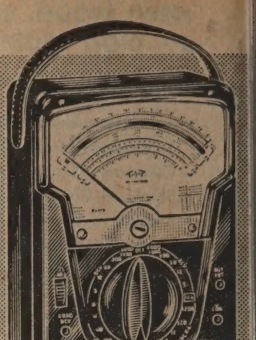
956-5630.....**75.00**



200,000 Ohms/Volt DC Sensitivity

5-Microamp Suspension Meter

62 Ranges



MODEL 630NS PRECISION VOM

- 200,000 Ohms/Volt DC Sensitivity
- Rugged Construction with High Sensitivity and Repeatability
- No Rolling Friction in Movement
- Temperature/Freq. Compensated
- 62 Ranges, Usable to 100 kHz

Suspension meter movement has no pivots, bearings, hairsprings, etc. Extremely rugged. Special precision resistors are rigidly mounted. 20,000 ohms per volt for greater sensitivity on high resistance circuits. Input impedance is higher than on most VTVM's at 55 volts, DC and above. Accuracy is ±1½% DC, and ±3% AC.

Temperature compensated to 100 kHz. 20,000 ohms/volt AC sensitivity. Ranges: DC volts: 0-0.6-3-12-60-300-1200 at 100k ohms/volt. 0-0.3-1.5-6-30-150-600 at 200k ohms/volt, 0-0.150 at 60 μA. AC volts; 0-3-12-60-300-1200 at 10k per volt: 0-1.5-6-30-150-600 at 20k per volt. dB, —20 to +63 in 10 ranges. DC current: 0-5-60-120-600 μA, and 0-1.2-6-12-60-120-600-1200 mA, plus 0-6-12 amps. Ohms: 0-1000-10k-100k-1 meg-10 meg-100 meg. (4.4-44-440, etc. at center scale). Shipped complete with leads, clips, and batteries. 7½x5½x3¹½". 5 lbs.

956-5648.....**116.00**

MODEL 630NA DELUXE VOM

- Single Selector Switch
- 70 Ranges • 1½% DC Accuracy
- Handy Mirror Scale and Diode Overload Protection
- Compensated for Temperature and Frequency Response

Single selector switch reduces chances error in setting. Temperature and fr quency compensation, usable with fr quencies through 500 kHz. 5½" easy-t read mirror scale with unbreakable wi dow. Special diode protected meter, ar fuse protection in ohmmeter circuit pr vents overloading and burnouts. Rugge new suspension meter movement.

Accuracy: ±1½% DC, ±3% AC. Ran es: DC volts: 7 ranges to 6000 (10k p volt); 7 ranges to 3000 (20k/volt); 1 ran to 0.1260 μA). (AC volts: 6 ranges t 6000 (5000 ohms/volt); 6 ranges to 300 10k per volt). dB, —20 to +77 in 1 ranges. DC μamps, 1 range to 120 (24 mV); 2 ranges to 600 (120 mV). DC mA: ranges to 1200 (240 mV); 3 ranges to 60 (120 mV). DC amps, 1 range to 12 (24 mV); 1 range to 6 (120 mV). Ohms, ranges to 100k, 3 ranges to 100 meg Leads, clips, batteries. 5 lbs.

956-5645.....**98.0**

VOM ACCESSORIES

PROBES. Fully insulated 11¾" probe with 48" leads. *Indicates use with 630, 630A-2, 631. †Use with 630-PL, 630-APL, 630-L, 630-PLK. ‡for 631 only. Wt., 4 lbs.

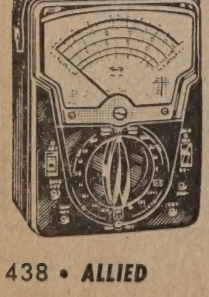
Stock No.	Type	DC Volts	EACH
956-3700	*T-79-70	0-30,000	18.80
956-3713	†T-79-130	0-25,000	18.80
956-3721	‡T-79-145	RF Probe	10.00

CASES AND STAND. *Black cowhide cas †Black leather case. Shpg. wt., 1½ lb Mfr's type T255A35 is a stand. Averag shpg. wt., 3 lbs.

Stock No.	Mfr's Type	For Testers	EACH
956-5662	*639-N	630 Series	13.20
956-5665	*639-P	630 Series	18.80
956-5670	†669-OS	666R	9.50
956-3955	T255A35	630 Series	2.20

TYPE 611 LEADS. For Model 10 AC-Ammeter Adapter (page 446) when used with 630 Series (or with any VOM having a 3 volt AC scale at 5000 ohms per volt) Long lead attachment simplifies readings

956-0611. Shpg. wt., 10 oz.....**3.4**



MODEL 630-L VOLT-OHM-MILLIAMMETER

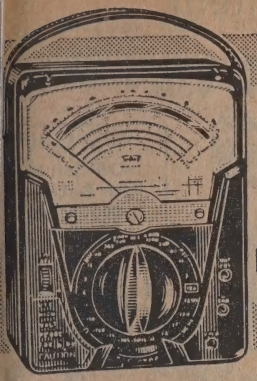
- Two Low-Power Ohm Ranges (x1 and x10) with 140-mV Ohmmeter Voltage
- Single Selector Switch Ensures Correct Range Settings, Eliminates Damage
- Exclusive Shielded "Bar-Ring" Movement
- ±2% Accuracy on DC, ±3% on AC
- 20,000 Ohms/Volt DC Sensitivity and 5000 Ohms/Volt AC Sensitivity

Low milliwatt ohmmeter circuit (only 140 mV on the x1 and x10 ranges)—will not damage semiconductor circuits. Single switch minimizes chance of incorrect settings; mercury battery reduces rezeroing. 5½", 2-color meter scale. Spring-backed jewels for extra ruggedness. Usable up to 500 kHz. Accuracy ±2% on DC range, ±3% on AC. Exclusive shielded "Bar-Ring" movement. Sensitivity: 20,000 ohms/volt DC; 5000 ohms per volt AC. Ranges: DC volts, 0-2.5-10-50-250-1000-5000. AC volts, 0-3-10-50-250-1000-5000. Decibels, —20 to +75 in 6 ranges. DC Current, 0-100 μA; 0-10-100-1000 mA; 0-10 amps. Resistance, 0-1000-10,000 ohms (13-130 at center scale); 0-1-100 megohms (4400-440k at center scale). AC output volts, 0-3-10-50-250-1000; jack with capacitor in series with AC ranges. Black molded case, 7½x5½x3¹½" Meter comes complete with test leads, clips and batteries. Shpg. wt., 5 lbs.

956-5639.....**69.00**

Portable VOM and VTVM Testers

TRIPLETT



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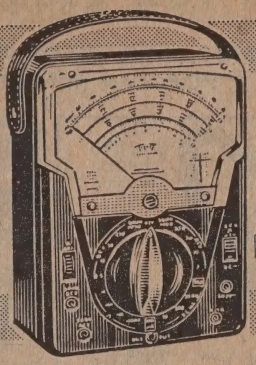

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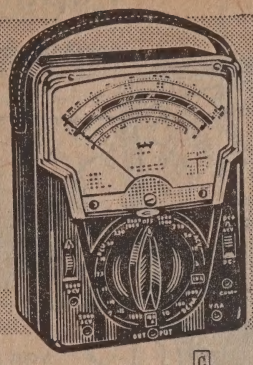

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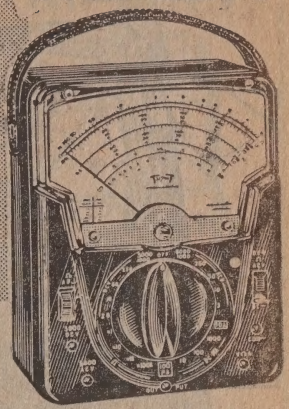


A PROFESSIONAL 630-M VOLT-OHM-MILLIAMMETER

1,000,000 Ohms/Volt DC for Greater Accuracy on Hi-Resistance Circuits, 20,000 Ohms/Volt AC Sensitivity

- **1-Microamp Suspension Meter Movement—No Pivots, Bearings, Rolling Friction—Extremely Rugged Design**

61 Ranges, Usable with Frequencies Through 100 kHz; Temperature Compensated; 1½% DC Accuracy; 3% AC Accuracy When Used in Horizontal Position

ombines the high input impedance of a TVM, with the convenience of a VOM. ensitivity: 1,000,000 ohms/volt DC; ,000 ohms/volt AC. Special diode- otected 1-μA meter movement. Large, ½" scale. Reads low as 20 nanoamperes. ccuracy: DC, ±1½%; AC, ±3%. 61 nges, for use with frequencies to 100 kHz. omponent mounted on glass epoxy cir- it board. DC volts: 0-0.6-12-60-300 at 0,000 ohms/volt; 0-0.3-1.5-6-30-150 at 1,000,000 ohms/volt; 0-1200 at 125,000 ohms/volt; 0-600 at 250,000 ohms/volt. ACV. 0-3-12-60-300-1200 at 10,000 ohms/volt; 0-1.5-6-30-150-600 at 20,000 ohms/volt DC current: 0-1-60-120-600 μA; 0-1.2-6-12-60-120-600-1200 mA; 0-6-12 amps. Resistance: 0-1k-10k-100,000 ohms; 0-1-10-100 megs; dB: —20 to +63 in 10 ranges. 7x5½x3½". With leads and strap handle. Shpg. wt., 5 lbs.

956-5642 ..... **231.00**

B MODEL 630-PL TYPE 2 VOLT-OHM-MILLIAMMETER

Meter Movement Diode-Protected Against Instantaneous Overloads

- **One Selector Switch Minimizes Chance of Incorrect Settings and Burnouts**

Four Resistance Measuring Ranges, From 0.1 Ohm to 100 Megohms

ig 5½" meter with instant-vision, wide- read scales, spring-backed jewels, and olarity reversing switch. Frequency re- onse to 500 kHz. Fuse gives extra protec- on to ohmmeter circuit. Sensitivity: 0,000 ohms/volt DC; 5000 ohms/volt AC. ccuracy: ±2% DC and ±3% AC. DC olts: 0-2.5-10-50-250-1000-5000 at 20,000 hms/volt; 0-0.25 at 100 μA. AC volts: 0-3-10-50-250-1000-5000 at 5000 ohms/volt. DC current: 0-100 μA; 0-10-100-1000 mA; 0-10 amps. Resistance: 0-1k-10k, plus 0-1-100 megs. dB: —20 to +75 in 6 ranges. Output volts: 0-3-10-50-250-1000 at 5000 ohms/volt. Molded black case, 7½x5½x 3½". Complete with leads, alligator clips, rubber feet, batteries, instr.

956-5651. Shpg. wt., 5 lbs. **64.00**

C MODEL 630-APL TYPE 3 LABORATORY-TYPE VOM

Extra-Rugged 5½" Suspension Meter with 4½" Mirror Scale

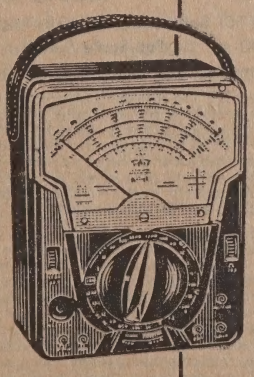
- **Diode-Protected Meter Movement**
- **±1½% DC, ±3% AC Accuracy**

ab type VOM has all features of Model 30-PL Type 2 above, plus ½% precision esistors for even greater accuracy. 5½" eter with 4½" mirror scale. Movement is iode-protected against instantaneous overloads. Sensitivity: 29,000 ohms/volt DC, 5000 ohms/volt AC. Accuracy: ±1½% DC, ±3% AC. Ranges same as 630-PL Type 2. With leads, clips, batteries.

956-5633. Shpg. wt., 5 lbs. **75.00**

MODEL 631 BATTERY-POWERED VTVM-VOM IS TWO TESTERS IN ONE

- **One Selector Switch For Entire Unit**
- **Complete VOM in Combination With Battery-Operated VTVM**
- **11-Megohm Input Impedance to VTVM**



Single switch selector for VTVM or VOM operation. Has large, easy-to-read 5½" meter with unbreakable face, and spring-backed jewels for ruggedness. Accuracy: VOM, ±3% DC, ±4% AC; VTVM, ±4%. VTVM. DC volts: 0-1.2-6-30-120 (11 megs input impedance). VOM. DC volts: 0-3-12-60-300-1200 (20,000 ohms/volt). AC and audio volts: 0-3-12-60-300-1200 (5000 ohms/volt). DC current: 0-60 μA; 0-1.2-12-120-1200 mA; 0-12 amps. dB: —20 to +63. Ohms: 0-1500-15k; 0-1.5-150 megs. Size, 7½x5½x 3½". Supplied complete with test leads, alligator clips, rubber feet, batteries and instructions. Probes on facing page. Shpg. wt., 5 lbs.

956-5659 ..... **86.00**

630-PLK TYPE 3 VOM

- **Burnoutproof Circuit**
- **Single Selector Switch**
- **Polarity Reversing Switch**

It's virtually burnoutproof. Transistorized switching circuit protects meter movement and all components from overload damage. Sensitivity: 20,000 ohms/volt DC, 5000 ohms/volt AC. Accuracy: ±2% on DC, ±3% on AC. DC volts: 0-2.5-10-50-250-1000-5000 (20,000 ohms/volt). AC volts: 0-3-10-50-250-1000-5000 (5000 ohms/volt). dB: —20 to +75 in 7 ranges. DC current: 0-100 μA (250 mV); 0-10-100-1000 mA (250 mV); 0-10 amps (250 mV). Ohms: 0-1000-10,000 (4.4-44 at center scale); 0-1-100 megs (4400-440k at center scale). Output volts: 0-3-10-50-250-1000 (3000 ohms/volt). 7½x5½x3½". Complete with 50" test leads, removable alligator clips, and batteries. Shpg. wt., 5 lbs.

956-5653 ..... **98.00**

630-APLK LAB-TYPE VOM

- **Complete Overload Protection**
- **Polarity Reversing Switch**
- **Suspension Meter Movement**
- **Single Selector Switch**

Same fine features, sensitivity, and overload protection as the 630-PLK Type 3, with ½% resistors for greater accuracy, and 4½" mirror scale. Accuracy is ±1½% DC, ±3% AC. With leads, alligator clips, batteries. 5 lbs.

956-5636 ..... **110.00**

MODEL 666R POCKET VOM

- **One Selector Switch**
- **Three Resistance Ranges to 3 Megohms**
- **Five AC and DC Voltage Ranges to 5000 Volts**
- **Convenient Hand Size**
- **Jacks at Top of Panel**

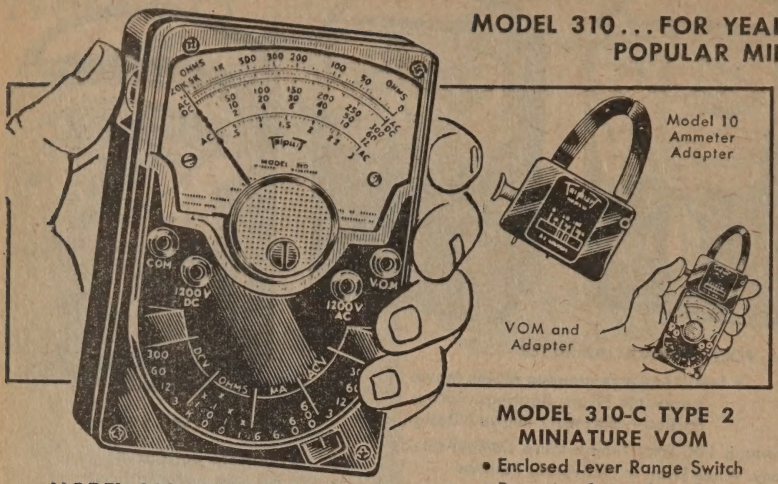
Handy tester for pocket or tool kit has single, recessed selector switch. AC rectifier is precalibrated for easy replacement. Accuracy: ±3% DC; ±4% AC. AC/DC Sensitivity: 1000 ohms/volt. Ranges: DC and AC volts: 0-10-50-250-1000-5000. DC current: 0-10-100 mA; 0.1 amp. Ohms: 0-3000-300,000; 0-3 megs. Output volts: 0-10-50-250-1000. Size, 5⅞x3⅛x2⅜". With test leads, alligator clips and batteries. Shpg. wt., 3 lbs.

956-5666 ..... **46.00**

TRIPLETT

Popular Test Equipment

MODEL 310...FOR YEARS, THE WORLD'S MOST POPULAR MINIATURE VOM



MODEL 310 MINIATURE VOM

- 20,000 Ohms/VDC, 5000 Ohms/VAC
- Shirt-Pocket Size
- Ammeter Provision

Miniature VOM is self-shielded, has spring-backed jewels for ruggedness. High-torque, bar-ring movement. Test prod fits into top for use as common probe, leaving one hand free. Accuracy: ±3% DC, ±4% AC. DC volts: 0-3-12-60-300-1200 (20,000 ohms/volt). AC volts: 0-3-12-60-300-1200 (5000 ohms/volt). Ohms: 0-20,000-200,000; 0-2-20 megs. DC current: 0-600 μA; 0-6-60-600 mA. Molded black case, 4¼x2¾x1⅝". Unbreakable plastic meter window. With test leads, battery, and instruction manual. See Model 10 clamp-on AC ammeter adapter, right. Shpg. wt., 2 lbs.

956-5312.....44.00

MODEL 369 LEATHER CASE

Handsome black cowhide leather carrying case for 310, 310-C and 310 FET meters. Trouser belt slips through loop on back of case for out-of-the-way carrying. Shpg. wt., 1 lb.

956-5369.....4.40

MODEL 379 LEATHER CASE

For 310 and Model 10 clamp-on ammeter combination. Has pocket for Model 101 line separator. Black leather, with strap. Shpg. wt., 1 lb.

956-5379.....8.40

REPLACEMENT LEADS

TYPE 79-153. For 310 and 310-C.
956-3727. Shpg. wt., 10 oz.....3.40
TYPE 311 LEAD. Allows separate use of Model 10 AC-Ammeter with Series 310 test equipment.
956-0311. Shpg. wt., 10 oz.....3.40

MODEL 310-C TYPE 2 MINIATURE VOM

- Enclosed Lever Range Switch
- Reversing Switch for DC Use

Similar to Model 310, but with 600-volt ranges instead of 1200. Hand-size, with provision for attaching Model 10C clamp-on AC ammeter, below. Single, fully enclosed lever range switch plus DC polarity reversing switch. Sensitivity: 15,000 ohms/volt on AC; 20,000 ohms/volt DC. Accuracy: ±3% DC, ±4% AC. DC volts: 0-3-12-60-300-600 (20,000 ohms/volt). AC volts: 0-3-12-60-300-600 (15,000 ohms/volt). Ohms: 0-20k-200k. 0-2-20 megs. DC current: 0-600 μA; 0-6-60-600 mA. 4¼x2¾x1⅝". With leads, battery. Wt., 2 lbs.

956-5310.....56.00

MODEL 10 AMMETER ADAPTER

Plugs into Model 310 or 310-FET to make a clamp-on AC ammeter. Can be used with any VOM with a 3-V AC scale at 5000 ohms/volt. Checks all line loads without breaking circuit or interrupting work. Six AC ranges: 0-6-12-30-60-120-300 amps. Clips around single wire for direct reading. Overall size, 4¼x1¼x3¼". Shpg. wt., 1 lb.

956-5011.....20.00
956-5010. Model 10-C. As above, but for Model 310-C VOM. 1 lb.....20.00

MODEL 10 LINE SEPARATOR

Plugs into AC outlet to divide two-conductor cord. Increases Model 10 sensitivity 10X and 20X, 0.3 to 30 amps, AC in 9 ranges. Shpg. wt., 1 lb.

956-5102.....8.00

MODEL 100 VOM-AND-AC-AMMETER OUTFIT

- 310 VOM with Model 10 Ammet
- Includes Carrying Case

Save $5.80 on this packaged miniatu VOM outfit. Cost of items purchas separately is $83.80. Outfit consists Model 310 pocket-size VOM; Model clamp-on AC Ammeter Adapter; Mod 101 Line Separator; Model 379 Leath Carrying Case; Model 311 Lead Attac ment for separating VOM and Adapte VOM has 20,000 ohms/volt DC sens tivity, 5000 ohms/volt AC sensitivit ±3% DC accuracy, ±4% AC. Shiel ed, with high-torque movement. AC an DC voltage ranges to 1200 volts in fi ranges; current to 600 mA in fo ranges; ohms to 20 megs in four range

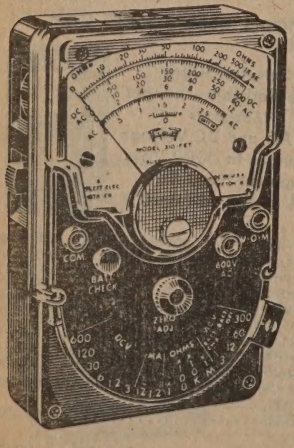
Clamp-on adapter converts 310 to am meter. Reads current in 6 steps. 10 separator increases ammeter sensitivit Case holds 310 and 10 with pocket fo 101 Line Separator. Description at lef Shpg. wt.. 7 lbs.

956-5101.....78.0

MODEL 100-C OUTFIT

Same as above outfit, but with Mode 310-C VOM. Has 15,000 ohms/volt AC sensitivity, 20,000 ohms/volt DC. AC and DC voltage ranges to 600 volts Polarity reversing switch. Include Model 10-C clamp-on AC Ammete Adapter; Model 101 Line Separator Model 379 Leather Carrying Case Model 311 Lead Attachment for sep arating VOM and Adapter. Full descrip tions at left. Shpg. wt., 7 lbs.

956-5100.....88.0



MODEL 310-FET SOLID-STATE VOM

- All FET Solid-State with 10-Megohm Input Resistance
- Battery Operation
- 300-mV DC Full-Scale Sensitivity for Transistor Bias Measurements to 5000 Megohms
- Handsize with Single Selector Switch
- Takes Optional AC Clamp-on Ammeter

Handsize FET VOM is compact, yet gives a full range of operating features and an input impedance that equals that of many large line cord operated VTVM's. Transistorized amplifier uses field effect transistor circuit to provide high input impedance and greater stability on all DC ranges. Accurately reads resistance up to 1 megohm; AC and DC volts to 600 V.

Designed for convenience of use, with all controls and jacks easily accessible on the face of the unit. Single selector switch for all functions and ranges minimizes chance of incorrect setting and possible burnout. Large, easy-to-read meter has suspension meter movement to eliminate pivots, bearings, hairsprings and rolling friction for top sensitivity and better repeatability. Meter also features uncluttered scale and excellent range overlap for accurate readings. Shatterproof plastic meter window.

Ten megohms/volt input impedance on DC gives maximum accuracy in measuring in high resistance circuits. Has 300 mV DC full-scale sensitivity for transistor bias measurement. Ohms to 5000 megohms. Provision for plugging in AC clamp-on adapter to check line loads instantly without opening the circuit. DC volts: .3-1.2-6-30-120-600V, ±3% full scale accuracy. AC volts: 3-12-60-300-600V at 5000 ohms/volt, ±4% accuracy. Resistance: 1-100-10k-1 meg with 50-ohm center scale. DC milliamps: .12-1.2-mA. Diode overload protection.

Powered by batteries, has built-in battery check provision. Molded black plastic case measures 4¼x2¾x1⅝". With test leads, alligator clips, battery. Shpg. wt., 2 lbs.

956-5311.....74.00
LEATHER CASE. For 310, 310C, 310 FET. 1 lb.
956-5370.....10.50

Portable Test Equipment

MODEL 600 TVO SOLID-STATE VOLT-OHMMETER

- VTVM Performance—VOM Portability
- Field-Effect Transistors for Stability
- High Input Impedance—11 Megohms
- One-Probe Operation
- Single Selector Switch
- DC Polarity Reversing

Boasts portability of a VOM with the high input impedance of a VTVM. Designed for use by service technicians, instrument and electronic process control engineers, test lab and computer technicians, quality control personnel. Engineered for easy operation, with uncluttered scale and excellent range overlap for accurate readings on the five-inch meter.

Accuracy, ±3% of full scale. Uses special field-effect transistor circuit for high input impedance and greater stability. Input impedance: 11 megohms, except on 0.4 and 0.8 volts, 2.75 and 3.5 megohms respectively; AC volts, 0.75 megohm, minimum. Frequency range, 15 Hz to 2 MHz. The 50 μA meter movement has Bar-Ring self-shielded rugged magnet construction.

Ranges: DC volts, 0-.4-.8-1.6-4-8-16-40-160-400-1600; AC volts, 0-4-8-16-40-160-400-800; Ohms, 0-1,000-10,000-100,000-1 meg-10 megs-100 megs (10 ohms center scale at X1 range). Has DC polarity reversing switch. Powered by one "D," two "AA" and one 9-volt transistor battery. Typical battery life, 4000 hours. Includes battery test provision. Brushed aluminum front panel with etched black range markings. Molded black case, 3⅜x5⅛x6½". Rigid aluminum handle serves as stand, supporting tester at 25° angle. With batteries and test leads. Shpg. wt., 4 lbs.

956-0600.....86.00

RF PROBE T79-264. For frequencies to 250 MHz.
956-3788. Wt., 4 lbs.....9.50

LEATHER CARRYING CASE. Shpg. wt., 1½ lbs.
956-0730.....15.40

MODEL 601 TYPE 1 SOLID-STATE PUSHBUTTON VOM

- 14 Ohmmeter Ranges with 7 Low-Power Ranges at 75 mV for Solid-State Circuits
- Voltage Ranges from 10 mV AC and 100 mV DC, plus Current Ranges from 10 μA

Field-Effect-Transistor circuit offers high input impedance (11 megohms) on all AC and DC ranges, plus improved stability over battery life and temperature ranges. Has low power ohms switch for measurement of integrated circuits without damage. Push-button switches select function; single rotary switch selects from 52 ranges. The model 601 measures such parameters as DC voltage, AC rms voltage, resistance, AC/DC current, decibels on 10 ranges, and the condition of its own batteries. Accuracy: ±2% on DC ranges, ±3% on AC. Frequency response on AC, 50 Hz to 50 kHz. Simplified color-coded dial insures fast measurements, with AC and DC ranges using the same arc. 5" meter has a 4.125" scale length with uncluttered scale and excellent range overlap for accurate readings. Ranges: DC volts: 0-.1-.3-1-3-10-30-100-300-1000. AC volts: 0-.01-.03-.1-.3-1-3-10-30-100-300-1000. Ohms: 0-1-10-100-1000-10k-100k; 0-1 meg. 10 ohm center scale. AC and DC current: 0-10-100-1000-10,000 μA. Decibels: —40 to +60 dB. High-impact molded case with brushed aluminum front panel, carrying handle/supporting stand for convenient portability. 3⅜x5⅛x6½". With batteries and pencil-thin probe. Shpg. wt., 5 lbs.

956T0601.....158.00

MODEL 800 TYPE 2 LABORATORY VOM

- 8" Suspension Meter with 6.95" Mirror Scale
- 70 Ranges plus Polarity Reversing Switch
- 1½% DC, 3% AC Accuracy
- Diode Overload Protection

Portable VOM has the versatility of a complete electronic measuring laboratory. Designed to meet the present and advanced circuit measurement requirements of circuit designers, service and lab technicians, instrument evaluation, production quality control, industrial processing, etc. 8" suspension mirror with 6.95" mirror scale gives greater readability plus diode overload protection. Two rotary switches select 70 ranges with DC polarity reversing switch and fused ohmmeter circuit. ±3% AC accuracy to 1200 volts; usable with frequencies to 100 kHz. DC accuracy ±1½% with temperature and frequency compensation.

Ranges: DC volts, 0-0.6-3-12-60-300-1200-6000 at 10,000 ohms/volt, 0-0.3-1.5-6-30-150-600-3000 at 20,000 ohms/volt. 0-.120 at 60 μA. AC voltage ranges: 0-3-12-60-300-1200-6000 at 5000 ohms/volt, 0-1.5-6-30-150-600-3000 at 10,000 ohms/volt. Decibels: —20 to +70 in 10 ranges. DC microamperes: 0-60-600 at 120 MV, 0-1.2-12-120-1200 at 240 MV. DC amperes: 0-6 at 120 MV, 0-12 at 240 MV. Ohm ranges: 0-1k-10k-100k, 1 meg, 10 meg, 100 meg. Heavy molded black case, 7½x6¼x3⅞", with insulated movable handle which can be used for stand. With leads, battery.

956-0800. Shpg. wt., 7 lbs.....116.00

MODEL 850 VTVM

- High Stability—12AU7 Cathode Circuit
- 0-5-Volt DC Range for Transistor Circuits
- Easy-to-Read 7" Scale
- Built-In Burnout Protection

Extremely versatile VTVM combines superior voltage measuring capability with 115-volt operation. Ideal for benchwork in the electronics workshop, quality control stations, R&D laboratory work, etc. Provides seven peak-to-peak voltage ranges, eight DC voltage ranges, seven AC rms volts ranges, seven resistance ranges, plus a frequency range from 15 Hz to 3 MHz to provide a wide-range measurement capability.

Wide 7" meter has easy-to-read scale, electrical protection to prevent burnout and 12AU7 cathode circuit to produce top stability. Separate scale on meter for peak-to-peak readings. Spring-backed jewels for added ruggedness. Single-unit probe has built-in switch for AC/DC/Ohms. 11 megohm input resistance on all DC voltage ranges. Accuracy ±3% on AC and DC. Ohms accurate within ±3% full scale based on DC scale. DC voltage ranges: 0-.5-1.5-5-15-50-150-500-1500. AC rms voltage ranges: 0-1.5-5-15-50-150-500-1500. Peak-to-peak voltage ranges: 0-4-14-40-140-400-1400-4000. Resistance ranges: 0-1000-10,000-100,000-1 meg-10 megs-100 megs-1000 megs. Frequency range 15 Hz to 3 MHz (up to 250 MHz with auxiliary diode probe listed below). Input resistance: 11 megohms on DC volts, AC volts minimum of .83 megohm.

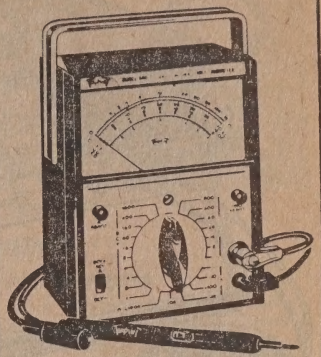
Molded black case 7⅝x6⅞x3¾". Carrying handle also supports tester at 25° angle for easy reading. With test leads and battery. For 115 VAC. Shpg. wt., 7 lbs.

956-0850.....98.00

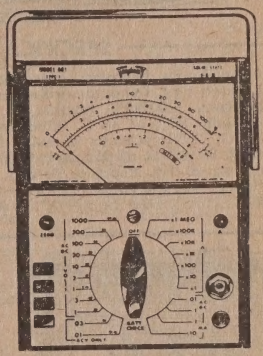
T-79-196 PROBE. For VDC to 50 kV.
956-3746. Wt., 4 lbs.....26.50

T-79-215 RF PROBE. For up to 20 volts with frequencies to 250 MHz.
919-0190. Shpg. wt., 1 lb.....9.50

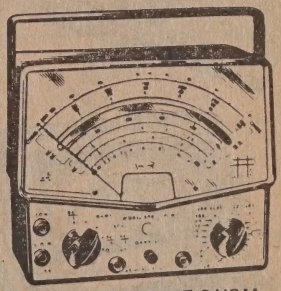
TRIPLETT



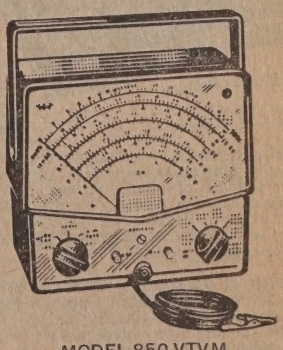
MODEL 600 TVO



MODEL 601 TYPE 1 VOM



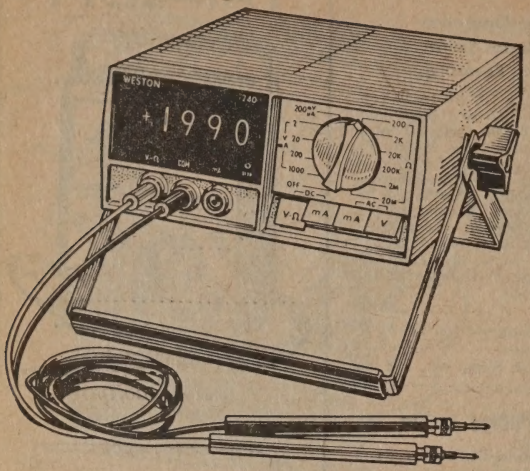
MODEL 800 TYPE 2 VOM



MODEL 850 VTVM

Weston Test Equipment

DUAL-SLOPE DIGITAL MULTIMETERS



- All Circuits Fully Protected Against Overloads
- 200-mV Range Allows Use of Weston Transducers

MODEL 1240. Compact 26-range digital multimeter measures D and AC voltage and current, and resistance. Designed for today requirements, it provides fast, accurate measurements and staf service. Panel layout is simplified and extremely convenient—t fully recessed single range-selector and feather-touch functi switches assure easy operation. Movement is protected on all ranges and on all circuits. Fuses can be replaced without openi case. Features high-impedance bipolar A/D dual-slope convert that rejects normal powerline interference. Integrating time 200 ms. Gives excellent rejection of 50 Hz, 60 Hz, and 400 H interference, or any whose frequency is a submultiple of 200 m The dual-slope integration system cancels out clock inaccuraci for improved scale factor.

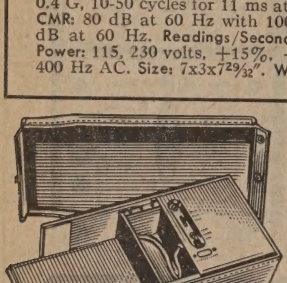
Ranges: DC Volts: 0-0.2V (input impedance 100 megs), 0-2 (input impedance 1000 megs), 0-20-200-1000V (input impedance megs). Accuracy ±0.1% (±0.05%) of reading. AC Volts: 0-2 mV, 0-2-20-200-500V. Input impedance 1 meg at 50 pF. Accurac ±0.5%, ±1 digit, at 40 Hz to 10 kHz; ±1%, ±1 digit, at 10 kH to 20 kHz. DC Current: 0-200 μA (±0.25%, ±1 digit), 0-2-2 mA (±0.2%, ±1 digit), 0-200 mA (±0.3%, ±1 digit), 0-2 amp (±0.5%, ±1 digit). Voltage drop 0.2V on all ranges. AC Curren 0-200 μA (±0.75%, ±1 digit), 0-2-20 mA (±0.7%, ±1 digit 0-200 mA (±0.8%, ±1 digit), 0-2 amps (±1%, ±1 digit). Voltag drop 0.2V on all ranges. Frequency range 40 Hz to 10 kHz. Resis ance: 0-200-2K-20K-200K ohms, 0-2 megs (±0.5%, ±1 digit 0-20 megs (±1-2%).

Has shock-resistant, glass-filled thermoplastic case, 7x3x7²⁹⁄₃₂". Adjustable tilt-stand and carrying handles. Can also be rack mounted. With leads and line cord. For 115, 230 volts, 50-400 H AC. Optional carrying case below.
986-7840. Shpg. wt., 5 lbs. **394.5**

MODEL 1241. Above, but has the following ranges only: DC Volts 0-0.2V (input impedance 100 megs), 0-2V (1000 megs), 0-20-200 1000V (10 megs). Resistance: 0-200-2K-20K-200K ohms, 0-2 meg (±0.5%, ±1 digit), 0-20 megs (±1-2%).
986-7841. Shpg. wt., 5 lbs. **289.0**
986-7842. Carrying Case. Shpg. wt., 1 lb. **19.5**

SPECIFICATIONS

Out-of-Range Indicator: Flashing light. **Polarity Indicator:** Lighted sign. **Temperature Range:** 10° to 40°C. **Temperature Influence:** ±0.005% reading/°C, ±0.005% full scale/°C. **Humidity:** 85% at 36°C. **Vibration:** 5-10 cycles for 1 hour at 0.4 G, 10-50 cycles for 11 ms at 2 G. **Shock:** 50 G on 3 axes. **CMR:** 80 dB at 60 Hz with 1000-ohm unbalance. **NMR:** 35 dB at 60 Hz. **Readings/Second:** 5 (nonblinking display). **Power:** 115, 230 volts, +15%, −10%, 6-watts nominal, 50-400 Hz AC. **Size:** 7x3x7²⁹⁄₃₂". **Weight:** 4 lbs.



BATTERY SUPPLY PACK FOR ABOVE MULTIMETERS

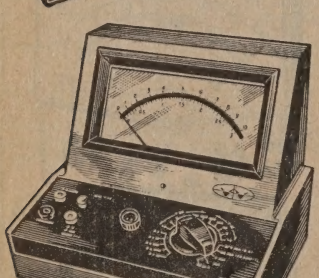
MODEL 9740. Self-contained battery-powered supply capable of operating Model 1240 or 1241 for 6 hours. Accessory connector cable between battery pack and digital multimeter permits full-temperature-range operation of the multimeter either in the 7⅜x3⅜x17" leather case or when both are removed from it. Selector switch provides three operations: "Battery"—supplies energy to attached multimeter; "Line"—bypasses unit circuitry so multimeter is operated directly from a 115 or a 230-volt AC line; "Charge"—recharges the 12-volt battery in 16 hours from a 115 or a 230-volt AC line. Two test jacks check battery voltage, allow connection of external 12-volt supply. 7½x3½x17"
Order battery below.
986-X 8302. Shpg. wt. 7 lbs. **99.6**

12-VOLT BATTERY

Standard Globe "Gel/Cell" rechargeable 12 volt battery is sealed, maintenance-free. 100-40 or more recharge cycles. 6x2½x4".
986-8301. Shpg. wt. 5 lbs. **30.0**

SERIES 80, 81, AND 82 AC AND DC TEST INSTRUMENTS

- Employ Console-Design Concept for Readability, Easy Control Access
- Anti-Parallax Viewing Connector for "On-the-Mark" Readings



Model 80

SERIES 80 BENCH MULTIMETER

MODEL 80. Versatile, accurate bench multimeter specially designed for easy use. Offers optimum readability without eyestrain or ambiguity. Convenient access to the control deck, whether you are sitting or standing. Easy-viewing slope-front panel and fingertip controls make unit ideal for production line, lab, or service applications. Large 5½" meter is diode-protected to prevent burnout; entire instrument is fuse-protected on the two lowest ohmmeter ranges.

Ranges: AC voltage, 0-2.5-10-50-250-500-1000-5000 volts @ 5k ohms/volt; DC voltage, 0-0.25-1-2.5-10-25-50-100-250-1000-5000 volts @ 20k ohms/volt; DC current 0-50 microamps, 0-1-10-100 milliamps, 0-1-10 amps; 5 resistance ranges read 2000 ohms to 20 megohms full scale, 20 to 200 k center scale. dB, −10 to +10.

Accuracy of readings is 1% on DC scales; 1½% on AC scales. Anti-parallax scale. Size, 9¼x9¾x9¼". Housed in high-impact thermoplastic case.
986 C 0080. Shpg. wt., 5 lbs. **105.00**

SERIES 81 AND 82

Series 81 and 82 instruments feature five-way binding posts with 0.75" spacing to allow the use of plug-type leads. Switches have silver-alloy contacts for low resistance and long life. Resistors and shunts are metal film or wire-wound, except carbon resistors in the highest voltmeter ranges.

MODEL 81 DC MILLIAMMETER/AMMETER. Includes features of Model 80 at right. DC milliamps, 0-10-30-100-300; DC amps., 0-1-3-10. Include 5-way binding post to permit use with plug-type leads. Less leads.
986 C 0081. Shpg. wt., 4 lbs. **87.00**

MODEL 81 DC MICROAMMETER/MILLIAMMETER. Same as Model 81 Ammeter left, but has ranges: 0-0.1-0.3-1-3-10-30-100 milliamps; 0-2500-1390-475-164-50-16.6-5 ohms. Accuracy ±1%; Scale: 100 and 60 divisions. Shpg. wt., 4 lbs.
986 C 0086. ..... **87.00**

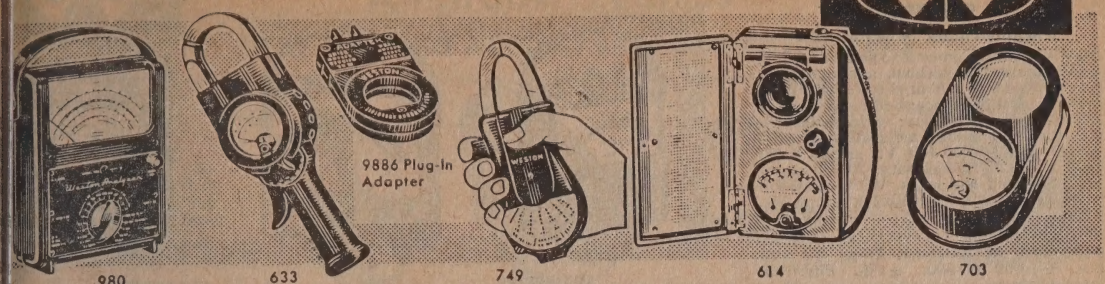
MODEL 81 DC VOLTMETER. DC voltage ranges: 0-0.25-1-2.5-5-10-25-50-100-250-1000 volts. Scale: 50 divisions; Sensitivity: 20,000 ohms per volt. Accuracy ±1%, except 2.0% on the 1000 volt range.
986 C 0089. Shpg. wt., 4 lbs. **87.00**

MODEL 82 AC MILLIAMMETER/AMMETER. Ranges: 0-50-100-200-500 milliamps; 0-1-2-5 amps. Accuracy: 2%, 60 to 400 Hz; from 25 to 1000 Hz frequency error is 1.5%, usable to 5 kHz. Transformer-rectifier type.
986 C 0092. Shpg. wt., 4 lbs. **90.00**

MODEL 82 AC VOLTMETER. Ranges: 0-2.5-10-50-250-500-1000 AC volts. Ranges below 250 volts are usable to 15 kHz. Sensitivity: 5000 ohms/volt. Accuracy ±1.5%; Scale: 50 divisions. Rectifier type.
896 C 0095. Shpg. wt., 4 lbs. **90.00**

Allied Electronics Has the Largest Stocks, the Best Service in the Industry

Weston Meters for Schools, Industry



WESTON SERVICING AND MEASURING INSTRUMENTS

MODEL 980 MARK II VOM

- ±2% DC Accuracy
- 20,000 Ohms/Volt DC Sensitivity
- Large 4.63″ Meter Scale
- Fused Resistance Ranges

nsitive rugged volt-ohm-milliameter with a DC sensitivity of ,000 ohms per volt and an AC sensitivity of 1000 ohms per volt. signed for accurate measurements. Features: spring back jewels; sed resistance ranges; insulated crackproof case. Single knob ects function and range. Ranges: DC volts, 0-1.6-8-40-160-400-0-4000; AC volts, 0-1.6-8-40-160-400-1600; Decibels, —15 to 54 in 6 ranges; DC μA, 0-80; DC mA, 0-1.6-8-80-800; DC amps, 8; Resistance, 1k to 10 meg full-scale and 25 to 250k center-scale ranges). Accuracy: DC, ±2%; AC, ±3%, 4.63″ scale. With leads, s batteries. 7 9/16x6 1/4x3″. Shpg. wt., 3 lbs.

86-7590 ..... 61.00

633 AC CLAMP VOLT-AMMETER

PE VA-1. For AC testing without breaking circuits. Clamps ound conductors (to 2″ dia.) to measure AC amps; test leads easure AC volts. Safety trigger for bare-hand use. AC amps: 0-10-100-250-1000. AC volts; 0-175-350-700. Accuracy: ±3%, 50-70 z, adjustable 0-400 Hz, 2.36″ scale length. Bakelite case; shatter-roof glass. 750 V insulation. 13 5/8x4 3/8x2 1/2″. Shpg. wt., 4 1/2 lbs.

86C6033 ..... 167.00

749 AC CLAMP POCKET VOLT-AMMETER

ocket-size version of meter above. Takes conductors to 1″ in dia. C amps, 0-6-15-30-60-150-300. AC volts, 0-150-300-600. 2.36″ ale. With case, voltage test leads, insulated clips, 3 accessory robes. 7 1/2x3x1 1/4″. Shpg. wt., 1 lb.

86-6080 ..... 57.75

ODEL 9886 PLUG-IN ADAPTER. Aids in current readings of double-onductor leads. Has 10-1 current divider. Shpg. wt., 7 oz.

86-6081 ..... 7.00

MODEL 614 LIGHTMETER

- Easy-to-Read 2.36″ Scale
- With Viscor and Cosine Filters
- Compact, Completely Portable
- For Color and Direction Correction

Professional-quality footcandle meter measures wide range of light values directly in footcandles in 3 ranges on a 2.36″ scale. Ranges: 0-100-250-500 fc. Supplied with "Viscor" and cosine filters for color and direction correction, respectively. With bakelite case and leather carrying strap. Completely self-contained. Size, 7 3/8x3 3/8x2 1/4″. Shpg. wt., 3 lbs.

986C5001 ..... 258.00

LIGHTMETER. Same as above, except range is 0-60-120-600 footcandles and with "Viscor" filter for visual correction of color only. Shpg. wt., 3 lbs.

986C5000 ..... 252.00

SERIES 703 SIGHTMETERS

TYPE 3A. Pocket-size meter has been designed to assist in filling industrial lighting requirements. Ideal for checking illumination levels at work stations, in offices, etc. Can be placed on table or desk, or held in hand in any position. Gives instant indication whether light is adequate for a particular task. Many applications in sales and demonstrations of lighting equipment. Meter has a range of 0 to 75 footcandles. Unfiltered. Scale length, 1.57″. Size, 4 5/8x2 5/8x1 5/16″. Optional case below. Shpg. wt., 2 1/2 lbs.

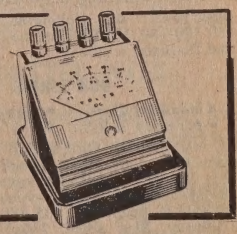
986-6051 ..... 82.00

TYPE 51. Range 0 to 150 footcandles. With quartz filter for ultraviolet use. Fluorescent characters and pointer on black background. Optional case below. Shpg. wt., 2 1/2 lbs.

986-6056 ..... 150.50

986-6057. Leather Case For 703 Series. Shpg. wt., 1 lb. 5.00

HIGH-ACCURACY "BENCH TESTERS"



- Choice of Single or Multi-Range Models
- Feature ±2% Full-Scale Accuracy
- Spring-Backed Jewels for Stability
- Binding Posts on Multi-Range Models

MODEL 2931, 2932 AND 2936 "BENCH TESTERS". Designed primarily for use in laboratories of schools, colleges and industrial firms to measure electrical values. Accuracy on all meters is ±2% of full scale. Ranges on multi-range models are selected by connecting to the appropriate binding posts, which accept pin tips, spade lugs or banana plugs. Spring-backed jewels for rugged long-term stability. Damping is designed for minimum response time. Av. shpg. wt., 1 1/2 lbs.

2931 DC VOLTMETERS SENSITIVITY 1000 OHMS/VOLT

Stock No.	Ranges—Volts DC	Scale Divisions	EACH
986C8010	0-1.5-3-30	60	45.00
986C8013	0-3-15-30	60	45.00
986C8011	0-1.5-15-150	75	45.00

2931 DC AMMETER

Stock No.	Ranges—Amps DC	Scale Divisions	EACH
986C8003	0-1.5-3-30	60	67.00

2931/2936 DC GALVANOMETERS ZERO-CENTER NULL INDICATORS

Stock No.	Range—VDC	Scale	EACH
986C8015	30-0-30	Standard—2μA/div.	31.00
986C8025	30-0-30	Linear—1μA/div.	43.00

Allied is your direct factory source for test equipment at OEM prices. Our service assures fast nationwide shipment.

MODEL 2932 1000 OHMS/VOLT AC VOLTMETERS (RECTIFIER TYPE)

Stock No.	Ranges—Volts AC	Scale Divisions	EACH
986C8021	0-30-150-300	60	51.00
986C8020	0-3-15-150	75	51.00

MODEL 2931 TWO-RANGE DC MILLIVOLTMETER (CONVERTIBLE TO AMMETER)

Range: 0-50 millivolts. Two scales of 50 and 75 are provided with divisions of 100 and 150, respectively. Use with external shunts and leads below to measure direct current.

986-8004 ..... 31.00

NO. 9858-131442 LEADS. 5-foot leads with resistance of 0.065 ohm to match DC Millivoltmeter. Shpg. wt., 4 oz.

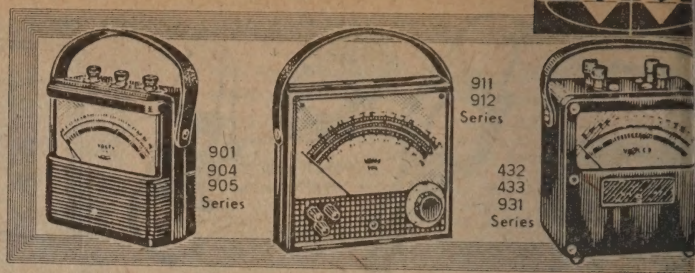
986-8458 ..... 2.00

MODEL 9992 50-mV SHUNT

Converts Model 2931 DC Millivoltmeter into DC amplifier with ranges as shown. Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Range—Amps DC	EACH
986-8914	41214	0-25	15.00
986-8918	41218	0-50	15.00
986-8923	41223	0-100	16.50

Weston Instruments for Plant or Lab



911 SERIES

• Mirrored Scale • Self-Shielded

DC VOLTMETER. Converts to panel or switchboard mounting without adapters. Has: easy-to-read 7.2" mirrored scale with maximum natural brilliance; knife-edge pointer; self-shielded mechanism; spring-back jewels; sure-grip knob; metal-film resistors. Range: 0-1-3-10-30-100 V, ±1%; 0-300-1000 V, ±2%. Sensitivity, 20,000 ohms/volt. Supplied less leads. With panel-conversion hardware. 7½x6½x2⅜". Shpg. wt., 6 lbs.

986C7372 ..... 98.00

986C7370. DC Ammeter. Amps, 0-1-3-10; mA, 0-10-30-100-300. ±1%. Physically same as above 98.00

986C7371. DC Milliammeter. 0-0.1-0.3-1-3-10-30-100 mA. ±1%. Physically same as above. 98.00

912 SERIES

• Mirrored Scale • ±2% Accuracy

AC VOLTMETER. Matches 911 series DC meters above. Converts to panel or switchboard mounting without adapters. 7.2" mirror scale; shielded movement; metal film resistors; spring-back jewels. Ranges: 0-10-30-100-300 V, ±2%; 0-3 and 0-1000 V, ±3%. Sensitivity, 5000 ohms/volt. Size, 7½x6½x2⅜". Shpg. wt., 6 lbs.

986C7_76 ..... 112.00

986C7375. AC Ammeter. Similar to above. Ranges: 0-50-100-200-500 mA; 0-1-2-5 AC amps. Accuracy: ±2% full-scale in all ranges. Transformer-rectifier types for use at 60-4000 Hz sine wave 112.00

901 SERIES

• Industrial Class • High Shielding
• Accuracy ±¼% • 5½" Mirror Scale

DC AMMETER. For use where easy reading and high shielding are desired. Has 5½" calibrated, mirror scale with knife-edge pointer. Ranges: 0-2-5-20 amps, with 50 mV meter movement. ¼% accuracy. Permanent magnet moving coil design. Less leads. 7½x7¼x3⅝". Shpg. wt., 5¾ lbs.

986C1015 ..... 255.00

986C7026. DC Milliammeter. As above but with ranges 0-10-20-50-100-200-500-1000 mA. Max. res. 2.5 ohms 265.00

986C7040. DC Voltmeter. 0-3-15-30-75-150-300-750 V. 5000 ohms/V. Same case and features as above 281.00

904 SERIES

• Industrial Class • High Shielding
• Accuracy ±½% • 5½" Mirror Scale

AC VOLTMETER. Offers high shielding and sufficient accuracy for checking other meters. Movable iron-vane type. 0-3-7.5-15-30-75-150-300-750 V. Response: 50-125 Hz with ½% accuracy; 125-450 Hz with 1% accuracy. 5½" scale. 7½x7¼x3⅝". Less leads. Wt., 5¾ lbs.

986C7320 ..... 381.00

986C7303. AC Ammeter. 0-2-5-10-20-50-100-200 amps. ½% accuracy. Response: 50-450 Hz. Same as above 342.00

986C7302. AC Ammeter. As above but ranges 0-1-2-5-10-20-50 amps 332.00

905 SERIES

• Industrial Class • High Shielding
• Accuracy ±½% • 5½" Mirror Scale

AC-DC SINGLE-PHASE WATTMETER. AC coverage from 25-60 Hz. Dynamometer-type movement. Ranges: Volts; Nor. 200/100, Max. 300/150. Amps: Nor. 10/5, Max. 20/10. Watts: High range; 2/1 kW: Low Range; 1/0.5 kW. Less leads. 7½x7¼x3⅝". Shpg. wt., 5¾ lbs.

986-7419 ..... 327.00

LEATHER CARRYING CASE

TYPE 48532. Protect test equipment with this attractive leather case. For series 931, 432, 433 (except 986CT4094).

986-8975. Shpg. wt., 1 lb. 26.00

931 SERIES

• Accuracy ±½% • 4.04" Mirror Scale

MATCHED DC VOLTMETERS, AMMETERS, MILLIAMMETERS. All types are carefully matched portable instruments of very high accuracy for industrial DC testing . . . within ½ of 1%. Moderately priced and designed for the requirements of most industrial test situations. For highest readability all instruments have knife-edge pointers and long, 4.04" mirror scale to eliminate parallax reading error.

Movement is the self shielded permanent magnet moving coil type—unaffected by stray fields. Available in DC voltmeters, ammeters, milliammeters and microammeter. Less leads (takes any type). Size, 5½x5x3½". Av. shpg. wt., 4 lbs.

DC VOLTMETERS

Stock No.	Ranges DC Volts	Ohms/Volt	EACH
986C7594	0-150-300-750	5000	174.00
986C7590	0-3-15-150	5000	174.00
986C7589	0-7.5-30-75	5000	174.00

DC AMMETERS

Stock No.	Ranges DC Amps	EACH
986C7522	0-5-20-50	157.00
986C7515	0-1.5-3-15	157.00
986C7513	0-0.1-1-10	157.00

DC MILLIAMMETER

Stock No.	Ranges DC mA	EACH
986C7558	0-30-300-3000	153.00

433 SERIES

• Accuracy ±¾% • 4.04" Mirror Scal

MATCHED AC VOLTMETERS, AMMETERS, LIAMMETERS. Exceptionally accurate ins ments for industrial testing. Movable v type mechanism offers precision reading moderate cost. Knife edge pointer for curate readings and mirror scale to eli nate parallax. Binding post terminals acc any type of leads (not supplied). Size, 5 5x3¼". Av. shpg. wt., 4 lbs.

AC VOLTMETERS

Stock No.	Ranges AC Volts	Resp. Hz	EAC
986C4085	0-150-300-600	25-125	174.
986C4082	0-75-150	25-125	147.
986C4081	0-30-60	25-125	147.
986C4094	0-150-300-750	25-1000	174.

AC AMMETERS

Stock No.	Ranges Amps	Resp. Hz	EAC
986C4017	0-5-20-50	25-500	216.
986C4016	0-3-7.5-30	25-500	216.
986C4015	0-1.5-7.5-15	25-500	216.
986C4012	0-1-5-10	25-500	216.
986C4008	0-5-10	25-500	157.
986C4025	0-1-2.5-5	25-1000	223.

AC MILLIAMMETERS

Stock No.	Ranges AC mA	Response Hz	EAC
986C4061	0-250-500	25-1000	163.

432 SERIES—DC OR SINGLE-PHASE AC WATTMETERS

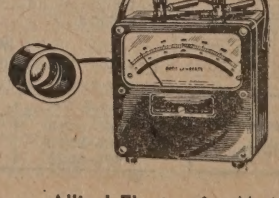
• Accuracy ±½% • 4.04" Mirror Scale • Electrodynamometer Type

For measuring DC or AC wattage. AC coverage from 25 to 125 Hz with power factors above 50%. Each unit has two ranges selected by binding posts and each range may be doubled. Power consumption: potential circuit @ 115 V, 60 Hz—watts, 1.2 volt-amperes. Current circuit 5 amps, 60 Hz—0.65 watt, 0.68 vo ampere. *High range/low range. 3¼x 5¼". Av. shpg. wt., 4½ lbs.

Stock No.	Volts* Normal	Volts* Max.	Amperes* Normal	Amperes* Max.	Watts High Range	Watts Low Range	Scale Div.	EAC
986C3887	150/75	200/100	1/.5	1.5/.75	0-75-150	0-37.5-75	75	296.0
986C3888	200/100	260/130	5/2.5	7.5/3.75	0-500-1000	0-250-500	100	296.0
986C3890	300/150	400/200	5/2.5	7.5/3.75	0-750-1500	0-375-750	75	296.0
986C3891	Same as 51 E 5386 T, for 25-1000 Hz Coverage							321.0
	300/150	400/200	10/5	15/7.5	0-1.5-3.0kW	0-0.75-1.5kW	75	296.0

LOW POWER FACTOR WATTMETER

986-3930	.....	300/150	.....	5/2.5	300/150	150/75	.....	341.0



MODEL 759 FOOT-LAMBERT METER

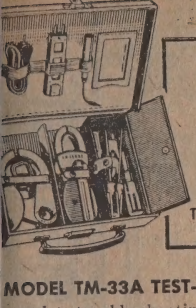
Meets JETEC engineering requirements. For resear or standard reference. "Viscor" filtered high outp cell with sensitive microammeter unit for highe accuracy. Tubular baffle restricts oblique light—provid basic range of 0 to 60 ft.-lamberts. Removable mul plier disc for second range of 0 to 300. Standard lam used for calibration. Meters standardized at color te perature of 6754° K by calibrated filter. Separat hooded light target. Multiplier disc; calibration curv Unit, 7⅝x10¼x10¾"; light target, 3⅜" dia.

986-6107. Shpg. wt. 5 lbs. 530.0

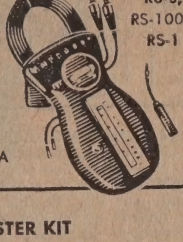
Allied Electronics Maintains a Complete Stock of Test Instrumen

Amprobe Testers

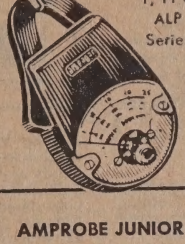
SNAP-AROUND AC VOLTAGE/CURRENT TESTERS



TM33A Kit

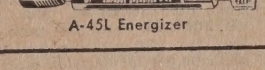


RS-3, RS-1000 RS-1

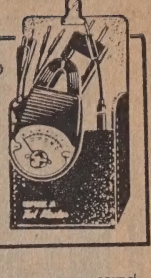


Y, YT and ALP Series

A-50-1 Deca-Tran



A-45L Energizer



TM-YO

MODEL TM-33A TEST-MASTER KIT

complete trouble-shooting and test kit for ctrical maintenance. Consists of Amobe RS-3 AC Voltmeter-Ammeter-Ohmeter with 3 ranges to 600 volts, 5 ranges 300 amps and 25-ohm (midscale) range. 50-1 Deca-Tran to multiply amps ranges X; and A-45L Energizer to increase curnt sensitivity; VLK-311 Extendo Leads. rtable case with snap-lock and space for all tools. 11¾x8x3". Wt., 3 lbs.

5-4333 ..... 125.30

ROTARY-SCALE TESTERS

otary-scale testers provide greater acracy—only one scale, appropriate to the nge selected, shows behind magnified uneakable window. Pointer-lock freezes adings; measure in dark, read in light.

ODEL RS-3. Insulated jaws clamp around nductor (up to 1 1/16" dia.) for current. est leads plug-in for voltage and resistance ecks. Reads 0-150-300-600 V, AC; 0-6-15-100-300 amps. AC; 25 ohms mid-scale. ccurate ±3%, full scale. With portable se, leads. 7 3/32x2 5/8x1 11/32". Wt., 2 lbs.

15-3003 ..... 70.42

ODEL RS-1000. As RS-3, but reads 0-15-100-300-1000 amps. AC. 2" dia. cond.

15-3010. Wt., 2 lbs. 93.83

ODEL RS-1. Reads 0-6-15-40-100 amps; C; 0-150-600 V, AC. No resistance range.

15-3001. Wt., 2 lbs. 55.12

ODEL VLK-311 EXTENDO LEAD KIT. (Not lus.) Simplifies use of RS-1, RS-3.

15-4611. Wt., 12 oz. 5.00

AMPROBE JUNIOR

Snap-around testers measure voltage, amperage. For conductors to ½" in dia. Measure amps shown and AC volts, 0-125-250 except *0-150-600; YT Models 0-150 and 0-300. ALP series has conductor tracer, 10 station markers, two station holders, voltage and ground leads, fused battery attachment, portable case. Y series with leads, less case. Shpg. wt., 1 lb.

Stock No.	Model	Amps	EACH
715-4825	Y25	0-25	30.40
715-4875	Y550*	0-50	30.40
715-4865	Y500*	0-100	30.40
715-5025	YT1025	0-10	
		0-25	36.18
715-5050	YT25100	0-25	
		0-100	36.18
715-0570	ALP550*	0-50	53.47

715-2300. Case for Y Series 4.12

AMPROBE JR. TEST MASTER KITS

Consists of a YO Amprobe Jr., A-45L Energizer, and a specially designed rugged carrying case. Measure voltage, current, and resistance instantly and accurately on calibrated scale (not just an indication). The Energizer increases the versatility of the instrument by increasing the sensitivity 5 or 10 times for precise readings on fractional horsepower motors and appliances; permits direct readings at any convenience outlet. Voltage range, 0-150/600. Current range: 0-25, 0-50 or 0-100 as indicated below. Also measures resistance. Ohmmeter range: 25 ohms midscale. 4¾x 2½x1⅜". Supplied with battery attachment and test leads. Shpg. wt., 1½ lbs.

Stock No.	Model	Amps	EACH
715-4525	TM-YO-525	0-2.5-5-25	49.23
715-4550	TM-YO-550	0-5-10-50	49.23
715-4500	TM-YO-500	0-10-100	49.23

TYPE VLK355 EXTENDO-LEAD KIT FOR JUNIOR MODELS (Not Illus.)

Simplifies taking voltage readings. One lead attaches to jaw with adapter, other reaches to other test point. Shpg. wt., 12 oz.

715-4655 ..... 5.00

AMPROBE RANGE-EXTENDING ACCESSORIES

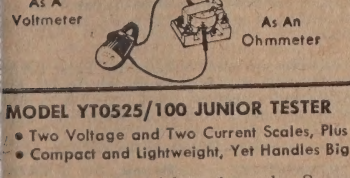
MODEL A-50-1 DECA-TRAN. Use with any model Amprobe to extend amperage ranges 10 times—up to 1200 amps. Includes case and 2' cord for remote reading. 1 lb.

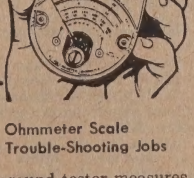
715-0550 ..... 41.00

MODEL A-45L ENERGIZER. Increases sensitivity of most Amprobes by 5 or 10 times. Permits current readings on permanently wired low-current equipment. 5 oz.

715-0500 ..... 9.25

PORTABLE AC VOLTAGE CURRENT TESTERS AND TEST-MASTER KITS





MODEL YT0525/100 JUNIOR TESTER

- Two Voltage and Two Current Scales, Plus Ohmmeter Scale
- Compact and Lightweight, Yet Handles Big Trouble-Shooting Jobs

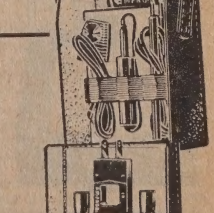
atest Junior Model from Amprobe. Snap-around tester measures oltage, amperes, and ohms. Compact, lightweight model is a andy five range instrument that fits in a pocket. Features two oltage and two current scales, plus ohmmeter scale for testing a oad range of electrical equipment. Accurate, one hand operation nds guesswork. Perfect as a first test instrument or as a spare unit. Measures 0-150 and 0-600 volts AC; 0-25 and 0-100 amps AC; 25 hm midscale ohmmeter. Model YT525/100 without ohmmeter cale. Supplied with set of voltage test leads. Accuracy, ±3% full cale. Weighs less than one pound. Carrying case sold below. Compatible with all Amprobe accessories. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Range Volts (AC)	Range Amps (AC)	Ohms	EACH
715-5095	YTO525/100	0-150/600	0-25/100	25	42.18
715-5015	YT525/100	0-150/600	0-25/100	Less Ohmmeter	36.18

715-1000. Model B Carrying Case 5.83

TEST-MASTER SNAP-AROUND VOLT-AMP-OHMMETER KIT

- Rotary Scale Reveals Only One Range At a Time—Eliminates Guesswork
- Convenient Two-Hand Operation
- Everything at Your Fingertips for Easy Trouble-Shooting



MODEL TM-63. Versatile test kit is a must for electrical trouble-shooting. Includes the RS-3 Rotary-Scale Snap-Around Volt-Amp-Ohmmeter. Insulated jaws clamp around conductor (up to 1 1/16" dia.) for current; test leads plug in for voltage and resistance tests. Ranges: 0-150/300/600 VAC; 0-6/15/40/100/300 amps AC; 25 ohms mid-scale. ±3% accuracy, full scale. Pointer lock. With VLK-311 "Extendo-Leads" that eliminate the need for a "third hand"; plus A-45L Energizer for increasing the sensitivity of the RS-3 five or ten times. Permits current readings on permanently wired low current equipment. Compact "A" Case has hinged cover, snap lock, carrying handle. 12x4¼x3". 3 lbs.

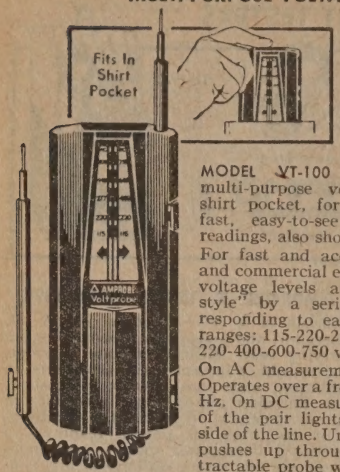
715-4363 ..... 84.54

MODEL TM-60 TEST-MASTER KIT. Adds versatility to RS-1 or RS-3 (not included). Includes A-45L Energizer that extends sensitivity five or ten times; VLK-311 "Extendo-Leads" for two-hand operation; compact "A" case with hinged cover for easy access.

715-4360. Shpg. wt., 2 lbs. 20.40

Amprobe Test Meters

MULTI-PURPOSE VOLTAGE TESTER



- 24/48 VAC Indication
- Indicates Correct DC Polarity
- Both Sliding and Retractable Probes
- Can Measure Points Over 3 Feet Apart

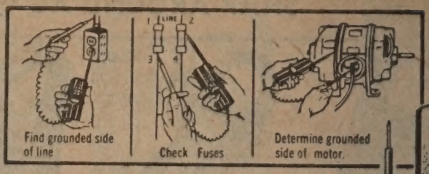
MODEL VT-100 VOLTPROBE. Compact, multi-purpose voltage tester fits in a shirt pocket, for use anywhere. Provides fast, easy-to-see AC and DC voltage readings, also shows DC polarity.

For fast and accurate testing residential and commercial electrical circuits. Nominal voltage levels are shown "thermometer style" by a series of two windows corresponding to each voltage level. Voltage ranges: 115-220-227-440-550 volts AC; 115-220-400-600-750 volts DC.

On AC measurements, both windows light. Operates over a frequency range of 25 to 800 Hz. On DC measurements only one window of the pair lights, indicating the positive side of the line. Unit has a sliding probe that pushes up through the body, and a retractable probe with a 3-ft. coil cord. Permits two-hand operation; unit can be held in the hand while testing, for easy reading. Weighs only 5 oz. High-impact case takes plenty of rough use. Overall size only 6x2¼x¾" with probes retracted. Shpg. wt., 8 oz.

715-4670 ..... 11.18

AC VOLTAGE TESTER



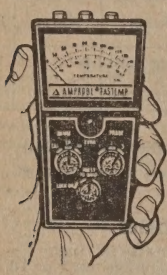
MODEL VT-124 VOLTPROBE. Lightweight, space-saving low-AC voltage tester is extra-handy and so convenient that you can conduct tests while holding the entire unit in your hands. Like the VT-100, this model is compact and affords pocket-portability to allow use everywhere—anytime.

Checks AC circuits in climate control equipment, switching systems, electric garage door operators, industrial equipment controls. Also checks fuses and determines the grounded side of lines and motors. Retractable probe prevents tool-tangling "spaghetti"; measures points 3 feet apart.

Take easy, accurate voltage checks on the unique "thermometer style" illuminated readout bar even in the dark. Voltage levels shown: 24-48-115-220-227-440-450 AC. Operates over a frequency range of 25 to 800 Hz. Overall size w probes retracted is 6x2¼x¾". Shpg. wt. 8 oz.

715-4675 17

FASTEMP DUAL RANGE INDUSTRIAL THERMOMETERS

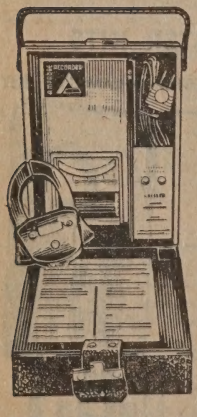


MODELS T-150 AND T-150C. Get virtually simultaneous temperature readings from up to three locations simply by turning the selector switch on these electronic thermometers. Activate any one of the probes instantly. Zero in on hot and cold spots in seconds . . . a real boon to air-conditioning servicemen. Compare inlet and outlet temps. of cooling and heating units, set refrigerator and freezer thermostats, measure heat-transfer equipment, check ambient temps. accurately to within ±2° F, ±1° C.; use for bearings in rotating equipment, non-corrosive plating baths, and heating plates. Model T-150 measures 2 Fahrenheit ranges, from −50° F to +50° F and from +40° F to +150° F. Model T-150C has 2 Centrigrade ranges, from −45° C to +10° C and +6° C to +65° C. Range over permits monitoring of changing temp. without quent range switching. Compact unit fits comforta in the hand and weighs only 10 oz. "Press-to-re button extends battery life; also locks in for con uous readings. Outfit includes universal probe. Or special surface and free-air thermistor sensors, "A batts., carrying case below.

715-4001. Model T-150. Shpg. wt. 14 oz. 52
715-4002. Model T-150C. Shpg. wt. 14 oz. 52
715-2811. Immersion Probe (RBT-11). Wt. 7 oz. .. 10
715-2813. Air Probe (RBT-13). Wt. 7 oz. 10
715-1100. Carrying Case (FTC). Wt. 14 oz. 11

See Page 421 For "AA" Batteries.

CHART RECORDERS FOR PERMANENT, ACCURATE RECORDS



DUAL SCALE RECORDER-INDICATORS

Can be used as standard indicating voltmeter, indicating ammeter, recording voltmeter or recording ammeter. Provides visual, accurate, permanent and objective record. Simple to operate and maintain. Paper-loading is especially easy with no rollers or drums to thread. Pressure-sensitive paper takes inkless stylus for clean hands, smudgeless operation. Can be used to monitor line-voltage, balance circuits on 24-hour basis, check motor loading, machine cycling or operating time.

Chart speed of 12 inches per hour for 30 hours on one roll of paper. Chart size: 2½" wide x 30' long. Chart speed of 1 inch per hour available on Special Order. Accuracy, ±3% full scale, except expanded scales; ±1% (or one division with 60 Hz sine wave input). Meter sensitivity, 260 μA with 375 ohms resistance. Requires 115 volts, 60 Hz AC. With snap-around current transducer, portable case. 7x 5 7/16x3 5/8". Shpg. wt., 4 lbs.

Stock No.	Mfr's Type	Range (AC) Volts	Range (AC) Amps	EACH
715-2581	LAVA81	95-130 190-260	0-10-50-250-500	193.95
715-2582	LAVA82	95-130, 190-260	0-5-25-100-250	188.05
715-2583	LAVA83	95-130 190-260 380-520	0-10-50-250 500	212.77
715-2584	LAVA84	95-130 190-160 380-520	0-5-25-100-250	206.89

CHART RECORDERS

- Inkless Stylus for Smudge-Free Impressions
- Up to 30 Hours Recording Per Roll of Paper
- Provides One Impression Every 5 Seconds

Provides permanent records of any variable than can be convert into an electrical signal. Records voltage, current, temperatu flow, pressure and other conditions. Uses pressure-sensitive pa marked with an inkless stylus. This means smudgeless charts a clean hands for the operator. One roll of paper runs for 30 full ho at a chart speed of 12 inches per hour. Easy drop-in paper loadi Gives highly accurate recording of ±3% on full scale. Provides o impression every 5 seconds.

Type LAV8600 has sensitivity of 1380 ohms/volt. Type LAA Meter includes clamp-on transducer. For 115 volts, 60 Hz AC. Si 7x5 7/16x2 1/8". Each model includes portable case. Uses 2½" x 30- long paper charts (order Strip Charts from table below). Av. shp wt., 4 lbs.

Stock No.	Mfr's Type	Description	Range	EAC
715-2550	LAV8600	Voltmeter	0-150-300-600VAC	135.1
715-2000	LAA81	Ammeter	0-10-50-250-500 Amps AC	142.1

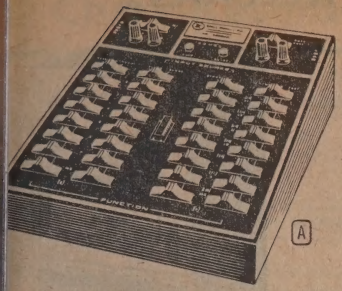
STRIP CHARTS FOR CHART RECORDERS

Perforated and printed in one color. Individually boxed rol chart size, 2½" wide x 30' long. Marked volts or amps appropria to recorder indicated. Package of six rolls.

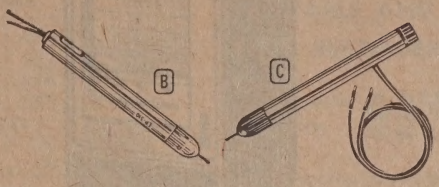
Stock No.	Mfr's Type	For Use with These Recorders	Six Rol
715-5565	835X3A	LAVA81, 82, 83, 84	12.0
715-5530	830AV600	LAV8600	12.0
715-5575	850A	LAA81; LAVA81, 82, 83, 84	12.0

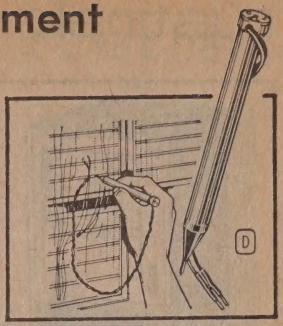
Allied Electronics Has the World's Largest Stock of Test Instrumen

AEL and Kurz-Kasch Test Equipment



KURZ-KASCH





MODEL IC590 TESTER

Battery-powered tester for static and dynamic logic levels in a range of 5 and -volt families (TTL and DTL). For all 14 d 16 pin dual in-line devices. Adapts to flatpacks. Simulates operating condi-ns. Color-coded readout for static logic t to each pin position; white for logic ", red for logic "1". For all industrial es. Ideal for teaching truth table logic lationships. Size, 13½x10x4".
8-1650. Shpg. wt. 4 lbs.....169.95

SPECIFICATIONS

ernal Power Requirements: operates on VDC (uses 6 "C" cell batteries). **Voltage:** r all 5-volt logic systems from 4.75 to VC. **gic Level Response:** 0-1 VDC—logic "0" adout color-coded white; 1-2.2 VDC—no adout; 2.2 VDC-Vc—logic "1" readout lor-coded red. **Pulse Detection Response:** w range, 2 pps; high range, 20k pps (or sh-button single pulse generation). **Input d Output Terminations:** 5-way binding sts. **External Loading:** may be applied to y IC under test.

MODEL LP-510, 520 AND 530 PROBES

B All probes feature input overload protection +50 VDC continuous, −20 VDC intermittent. All probes compatible with DTL, TTL, RTL and similar families, featuring an input impedance of greater than 150,000 ohms for logic level "1".

Model LP-510 logic level reponse: 0-1 VDC, logic "0" readout white; 1-2.2 VDC, no readout; 2.2-Vc, logic "1" readout red; infinity, no readout.

Model LP-520 logic level response: 0-1 VDC, logic "0" readout white; 1-2.2 VDC, no readout; 2.2 VDC-Vc, logic "1" readout red; infinity, no readout.

Model LP-530 logic level response: 0-15 VDC, logic "0" readout white; 1.5-10 VDC, no readout; 10 VDC-Vc, logic "1" readout red; infinity, no readout (as in case of missing pin or disconnected lead). All units have 26¾" leads, pin-type terminals. Size, 6" long, 9/16" diameter.
838-2250. Model LP-510. Wt. 1 lb....44.95
838-2255. Model LP-520. Wt. 1 lb....69.95
838-2260. Model LP-530. Wt. 1 lb....44.95

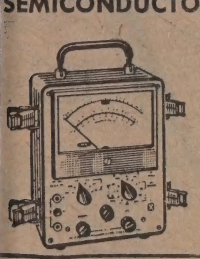
MODEL LG-580 DELUXE TEST PROBE

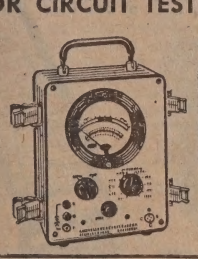
C Features switch-selected 10 Hz, 100 Hz, 1 kHz and 10 kHz signals, or single pulse generator. Takes power from equipment under test (4.5-6.5 VDC). Tests all logic systems from 4.75 VDC-Vc. Compatible with DTL, TTL, RTL and similar families. Polarity protected. Output: greater than 2.5 V at 600 ohms. Frequency stability better than 5% over a 4.5-6.5 VDC variance. Size, 6½x3/16" dia. 26¾" dual leads.
838-2270. Shpg. wt. 1 lb.....99.95

MODEL LP-500 LOGIC PROBE

D Checks all logic system voltage levels from 3.75 to 6.5 VDC (compatible with DTL, TTL and similar families). Input impedance greater than 150k for logic "1" level. Logic Level Response: 0-1 VDC, logic "0" window illumination; 1-2 VDC, no illumination; 2-6.5 VDC, logic "1" window illumination; Infinity, no illumination. 5¼" long, 3/16" dia. 26¾" leads. Shpg. wt. ½ lb.
838-2245.....39.90

SEMICONDUCTOR CIRCUIT TESTERS





Model 259C Model 245M

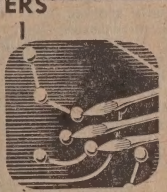
MODEL 259C LIGHTWEIGHT PORTABLE TESTER

- Tests Transistors, Diodes, FET's
- Automatic Beta Calibration

n-circuit semiconductor tester designed o fill a requirement for testing semi-conuctors in-circuit with simplicity and comlete safety. Measures both low- and high-ower transistors either in or out-of-circuit or 1000-Hz Beta (h_{fe}) within a range of 1 to 000, and transconductance (Gm) of Field ffect Transistors to 10,000 μmhos.

he 259C will also measure the resistance ppearing between the emitter and base, ollector and base, and collector and emit-er electrodes of transistors and F.E.T.'s, as ell as measuring the reverse leakage of iodes, rectifiers and F.E.T.'s either in or ut-of-circuit. Measurements are easily read n a 6" taut-band meter.

he 259C Tester includes an Automatic eta Calibration Circuit, which automatially sets the collector current of the transis-or under test at 1 milliamp. Small, light-eight, ruggedly built tester is battery op-rated (batteries included). Size: 7½x8½x 0". Supplied with test leads. Optional one-and probe, next column. Shpg. wt., 10 lbs.
29-0916.....420.00



MODEL 242 PROBE

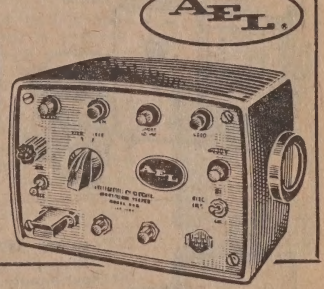
- Makes Testing Much Easier
- Three Adjustable Contacts
- One Hand Operation

Makes one-hand testing possible. Features three contacts, quickly adjustable to exact contact configuration. For Model 240, right. 1 lb.
729-0909.....52.70

MODEL 245M TESTER

Extremely versatile transistor and diode tester—provides in-circuit or out-of-circuit tests. Simplified operation with only 3 controls: PNP/NPN switch, function switch, and Beta calibration adjust. The wrong setting of the PNP/NPN switch will be indicated by a reverse meter reading when setting the calibration adjust for measuring Beta. Can't damage semiconductor under test. Measures high and low power transistors. in- or out-of-circuit, for 1000-cycle Beta within a range of 1 to 1000. Also measures resistance across emitter-to-base, collector-to-base, collector-to-emitter. Measures Beta and I_{CBO} out-of-circuit, as well as reverse leakage of diodes and rectifiers. High-impact plastic case, cover with compartment for probe storage. 4½" taut-band meter. Uses 6 type C batteries. Size, 10x8x 6½". Shpg. wt., 5 lbs.
729-0913.....291.00

729-0914. Model 246 In-Circuit Probe. (Not illus.) 3 contacts permit using Model 245M and 259C Semiconductor Testers to check transistors with one-hand.....52.70



MODEL 240 AUTOMATIC CIRCUIT TESTER

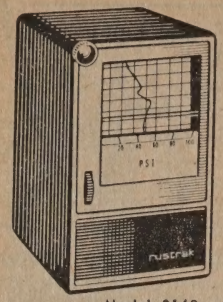
- Makes Tests In or Out of Circuit
- Sets Test Voltages Automatically

In-circuit semiconductor tester utilizes a revolutionary principle in transistor test equipment which permits accurate, automatic transistor testing. The test set automatically applies the proper voltages to the appropriate leads after determining and adjusting for the correct voltages for silicon or germanium transistor types. Will not damage or burn out components.

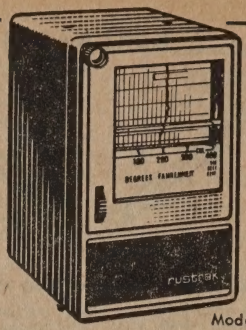
Checks transistors out-of-circuit, or in-circuit with shunts as low as 250 ohms (germanium) or 470 ohms (silicon), base to emitter. Absolutely no knobs to adjust, no potentiometers to turn and no calibration to make. Results immediately indicated by go, no-go and fault indicating lights. Accurately checks for and indicates gain, shorts and opens in your transistors. Ideal for production-line uses.

Test virtually every type of transistor including power, switching, small signal, junction, alloy, point contact and military types. Size, 7¾x5½x6". For 110-120 volt. 60 Hz AC. Shpg. wt., 18 lbs.
729-0915.....600.00

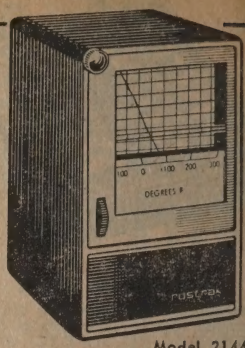
rustrak Miniature Chart Recorders



Model 2162



Model 2122



Model 2144

PRESSURE RECORDER

MODEL 2162. Single-channel recorder designed to provide accurate continuous monitoring of gas and liquid pressures. Utilizes C-type Bourdon tube made from seamless Grade A phosphor bronze. Available with ranges other than listed below, or zero suppression up to 50% on special order. Accuracy, ±2%. Connector: ⅛" male thread, NPT. Adapter: ⅛" to ¼" male, NPT standard. Response time: 0.5 seconds. Overall size, 5⅜x3⅝x4⅛". For 115-volt, 60 Hz. Shpg. wt. 5 lbs.

908-0610. 0-15 psi.....110.00
908-0611. 0-50 psi.....110.00
908-0612. 0-100 psi.....110.00
908-0614. 0-300 ps.....110.00

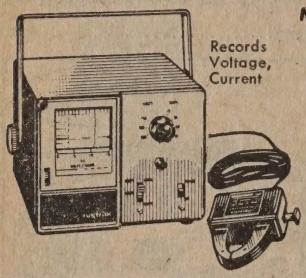
RECORDING PYROMETER

MODEL 2122. Temperature recording system with sensors. Four ranges: 0-400°F and 0-1200°F with Type J (I/C) thermocouple, 0-800°F and 0-2400°F with Type K (C/A) thermocouple. Taut-band galvanometer assures accuracy to 2% of span. Cold-junction compensation (+60 to +125°F). Quick and easy calibration to any thermocouple resistance from 0 to 23 ohms. Maximum writing speed: 1 strike per second. Maximum chart speed: 24 inches per hour. Standard motor operates at 2 rpm. Has chart access window. **Specify °F or °C calibration in ranges above.** 5⅝x3⅝x5⅞". 115 or 220 volts, 50-60 Hz, 12 or 24 VDC.
908-0508. Shpg. wt. 7 lbs.....180.00

TEMPERATURE RECORDERS

MODEL 2144. Self-contained temperature corder utilizing a nickel wire sensor accurate, high resolution recordings fr −100°F to +600°F. No reference point quired, no cold junction compensation monitoring needed. Span: 100°F m 600°F max. Accuracy, +2.5% of sp ±0.5% full-scale. Supplied with probe 15-ft. extension cable. **Specify tempera span within range.** 5⅜x3⅜x5⅞". 105-V, 60 Hz. Shpg. wt., 7 lbs.

908T0568. 0 to 300° F.....195
908T0571. 0 to 500° F.....195
908T0442. Model 304 SST Tubular Pro For above. Shpg. wt., ½ lb.....40
908-0443. Surface Probe. 3 oz.....16



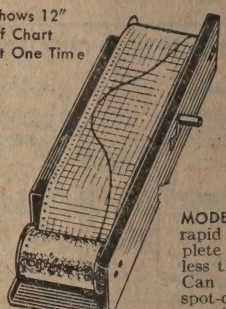
Records Voltage, Current

MODEL 2113 AC POWER RECORDER

Simultaneously records both current and voltage, with synchronous input switching for one solid and one broken trace. Available with 1-rpm motor only, for a writing speed of alternate strokes every 4 seconds. Two-point recording permits usable chart width of 2⅝" for each parameter. Voltage ranges: 0-150, 0-300, and 0-600 volts. Current ranges: 0-15, 0-30, 0-60, and 0-150 amperes. Recording accuracy, 3% on both current and voltage scales. Overall size, 7¼x 5⅝x7½". Clip leads for voltage and clamp-on transducer for current are attached. Includes chart access window and all features of the 200 Series chart recorders, listed on page 449. For 105-130 volts, 60 Hz AC. Shpg. wt., 8 lbs.
908T0496.....215.00

CHART VIEWER

Shows 12" of Chart at One Time

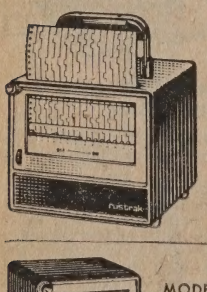


Easy to Set and Opera

Paper is Positioned i Seconds

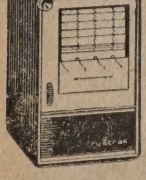
MODEL 168. Provi rapid review of co plete 63-foot roll less than a mint Can be used spot-checking a searching. Precis clutch mechani permits clockwise cranking for chart tra in either direction. Lateral snap-action crankshaft changes direction of chart tra for fast spot-viewing. Accepts strip-ch recording paper from 1⅞" to 3" wide, w ⅝" I.D. core. Maximum roll capacity, diameter. Special mandrels are availa for other core diameters. Weighted c struction with non-skid pads—will not m polished surfaces. Size, 14x3½x2⅝".
908-0304. Shpg. wt. 3½ lbs.....42.

16-CHANNEL EVENT RECORDER



MODEL 392-16. Simultaneously records up to 16 on/off events. Response time is 10 milliseconds; chart speeds up to 50 inches per minute. Offers thumbwheel chart-advance operated from front panel to facilitate precise setting of timing lines on chart paper or to quickly discharge paper when using tear-off mode of operation. Interchangeable gear box provides easy change of chart speed. Your choice installed at time of order—specify gear train for desired speed from table (below) under Model 292-4. Window slides down for access to chart for notes and identification without opening recorder. Requires 24 VDC at 70 mA per channel; use two Model 921 supplies (below). Rugged die-cast case, 6⅝x6½x 5⅝". Has 2-rpm chart-drive motor for 115 volts, 60 Hz AC. Uses 16E paper listed on page 449.
908-0492. Shpg. wt. 8 lbs.....351.00

FOUR-CHANNEL EVENT RECORDER



MODEL 292-4. Simultaneously records up to four on/off events. Response time is 10 milliseconds. Features access window that slides down for notes and identification without opening recorder. Has thumbwheel chart-advance operated from front panel to facilitate precise setting of timing lines on chart paper or to quickly discharge paper when using tear-off mode of operation. Interchangeable gear box provides easy change of chart speed. Your choice installed at time of order—specify gear train for desired speed from table (right). Requires 24 VDC at 70 mA per channel; use only one Model 921 supply (below). For 292-4 and 292-8. 3⅝x5⅝x4⅝". Has 2-rpm chart-drive motor for 115 volts, 60 Hz AC. Uses Style EE paper listed on page T-449.
908-0391. Shpg. wt. 5 lbs.....103.00
908-0397. Model 292-8. Above, but records 8 on/off events.143.00
908-0432. Model 921-8 Power Supply. Supplies 24 VDC from 115-volt, 60 Hz AC line for above recorders. Shpg. wt. 5 lbs.....20.00

MODEL 292 EVENT RECORDER CHART SPEED DATA* (2-rpm moto

Gear Train Assembly No.	¼	½	1	2	3	6	10	12	15	30
Chart Speed (Inches/hr.)	¼	½	1	2	3	6	10	12	15	30
A or B (Sec.)	720	360	180	90	60	30	18	15	12	6

*Based on 0.050" (1.27 mm) minimum event time (A) or minimum time between events (B). Choose gear train closest to A or B to suit your particular recording use.

MOTORS TO 100 rpm AVAILABLE ON SPECIAL ORDER ONLY; CONTACT ALLIED FOR PRICE AND DELIVERY INFORMATION.

Get prompt shipment at OEM prices. To assure the fastest, mos accurate service, please specify type number and stock number on each order.

SINGLE-CHANNEL CHART RECORDERS

DC MICROAMMETER RECORDERS

Stock No.	Model	RANGE	Ohms	EACH
908C0324	288	0-10 μA	5700	130.50
908C0326	288	0-50 μA	5400	114.50
908C0328	288	0-100 μA	4600	109.50

DC MILLIAMMETER RECORDERS

908C0333	288	0-1 mA	100	99.50
908C0332	288	.5-0-.5 mA	100	104.50

DC MILLIVOLTMETER RECORDERS

908C0347	288	0-10 mV	10	109.50
908C0348	288	0-25 mV	12.5	109.50
908C0350	288	0-100 mV	100	99.50

AC VOLTMETER RECORDERS

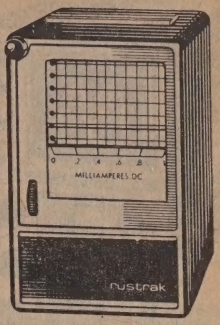
Stock No.	Model	RANGE	Ohms	EACH
908C0368	288R	0-150 V	.....	110.00
908C0401	293	70-135 V	.....	110.00
908C0411	293B	70-135/140-270/ and 280-540 V	.....	120.00
908C0406	293A	70-135/140-270 V	.....	115.00
908C0679	2186	105-135/210-250 V	.....	150.00
908C0682	2186A	105-125/210-250/ and 420-500 V	.....	160.00

AC AMMETER RECORDERS

Stock No.	Model	RANGE	Ohms	EACH
908-0497	2118	0-1 and 0-5 amps	.....	128.00
908-0468	2107	0-500 amps with clamp-on transducer	.....	145.00

LAB-GRADE PORTABLE AND PANEL RECORDERS

Basic Recorder Low As 99.50



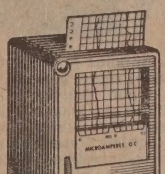
Miniature recorders feature continuous line recording through striker bar that transforms angular motion of DC galvanometer into rectilinear trace. Pressure-sensitive chart paper requires no ink or heated stylus. May be operated from sub-zero temperatures to 150° F, from sea level to 100,000 foot altitude. Housed in rugged aluminum case, finished with durable epoxy charcoal gray suede coating. Choice of single or dual-channel instruments (dual-channel listed below). Rustrak recorders have countless applications in the fields of oceanography, medicine, pollution control, meteorology, communications, manufacturing and laboratory tests.

Standard units include a synchronous motor that operates from 115 volts, 60 Hz. Chart speed is 1" per hour, with 31 day recording capability per chart roll. Other chart speeds available using interchangeable gear trains—see Accessory listings below. Accuracy is 2% of full scale (1% on Special Order) for DC units, 3% of full scale for AC. Response time, 0.8 to 1 second. Portable case, with panel mounting hardware furnished. Tear-off or reroll operation. Quick, easy chart review and rewind; chart advance thumbwheel. Sliding access window allows making notes on chart. Scale width: single-channel, 2 5/16"; dual-channel, 1". Instruction manual. 5 5/8x3 5/8x4 5/16". Wt., 5 lbs.

DUAL-CHANNEL RECORDERS, ACCESSORIES

DUAL-CHANNEL RECORDERS

ODEL 291. Same as single-channel recorders ove, but with two individual galvanomrs for simultaneous recording from sepae signal sources. Excellent for integrating nparison charts. Accuracy, 2% of full le. Scale width, 1" per channel. Cast minum case for rugged use. 5 lbs.

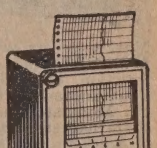


Stock No.	Ranges	Ohms	EACH
8C0386	0-1 mA DC; 0-1 mA DC	100	143.50
8C0383	0-100 μA DC; 0-100 μA DC	4600	158.50
8C0381	0-50 μA DC; 0-50 μA DC	5400	167.50

1-MICROAMP DC RECORDER

MODEL 2194. Precision-engineered solid-state chart recorder is ideal for use as temperature bridge readout, strain gauge readout, or as recorder accessory for a wide range of laboratory and process instruments. Has full-scale DC sensitivity of 1 μA and provides a range of 0 to 10 mV DC. Accurate to ±2% of full scale over 0° to +50° C operating temperature range. Max. source impedance is 100 ohms. Min. input impedance is 10,000 ohms. Scale width, 1" per channel. Single channel, scale width, 2 5/16" per channel. Response time is (to step-function) 1 second. Size, 5 5/8x3 5/8x5 7/8". Primary power, 100-135 V., 60 Hz AC. Not available for 6 VDC operation. Shpg. wt. 3½ lbs.

908-0694.....180.00



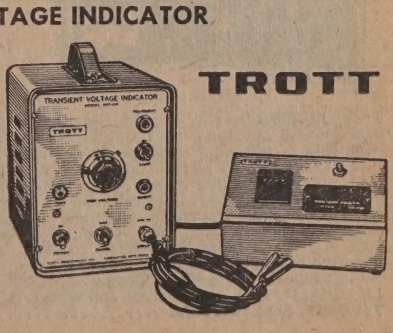
ACCESSORIES AND MOUNTING PANELS FOR RUSTRAK CHART RECORDERS

Stock No.	Description	EACH	Stock No.	Description	EACH
908C0695	Extra gear trains. In per hour; 1/4, 1/2, 1, 2, 3 6, 10, 12, 15, 30, 60. **Specify speed.**	5.00	908-0002	Style B, 75 divisions	2.25
			908-0003	Style C, 65 divisions	2.25
908C0677	2-unit rack mtg. panel	20.00	908-0004	Style D, 20 divisions (dual chan.)	2.25
908C0678	3-unit rack mtg. panel	20.00	908-0005	Style EE, (event recorder)	2.25
908C0679	4-unit rack mtg. panel	20.00	908-0006	Style F, 15 divisions (dual chan.)	2.25
908-0001	63' chart paper rolls, Style A 50 div.	2.25	908-0007	Style 16E, (event recorder)	3.75

TROTT TR741B SOLID-STATE TRANSIENT VOLTAGE INDICATOR

ansistorized, battery-operated device sensing and indicating the presence of ltage transients in electronic circuitry. tects transients as short as 0.5 μsec. djustable, direct-reading multi-turn conl for any trip amplitude—0 to 2000 lts. Additional 0-200 volt range offers panded scale for low voltage tests. Zener gulation and unijunction firing circuit rmit 0.25% repeatability. Once tripped, indicator lamp remains on until reset. Also provides 22½ volts for external counter trip. Accuracy is ±2% of full scale. Input impedance: 1 meg shunted by 5 pF. Rugged construction for long life and dependable operation. Gray hammertone portable case, 8x6½x8". With two 22½-volt "B" batteries, two 4-ft. test leads. Shpg. wt., 7 lbs.

959-8750.....281.25

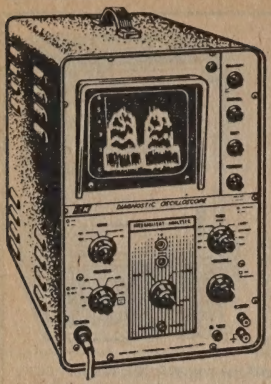


MODEL TR741EC1 COUNTER

or use with above voltage indicator. ounts transient pulses up to 9999. Resets dicator unit after each pulse. Up to 10 unts per second. Size, 4½x7¼x4½". Supplied complete with 22½-volt battery, plus an 18-inch cable and plug. Shpg. wt., 3 lbs.

959-8751.....110.80

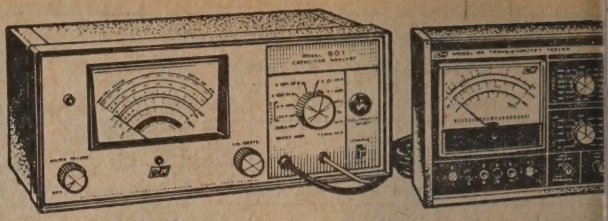
B&K Professional Test Instruments



MODEL 1450 PROFESSIONAL DIAGNOSTIC SCOPE

- Includes Vector-Scope
- Intermittent Analyzer for Easy Diagnosis
- Direct/Low Capacity Probe

Features Intermittent Analyzer with visual indicators and electronic memory, for fast isolation of intermittent stage. Automatic sync; double-scale calibrated screen reads peak-to-peak voltages directly—appropriate scale automatically lights as the vertical input sensitivity is selected. 7-step attenuator. Horizontal sweep, over 500 kHz (accurately shows 5 MHz signal). Vertical sensitivity, 25 mV rms/inch, 70 mV peak-to-peak inch; horizontal, 0.5 rms/inch. Z-axis input. Size, 13⅜x8¾x17¼". 117 VAC.
731U1450. Shpg. wt. 26 lbs.....299.95



MODEL 801 CAPACITOR ANALYST

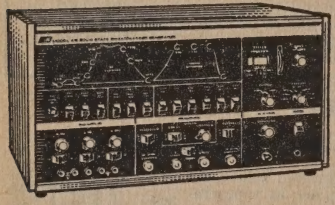
Designed for quick and accurate testing of foil, mica, ceramic and electrolytic capacitors. Tests electrolytics out-of-circuit for energy storage and effective capacitance, up to 2000 μF. Measures capacitance from 25 pF to 100 μF; values read on scale.

Tests in-circuit or out-of-circuit for leakage, with direct reading up to 50 megohms; shorts, 10 pF to 2000 μF (low as 25-ohm shunt); opens (low as 50-ohm shunt), down to 25 pF. Polarity protected circuitry guards against reverse voltages. Line isolated power supply; overload protected meter movement. Attractive gray metal case. Size, 5½x12¾x6¾". 117 VAC.
731U0801. Wt. 11 lbs.....119.95

MODEL 162 TRANSISTOR ANAL

Latest design DC transistor te tests both transistors and FE (Field Effect Transistors) in and of-circuit. Checks transistors f 1 mA to 1 ampere collector cur in increments of 10. Tests AC b Provides a constant 1½-volt colle voltage to transistor in test.

Extremely sensitive meter move assures accurate leakage tests. FE are tested by measuring the G_m of device from 0-50,000 micromhos. test position can also be used measure in-circuit impedance in presence of transistors. Also che dual gate FET's. Easy-to-read 3-s meter. Size, 7⅝x9½x4". 117 VA
731-0162. Shpg. wt. 5 lbs.....9

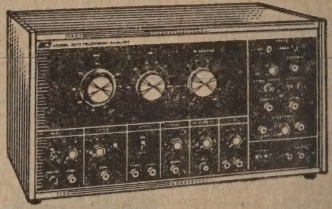


MODEL 415 MARKER GENERATOR

- 11 Crystal-Controlled Markers
- All Solid-State with Dual Gate FET's
- Marker Tilt for Easy Marker Identification

Marker generator features all-solid-state circuitry with dual gate MOS FET's plus 11 crystal-controlled markers that utilize post injection, one additional marker space. Markers may be used simultaneously as four sets of markers on video, RF 4, RF 10, and IF. Modulator marker for trap alignment. Built-in marker tilt shifts marker horizontally or vertically to permit easy identification of markers regardless of slope of the curve. External marker capability. May be aligned from antenna terminals. Pattern sweep and direction can be reversed by switches on the unit.

Also features built-in Zener reference, transistor regulator, and power supply for maximum stability with no drift. Overload protected over bias supplies minimize chance of burnout. Three complete bias supplies designed for both transistors and tubes. Has RF attenuator, RF output of 72 ohms, 300 ohms. 10.7 MHz provides continuous change of markers, 4.5 MHz for TV audio. 15 kHz filter. 9¾x18x12". Direct probe, demodulator probe, leads. AC.
731U0415. Shpg. wt. 26 lbs.....399.95

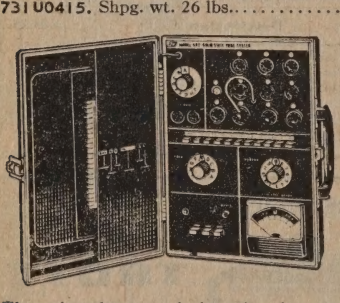


MODEL 1077B TV ANALYST

- Checks Every Stage TV Receivers
- Provides All Stand TV Test Signals
- Cuts Troubleshootin Time to Minimum

Pinpoint any TV trouble in minutes with this complete analy and signal generator. Combines a miniature TV transmitter wi circuit analyzer. Directly injects RF, IF, video or audio sig into any stage of black-and-white or color TV sets. You view re on set's screen—no external scope or waveform interpreta needed. Repair tough dogs, intermittents, and general troubles v this simplified technique. Injects horizontal and vertical sync, solid-state and vacuum tube sync and sweep checks.

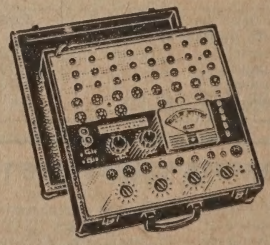
Outputs: 9 VHF channels, all UHF and video frequencies; 4.5 M with 1000 Hz audio for TV sound; sync, video, chroma (low Z transistor TV sets). Also has outputs for completely analyz sweep section (horizontal and vertical), output for checking h zontal output transformers and yokes. Generates IF signals of 20 MHz for testing IF amplifier stages. Checks for B+ boost and p vides high voltage indicator, high level keying pulse and lo calibrated bias supply. 9¾x18x12". For 105-125 VAC.
731U1077. Shpg. wt. 31 lbs.....389



607 DYNA-JET HIGH-SPEED TUBE TESTER

- Indicates Shorts for any Tube Being Tested
- Does Exclusive Grid Leakage and Gas Tests

The only tube tester in its price class that gives positive "shorts" indication in any tube being tested. Positively detects all shorts regardless of pin connections while it eliminates all false shorts. Provides ten lockout pushbuttons that can open any and all multiple-connected pins in any tube under test. Reset button clears all lockouts. Testing is fast and easy due to convenient shape-coded symbols that match controls to chart and a minimum number of settings, only three or four. Tests newest tube types plus all old types used in TV and radio. Also tests thyratrons, auto radio hybrids, imported hi-fi tubes and many industrials and specials. Solid-state. Sets up quickly and easily. "Computer styled" attache-type case, 13½x9½x4". With special chart and holder. AC.
731-0607. Shpg. wt. 8 lbs.....114.95



707 DYNA-JET DYNAMIC MUTUAL CONDUCTANCE TUBE TESTER

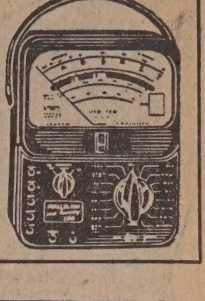
- Accurate, Fast, Easy to Use, Made for Long Life
- Tests Tubes Under Actual Operating Conditions
- Switch Section Gives Obsolescence Protection

Tube tester features multiple-socket plug-in-and-check secti plus obsolescence-proof switching section for accommodation of r tube types. Tests radio and black-and-white and color TV tub voltage regulator, thyratrons, auto-radio hybrids, European h and industrial tubes, nuvistors, novars, both types of 10-pin tub 12-pin compactrons. Checks each section of multi-section tu individually. Single button makes complete test for interelem shorts automatically. Adjustable grid emission, gas and gr cathode leakage are tested at sensitivity of over 100 megohms. L test predicts probable future failures. Large 4½" meter has "R place-?-Good" scale. Portable carrying case measures 16⅛x15 5⅞". For 105-125 volts, 50-60 Hz AC. Shpg. wt. 16 lbs.
731U0707.....199.

B&K Test Equipment for Fast, Accurate Tests

61-RANGE VOLT-OHM-MILLIAMMETER FOR SOLID-STATE CIRCUITS

- Extra-Low Resistance, Current, and Voltage Ranges for Testing Solid-State Equipment
- Reads AC and DC Volts to 6000
- 5" Mirrored, No-Parallax Scale
- Single-Knob Function Selector



MODEL 120. Tests solid-state circuits easily and accurately with the extra-low voltage and current ranges. Readily measures element-to-element voltage differentials of only a few tenths of a volt, typical in transistor circuits. Tests any of today's complex circuits, with its 61 ranges that start lower and go higher than most instruments of its size and type. Efficient single-knob function selector reduces time and work to speed up and improve the quality of your tests. Has mirrored, no-parallax scale, transit meter movement protection, DC polarity reversing switch. Accuracy, ±2% DC; ±3% AC. AC/DC volts: 0-1.2-3-12-60-300-600-1200-6000; extra-low range of 0.3 VDC (20,000 ohms/volt DC, 5000 AC). AC output volts to 600. DC current: 0-60-300 μA, 0-1.2-12-120-600 mA, 0-12 amps. Ohms: 0-200-2k-200k, 0-2-20 megs; 2 ohms center scale. 8 dB ranges: −20 to +77. 7x5¾x3⅛". With batteries, test leads, manual.

731-0120. Shpg. wt. 4 lbs.....64.95

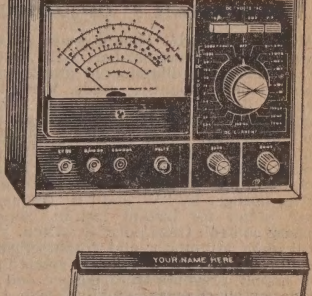
731-0125. Model 120M. Above, ½% multipliers for 1½% DC accuracy, 3½% AC. Wt. 4 lbs.....69.95

731-0070. TV-2C 30,000 VDC Probe. 2 lbs.....14.95

731-0023. LC-3 Carrying Case. Wt. 3 lbs.....8.95

SOLID-STATE VOLTAGE-REGULATED FET/VOM

- 4½" Meter With Convenient Zero-Center Scale
- Complementary Symmetry Circuit Protects FET's

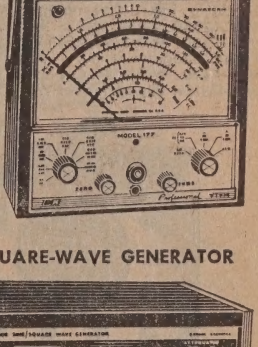


ODEL 176. Designed especially for the dio-TV specialist, but does any kind of ectronic testing with greater ease and acracy. Its outstanding reliability and stality makes it a deluxe instrument in every spect. Has many design features for longrm accuracy. Completely symmetrical rcuit permits identical calibration of plus nd minus voltages. Voltage regulation aintains constant voltage for life of batries. Has 8 DC voltage ranges with acracy of ±2% of full scale; 8 AC voltage nges with accuracy of ±3% of full scale ms and p-p voltages read on same scale); 7 resistance ranges with accuracy of 3° of scale arc; 6 DC current ranges with accuracy of ±2% of full scale; decibels, −10 to +66. Circuit is fused and diode protected against accidental overloads. Special complementary-symmetry circuit protects FET's from overvoltage transients and provides balanced temperature compensation. Big 4½" high-sensitivity meter. DC input impedance, 11 megs; AC, 10 megs. BNC connector. Shockproof carrying case with tilt handle mounted on back. Size, 7x9x3½". Comes complete with manual.

731-0176. Shpg. wt. 5 lbs.....99.95

PROFESSIONAL VACUUM-TUBE VOLTMETER

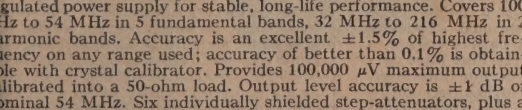
- Rugged Cycolac® single AC/Ohms/DC Probe
- Polarity Switch Eliminates Lead Switching



ODEL 177. Precision instrument with the urability to take rugged use. Helps you lve virtually any electronic testing prob-m. Ideal for transistor applications, ecking relay circuits, measuring voltage op across low resistances, as well as eneral laboratory, shop, service and experental work. Offers special convenience atures such as built-in battery eliminator at banishes replacement of ohmmeter attery. Ranges: DC Volts, 0-0.5-1.5-5-15-0-150-500-1500; AC Volts, (rms), 0-1.5-5-5-50-150-500-1500; AC Volts (p-p), 0-4-14-0-140-400-1400-4000 (AC response, ±1 dB, 40 Hz to 3 MHz; 600-ohm source, 5-volt range); Resistance, 0-1000-10k-100k ohms, 0-1-10-100-1000 megs (mid-scale: 10, 100, 1000, 10k, 100k ohms; 1, 10 megs). Input impedance, 11 megs (1 meg in probe). Accuracy: DC, ±3% of full scale; AC, ±5% of full scale. Easy-to-read meter with fully-protected 100-μA movement. Sturdy metal case with carrying handle for easy portability. 7⅛x7¼x3⅝". Cycolac single AC/ohms/DC test probe designed for hard usage on the service bench or in the field. Thoroughly professional unit! AC.

731-0177. Shpg. wt. 8 lbs.....89.95

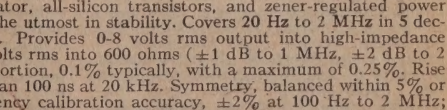
NEW! SOLID-STATE RF SIGNAL GENERATOR



ODEL E200D. Versatile new instrument for general TV, radio, and dustrial servicing. Features all-silicon-transistor design and zener-gulated power supply for stable, long-life performance. Covers 100 Hz to 54 MHz in 5 fundamental bands, 32 MHz to 216 MHz in 2 rmonic bands. Accuracy is an excellent ±1.5% of highest freuency on any range used; accuracy of better than 0.1% is obtainble with crystal calibrator. Provides 100,000 μV maximum output alibrated into a 50-ohm load. Output level accuracy is ±1 dB of ominal 54 MHz. Six individually shielded step-attenuators, plus a riable fine output-level control with calibrated meter, provide otal capability of −96 dB and a wide range of outputs with known gnal levels. Has 400-Hz internal modulation and an external modation sensitivity of 1-volt rms for 50% modulation. Accurate 100 Hz and 1 MHz crystal calibrator system; accuracy, ±0.05%. uilt-in detector, amplifier, and speaker system provided for calibraon function. 200-μA meter. Size, 12¾x7¼x8". AC.

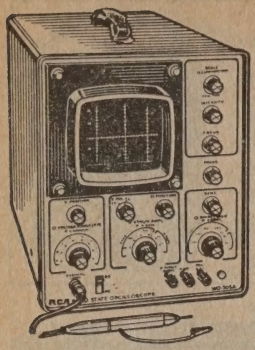
31-0200. Shpg. wt. 14 lbs.....159.95

NEW! SOLID-STATE SINE/SQUARE-WAVE GENERATOR



MODEL E310B. New version of a generator that has been popular with the electronic industry for years. Solid-state design includes FET oscillator, all-silicon transistors, and zener-regulated power supply for the utmost in stability. Covers 20 Hz to 2 MHz in 5 decade ranges. Provides 0-8 volts rms output into high-impedance load; 0-7 volts rms into 600 ohms (±1 dB to 1 MHz, ±2 dB to 2 MHz). Distortion, 0.1% typically, with a maximum of 0.25%. Rise time less than 100 ns at 20 kHz. Symmetry, balanced within 5% or less. Frequency calibration accuracy, ±2% at 100 Hz to 2 MHz; ±2%, or one Hz, below 100 Hz. Step attenuators have a total capability of −56 dB; accuracy ±5% into 600 ohms. Continuously variable output control adjusts output down to less than 0.25 mV in conjunction with step attenuators. Constant output from band-to-band. Fully shielded for no signal spillover to other equipment. Easy-to-read 5" dial with 12:1 gear-ratio drive for accurate frequency settings. 12¾x7¼x8". 3-wire cord. AC.

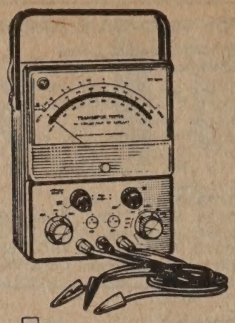
731-0310. Shpg. wt. 12 lbs.....119.95



A

A SOLID-STATE 5″ OSCILLOSCOPE

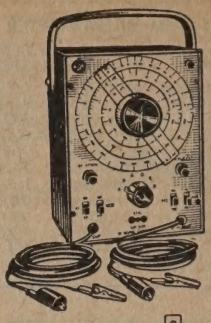
MODEL WO-505A. Highly sensitive wide-band scope offers flat-face CRT, return-trace blanking, illuminated graph screen, and camera mounting studs. Vertical response flat (±1 dB) from DC to 5 MHz, usable to 10 MHz. High vertical gain of 15 mV p-p/inch. Sweep frequency adjustable up to 1 MHz (in 6 ranges), permitting signals up to 10 MHz to be locked in. Synchronization is highly stable throughout sweep range. TV "V" and "H" frequencies are preset for instant lock-in. Separate phase control; trace polarity switch. Vertical input attenuator and graph screen are calibrated directly in volts. Regulated power supply prevents trace bounce and provides excellent overall stability. Size, 11⅜x 15½x9″. Complete with direct/low-capacitance probe and cable, alligator clips, clip insulator, instruction manual. AC.
901X2550. Shpg. wt. 25 lbs.....298.50
901-1360. WG-302A RF-IF-VF Signal Tracing Probe. Shpg. wt. 4 oz.....9.00
901-1470. WG-354A Capacitance-Type Voltage-Divider Slip-on Probe. Wt. 1 lb....11.00



B

B IN-CIRCUIT TRANSISTOR TESTER

MODEL WT-501A. Compact, lightweight, completely portable. Tests high and low-power transistors both in and out of circuit. Checks DC Beta from 1 to 1000, collector-to-base leakage (I_{CBO}) down to 2 μA, collector-to-emitter leakage (I_{CBO}) from 2 μA to 1 amp. Collector current adjusts from 20 μA to 1 amp (in 4 ranges) to allow testing most transistors at their rated current level. Special low-impedance circuit assures reliable in-circuit testing of transistor current gain. Front-panel NPN and PNP sockets for convenient matching in complementary symmetry applications. Tests relative front-to-back ratio of diodes at appropriate current levels. Three color-coded test-leads facilitate in-circuit testing. 100-μA movement. Size, 6⅞x5¼x3⅛″. With batteries, leads.
901-4501. Shpg. wt. 4 lbs.....66.75



C

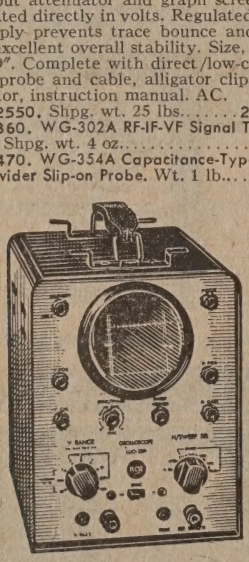
C SIGNAL GENERATOR WITH SWEE

MODEL WR-50B. Extremely well suited fo alignment and signal tracing of AM, FM hi-fi radio, TV, and CB receivers. Provide fundamental frequencies from 85 kHz to 4 MHz in six overlapping ranges, sweep out put at 455 kHz and 10.7 MHz, and 400-H audio output. The sweep output permit a continuous oscilloscope display of I bandpass characteristics. Vernier tunin for precise setting of output frequency Dial accuracy, ±2%. RF output can b modulated with internal 400-Hz signal o with external audio signal. Two-step RF attenuator switch plus variable attenuato control. Modulation level control. RF out put on all ranges, 0.05 volts rms minimum Built-in crystal calibrator with front-pane crystal socket and attenuator switch. 7¾x 5⅜x4¾″. With leads, instructions. AC.
901-4050. Shpg. wt. 10 lbs.....72.0

D

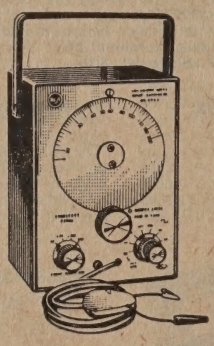
D CRYSTAL-CALIBRATED MARKER GENERATOR

MODEL WR-99A. Combines functions of multiple marker generator, heterodyne frequency meter, and crystal calibrator in one instrument. Continuously tunes 19 to 260 MHz in 8 expanded ranges. Built-in 4.5 MHz crystal, speaker. Triple markers Metal case, 13½x10x7″, carrying handle. AC
901U4099. Shpg. wt. 21 lbs.....256.5



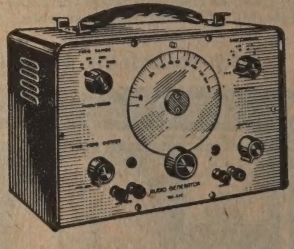
WIDEBAND 3″ OSCILLOSCOPE

MODEL WO-33A. Offers dual bandwidth and sensitivity. Has narrowband sensitivity of 0.1 volt p-p/inch (0.003 Vrms) at 20 Hz to 150 kHz (−3 dB) bandwidth. Wideband sensitivity of 0.3 volt p-p/inch (0.1 Vrms) at 5.5 Hz to 5.5 MHz (−3 dB) bandwidth. Sweep range: 15 Hz to 75 kHz with plus, minus, internal, external sync. Sync locks as high as 4.5 MHz. 160° adjustable-phase line sweep. Vertical input impedance: 90 pF and 1 meg direct, 50 pF and 1 meg at panel, 10 pF and 10 megs at low-cap position. 8¾x6½x10¼″. With direct low-capacity probe, instruction manual. AC.
901U2533. Shpg. wt. 16 lbs.....180.00
901-1450. WG-350A Demodulator Probe. Shpg. wt. 4 oz.....5.25
901-1350. WG-300B Direct/Low-Capacity Probe. Shpg. wt. 1 lb.....12.00
901-1280. WG-271A Adapter. Required when WG-300B is used with WO-33A. Shpg. wt. 4 oz.....2.50



SINE/SQUARE WAVE GENERATOR

MODEL WA-504A. Precisely designed for use in audio, high-fidelity, and general-electronics applications as well as in electronics training, demonstrations, and laboratory work. Generates sine/square waves from 20 Hz to 200 kHz in four ranges. Stable, solid-state circuit including MOS FET oscillator stage for exceptional frequency stability. Essentially flat output voltage—±1.5 dB, 30 Hz to 100 kHz. Sine wave output voltage, 10 volts rms or more into rated load. Distortion: 0.25% or less over entire audio frequency range. Has front panel switch-selection of sine or square wave output; 10-1 step attenuator with continuously adjustable output control. Easy-to-read single scale dial. Square wave output voltage: 10 volts p-p. Rise Time, less than 1.0 μsec. Tilt, less than 5.0%. Rugged metal case, 7¾x5⅜x4⅜″. AC.
901-1504. Shpg. wt. 4 lbs.....95.00



SINE/SQUARE WAVE GENERATOR

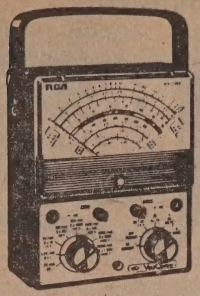
MODEL WA-44C. A precision laboratory in strument meeting today's rigid require ments for testing modern electronic equip ment. Provides low-distortion waves fo measuring frequency response, finding L-C combinations and impedance of loudspeak er enclosures, many other uses. Covers range of from 20 Hz to 200 kHz, making i also useful for testing supersonic equipment Accurately factory calibrated in four range of either sine or square waves. Produces highly stable signal with an amplitude vari ation of not more than ±1.5 dB for 30 H to 100 kHz. Total harmonic distortion is les than 0.5% for the entire audio frequenc range. Output is 8 volts rms maximum wit rated load. Square waves have less than 5% tilt. Has separate 60-Hz output for inter modulation distortion measurements. Sta ble bridged "T" oscillator with cathod follower outputs. 10:1 step attenuators plu continuously variable level control. Stee cabinet, 7x10¹¹⁄₁₆x6⅛″. AC.
901U1044. Shpg. wt. 12 lbs.....98.5

ALLIED ELECTRONICS CAN SUPPLY THE ENTIRE RCA TEST EQUIPMENT LINE

Quality Test Equipment

RCA

WV-500B VOLTOHMYST



- Burnout-Protected Meter
- Drift-Free Operation
- 11-Megohm DC Resistance
- Reads AC Volts (p-p and rms)
- 10-Millivolt DC Range

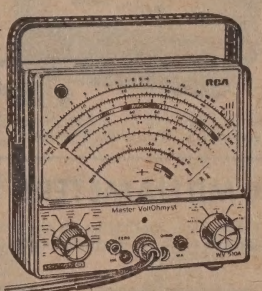
rsatile, battery-operated electronic tmeter has countless uses in audio, io, TV and industrial servicing and ting applications. Specially de- ned for stable, drift-free operation. itures dependable solid-state cir- t; sensitive burnout-protected me- ; 11 megohm input resistance on all DC input ranges. Reads AC ts (both p-p and rms); DC volts, DC current and resistance. millivolt DC range for accurate transistor work.

nges: DC volts, 0-.01-0.5-1.5-5-15-50-150-500-1500. AC volts ıs), 0-0.2-1.5-5-15-50-150-500-1500. AC volts (p-p), 0-0.5-14-42-)-420-1400-4200. DC current in eight ranges from .01 mA to 1.5 Seven overlapping resistance ranges from 0.2 ohms to 1000 meg- ns. AC frequency response (on 1.5 and 5 VAC ranges), ±1 dB, Hz to 3 MHz. Sensitive 100 μA meter movement, color-coded les. Accuracy for all voltage and current functions is ±3% of scale reading.

nt panel ohms and zero-adjust; single AC-ohms/DC test probe fast multiple measurements. Rugged case, 6⅞x5¼x3⅛", con- ient carrying handle. With probe, batteries. Shpg. wt., 3½ lbs.
1-4700.....88.00

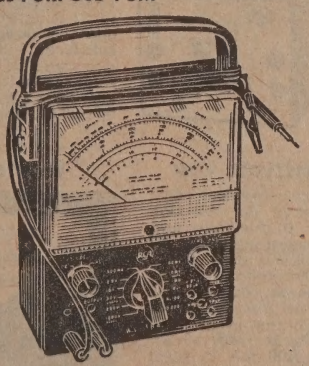
WV-510A MASTER VOLTOHMYST

tstanding quality in a voltmeter. cellent stability and linearity service, industrial and labora- y work. Battery or AC operation. o-color mirror scale. Measures voltage, 0.01-1500 volts, in 8 ges; AC voltage, 0.2-1500 volts; rect Current from 0.01 mA to 1.5 AC p-p voltage of complex wave- ms from 0.5 to 4200 volts; re- ance values from 0.2 ohm to 0 megohms. 7 overlapping ranges AC, resistance and current. curacy: ±3% of full scale read- . With WG-401A probe and ca- , alligator clip, current leads, in- uctions. 110-135 V, 50-60 Hz AC. x5¼x3⅛". Wt. 3½ lbs.
1-4710.....128.00



1-2411. WG-411A High-Voltage be to 50,000 VDC. 6 oz.....13.50
1-2436. WG-436A Multiplier istor. Wt. 4 oz.....3.75

WV-38A ALL-PURPOSE VOM



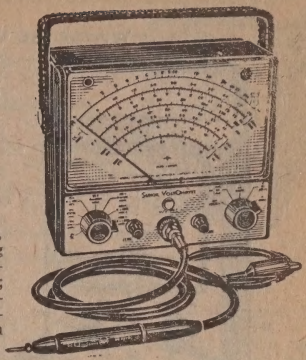
- ±3% DC Accuracy
- ±5% AC Accuracy
- 1-V and 250-mV Ranges
- Large 5¼" Meter Scale
- Polarity Reversal Switch

ghly accurate VOM fea- es 1-volt and 250 mV full- le DC ranges for transis- servicing; easy-to-read ¼" meter scale. Ranges: 0.25-1-2.5-10-50-250- 00-5000 VDC at 20,000 ms/volt. 0-2.5-10-50-250- 00-5000 VAC at 5000 ms/volt.

asts high DC accuracy of 3%; AC, ±5%. Wide AC quency response on 2.5-50 t ranges: ±½ dB, from Hz to 50 kHz. Has three resistance ranges from 0 to 20 megohms. DC current ranges: 0-50 μA, 0-1-10-100-500 mA, 0-10 amps. ads decibels from —20 to +50 in four ranges.

s DC blocking capacitor for measurements of AC output voltage; nt panel ohms adjust. DC polarity reversal switch for making ltiple measurements without changing leads. Rugged case, x5¼x3⅛". With leads. Shpg. wt., 5 lbs.
1-4538.....55.50
1-1270. WG-270A Case. Scuff proof. Shpg. wt., 1 lb.....5.25

MODEL WV-98C SENIOR VOLTOHMYST



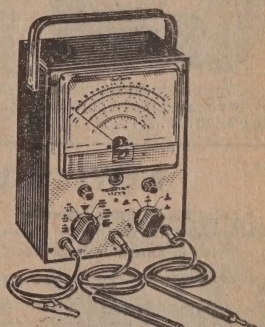
- Burn-Out Protection
- 200 μA Meter Movement
- 8 DC Voltage Ranges
- Deluxe Mirrored Scale
- Single AC-Ohms/DC Probe
- 11-Meg DC Input Resistance

Deluxe multi-function tester, ideal for all types of servicing in shop or lab. Features electronic burnout protection; rugged 200-μA meter movement; and 1% precision resistors for highest accuracy on all measurements.

6½" meter has mirrored scale, ±3% accuracy. Has seven voltage ranges for AC p-p and rms volts; eight ranges for DC volts. Seven resistance ranges. Reads AC rms and DC volts to 1500; AC p-p volts to 4200. Has 0.5 VDC scale for accurate transistor work. Reads resistance from 0.2 ohm to 1000 megs.

DC input resistance is 11 megohms for negligible circuit loading. AC input impedance from 830k ohms and 70 pF to 1.5 megs and 60 pF. Rugged die-cast aluminum case. 6½x7x3¾", convenient carrying handle. With probe, shielded cable. 110-130 V, 50-60 Hz AC. Shpg. wt., 8 lbs.
901-4598.....99.00

WV-77E VOLTOHMYST



- 11 Megohm Input Impedance
- 0-1500 Volts DC Range
- Electronically Protected Meter
- Easy-to-Read Color-Coded Scales
- Fuse-Protected Ohms Network

Top-value test instrument, ideal service aid in a wide range of applications for laboratory, service shop or hobby bench. Features: electronically protected meter movement; easy-to-read scales. 11-megohm input impedance on all DC ranges minimizes circuit loading.

Ranges: AC rms and DC volts: 0-1.5-5-15-50-150-500-1500; AC p-p volts, 0-4-14-40-140-400-1400-4000; resistance, 0-1000-10k-100k ohms; 0-1-10-100-1000 megohms. AC frequency response: ±5% from 40 Hz to 5 MHz on 1.5, 5 and 15 Vrms, and 4, 14, and 40 V peak-to-peak ranges. Accuracy: DC, ±3% of full scale; AC, ±5% of full scale.

Has individual scales for 1½-V rms and 4-V p-p. Rugged metal case, 7¾x5⅝x4¾". With ultra-slim probes and extra-flexible test-lead cables, plus detailed operating instructions. For 105-125 V, 50-60 Hz AC. Shpg. wt., 5 lbs.
901-4577.....63.00

ACCESSORIES FOR VTVM'S/VOM'S

901-1297. WG-297 HV Probe. For WV-77E and WV-38A. Extends DC range to 50,000 V. Shpg. wt., 1 lb.....13.50

901-1289. WG-289 HV Probe. For WV-98C. Extends DC range to 50,000 V. Shpg. wt., 1 lb.....13.50

901-1206. WG-206 Multiplier. Use with WG-289. 1090 meg mult. for VTVM's having to match 11-meg input. 2 oz...3.75

901-1210. WG-210 Multiplier. 900-megohms. Multiplies 5000 VDC range of 20k ohms/V. VOM by factor of 10. 2 oz...3.75

901-1211. WG-211 Multiplier. 495-meg. Multiplies 250-VDC range of 20k ohms/V by factor of 100. Wt., 2 oz.....3.75

901-1355. WG-301A Crystal Diode Probe. "Slip-on" with WG-299D. Range to 250 MHz. Shpg. wt., 8 oz.....8.25

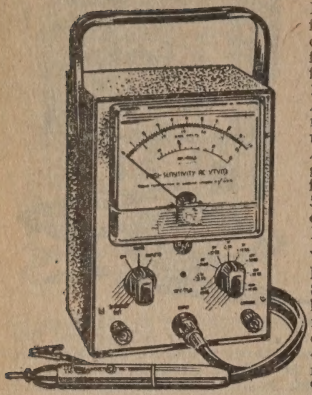
901-1460. WG-351A Crystal Diode Probe. For use with WV-77C, WV-77E. To over 100 MHz. 4 oz.....5.25

901-1299. WG-299E DC/AC-Ohms Probe. Includes cable. Shpg. wt.,1 lb.....9.75

Lab and Special-Purpose Test Equipment

RCA TEST INSTRUMENTS

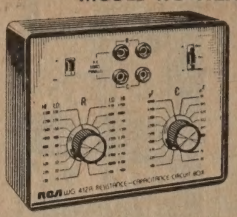
WV-76A AC VTVM



High sensitivity AC VTVM for hi-fi and other audio applications. Measures AC volts from 0.0002 to 500 over a frequency range of 10 Hz to 1.5 MHz. Nine overlapping AC voltage ranges from 10 millivolts to 100 volts. Measures dB from −40 to +40. Amplifier provides 38 dB gain for use as pramp in frequency range of 10 Hz to 500 kHz with probe in "low cap" position, 10 Hz to 1.5 MHz in "direct" position.

With Type WG-300B Direct/Low Capacitance Probe. Switch in probe for quick selection of "direct" (100-V max.) and "low-cap" (500-V or −56 dB max.) 7⅜x5⅜x4¾". With probe, leads, connector. 110-120 V, 60 Hz AC.
901-4576. Wt. 5 lbs...**99.00**

MODEL WG-412A R-C SUBSTITUTION BOX



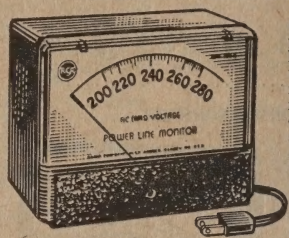
Resistance-capacitance circuit b provides convenient selection standard resistor and capacit values. Can be used separately, series, or in parallel R-C combi tions. A handy, time-saving ad tion to the repair shop, and qual control stations.

Ideal for instant component subs tution in servicing and circuit d sign, as well as establishing R circuits for checking impedan reactance and frequency charact istics. It's also a useful tool classroom demonstrations of Ohm law, capacitive reactance, etc. Compact unit includes 36 one-w resistors rated from 15 ohms to 10 megohms, plus eighteen 600-v capacitors from 100 pF to 0.22 μF. All resistors and capacitors ha 10% tolerance. Resistance and capacitance values can be quic selected with two rotary slide switches on panel. Slide switches p vide selection of series/parallel/separate connections for direct o put of a wide range of values through the four outputs on the pa face. 6⅞x5⅜x2⅜". With alligator clip leads. Shpg. wt., 1¾ lbs.
901-2415.....**30.**

MODEL WV-120A POWER LINE MONITOR

Provides continuous line voltage monitoring without need for interrupting work to check. Expanded scale provides high accuracy. Easy to use, just plug line cord into any AC outlet. Ideal for application in radio-TV repair, laboratories, shop, factory floor, or anywhere it is necessary to accurately monitor power-line voltage at all times. Voltage range: 100-140 volts. Frequency range: 25-400 Hz. Accuracy: ±2% at 120 volts. Large moving vane type meter provides accurate readings of powerline rms voltage even when voltage is not a pure sine wave. 3¹⁵⁄₁₆x5x3¹⁵⁄₁₆". Shpg. wt., 1½ lbs.
901-4620.....**19.50**

MODEL WV-503A POWER LINE MONITOR



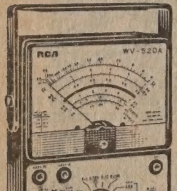
Power-line monitor designed pecially for use in indust labs, or the service shop—a where a continuous, accur indication of AC line volta is needed. Once unit is conne ed, a glance tells you line vo age without handling prob switches, or selecting scal Can be used with isolat transformer for selecting p cise line voltages for accur equipment checks. Frequer range: 25-400 Hz. Volta range: 200-240 V, ±2%. Rugged metal case, 3¹⁵⁄₁₆x5x3¹⁵⁄₁₆".
901-4703. Shpg. wt. 1½ lbs.....**19.**

NEW! "BLUE LINE" VOLT-OHM-MILLIAMETERS FROM RCA

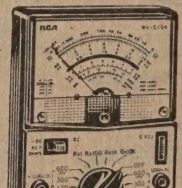
- Zener Diode Meter Protection
- Precision Resistors for All Ranges
- Styled in Attractive Dark Blue Cases

New line of quality VOMs offers models to fill the needs of everyone from hobbyist t serviceman or technician. Feature zener diode protected meters and precision resistor for all ranges.

WV-520A HIGH SENSITIVITY VOM



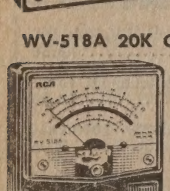
Extremely high-sensitivity: DC; 100k ohms/volt; AC, 10k ohms/volt. Has three-color aluminum panel and three-color meter with mirror scale. Measures DC voltages from 10 mV to 1500 V in eight ranges, AC voltages (rms) from .01 to 1500 V in six ranges; DC current from .05 mA to 5 A in six ranges; resistance from .5 to 20 megohms in four ranges; and decibels from −20 to +55.5 dB in five ranges. Accuracy: DC ±3%, AC ±4%. Zener diode meter protection. Supplied complete with test leads and two 1.5 volt batteries. Overall size, 3¼x7½x2⅜".
901-4720. Shpg. wt. 3 lbs.....**48.00**



WV-519A 50K OHMS/VOLT VOM

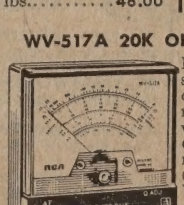
Three-color aluminum panel; three-co meter with mirror scale. Has DC polar switch. High-sensitivity: DC, 50k ohm volt; AC, 10k ohms/volt. Measures D voltages from 5 mV to 1200 V in eig ranges, AC voltages (rms) from .01 1200V in six ranges; DC current from 5 to 12 A in five ranges; resistance from ohm to 1 megohm in four ranges; and de bels from −20 to +57 dB in five rang Accuracy: DC ±3%; AC ±4%. Suppl complete with test leads and one 22.5 and one 1.5 V battery. Size, 4¼x6⅜x1⅞
901-4719. Shpg. wt. 2 lbs.....**36.**

WV-518A 20K OHMS/VOLT VOM



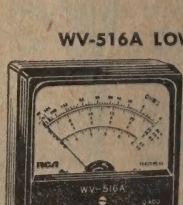
Special feature—panel mounted fuse to protect ohms-divider resistors. Has two-color meter with mirror scale. Measures DC voltages from .01 to 500 V in four ranges, AC voltages (rms) from .05 to 500 V in four ranges; DC current from 10 μA to 500 mA in four ranges; resistance from 1 ohm to 2 megohm. Accuracy: DC ±3%, AC ±4%. Sensitivity: DC, 20K ohms/volt AC; 10k ohms/volt. Supplied complete with test leads and two 1.5 volt batteries. Excellent value for the hobbyist and serviceman. For fast equipment checks. 5⅛x3½x1⅞".
901-4718. Shpg. wt. 1½ lbs.....**28.50**

WV-517A 20K OHMS/VOLT VOM



Has convenient panel switch for selection of all functions and ranges; measures DC voltages from .01 to 600 volts in four ranges; AC voltages (rms) from 0.2 to 660 V in four ranges; DC current from 10 μA to 300 mA in three ranges; resistance from 1 ohm to 5 megohms in three ranges; and decibels from −20 dB to +37 dB. Two-color meter scales. Accuracy: DC ±3%; AC +4%. Sensitivity: DC, 20k ohms/volt; AC, 10k ohms/volt. Supplied complete with test leads and two 1.5 volt batteries. Size, 4¾x3¼x1⅞".
901-4717. Shpg. wt. 1 lb.....**18.00**

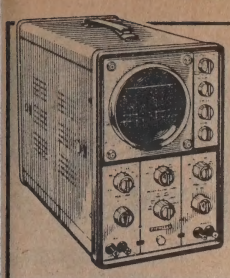
WV-516A LOW-COST VOM



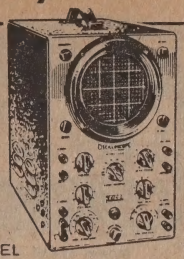
Compact, lightweig economical. Measu DC or AC rms vo from 0.1 to 1000 in four ranges; I current from 10 to 250 in three rang resistance from ohms to 200k oh in two ranges. P jack connectors us for all functions a ranges. Two-col meter scales. Accu cy: DC ±3%; AC 4%. Sensitivity: A DC, 2000 ohms/volt. Supplied compl with test leads and 1.5 volt battery. Exc lent value for hobbyists and servicem Easy operation allows fast checks of equ ment. Size, 2½x4⅛x1⅜".
901-4716. Shpg. wt. 1 lb.....**9.**

Factory Assembled Test Equipment

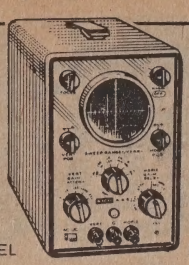
EICO



MODEL 465

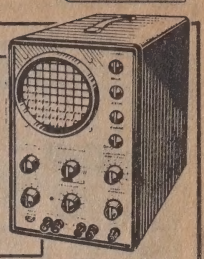


MODEL 460



MODEL 435

- Sensitivity of 3.5 mV rms/cm
- Zener Diode Calibration
- Direct Voltage Connections
- Automatic Sync



MODEL 427

MODEL 465W WIDEBAND 5″ OSCILLOSCOPE/VECTORSCOPE

Professional-quality scope offers vertical response of DC to 8 MHz (+1, −5 dB), usable to 10 MHz; horizontal, DC to 1 MHz (+1, −3 dB). Push-pull amplification throughout minimizes distortion; direct-coupling eliminates low-frequency phase shift. Internal, external and line-frequency sync of internal sweep oscillator: external or line input to horizontal amplifier. Horiz. and vert. calibration Voltages: 4-step attenuators. Vert. Sensitivity: 12 mV/cm rms. Horiz. Sensitivity: 17 mV/cm rms. Sweep Ranges: 10-100-1K-100K Hz, plus 30 Hz TV-VERT position and 7875 Hz TV-HOR position. 12¼x8½x17½″. 117 VAC.

775U0465. Shpg. wt. 27 lbs. 249.95

MODEL 460W WIDEBAND 5″ OSCILLOSCOPE

Vertical sensitivity: 25 mV p-p/cm. DC to 10 MHz vertical response, flat to 4.5 MHz. Easily reproduces 3.58 MHz color sync burst. 4-step attenuator. Sweep: 10 Hz to 100 kHz. Plus, minus, internal, external and line-frequency sync. Edge-lit grating with dimmer. Full screen DC positioning. 13x8½x16″. 105-125 V, 50-60 Hz AC.

775 U 0460. Factory Assembled. Shpg. wt. 28 lbs. 149.95

PROBES. Shielded. For all oscilloscopes on this page.

Stock No.	Type	Description	Wt.	EACH
22B6056	PSD	Demodulator Probe	8 oz.	6.95
22B6058	PD	Direct Probe	8 oz.	4.95
22B6060	PLC	Low-Capacity Probe	8 oz.	6.95

MODEL 435W 3″ WIDEBAND OSCILLOSCOPE

Portable 3″ scope features push-pull 3-stage amplifier; zener diode calibration (200 mV p-p); 4-position attenuator. Reads DC or p-p AC from 50 mV to 500 volts. Response, DC to 4.5 MHz, usable to 10 MHz. Vertical sensitivity, 18 mV rms/cm. Full retrace blanking. Sweep: 10 Hz to 100 kHz plus 30 Hz TV vertical and 7875 Hz TV horizontal. Horizontal response: 1 Hz to 500 kHz; sensitivity, 0.7 V rms/cm. Distortion-free positioning and trace expanson; edge-lighted screen. Overall size, 8½x5¾x12⅝″. For 105-125 volts, 50-60 Hz AC.

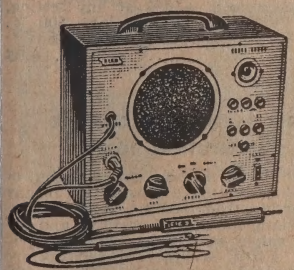
775U0435. Shpg. wt. 18 lbs. 169.95

MODEL 427 DIRECT-COUPLED 5″ OSCILLOSCOPE

Highly sensitive, general-purpose scope offers 3-stage push-pull amplification, with direct-coupling throughout the vertical amplifier. Makes DC or p-p AC (or combination) measurements from 10 mV to 500 V. Trace is sharp and clean, free of "blooming"; can be expanded to 30 cm vertically and 20 cm horizontally. Instant drift-free positioning permits centering any part of the expanded trace. Has zener diode calibration, 4-position frequency-compensated decade attenuator. Fully automatic sync; automatic sync limiter and amplifier. Intensity, focus, astigmatism.

DC balance controls and sawtooth sweep output on front panel. Positive or negative sync (internal, external or line-frequency). Vertical response: DC to 500 kHz (+1, −3 dB). Vert. sensitivity: 3.5 mV rms/cm (10 mV p-p/cm). Horizontal response: 2 Hz to 450 kHz (+1, −3 dB); sensitivity. 0.18 V rms/cm. Sweep Ranges: 10-100, 100-1K, 1K-10K, 10K-100K Hz. Input impedance: vertical. 1 meg/30 pF; horizontal. 10 meg/40 pF. 12½x8½x16⁷⁄₁₆″. For 117 VAC.

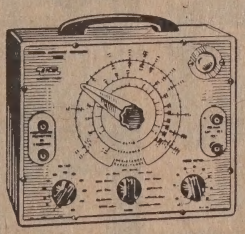
775 X0426. Shpg. wt. 23 lbs. 139.95



DELUXE 147W SIGNAL TRACER

Two input channels (high-gain RF and audio); visual and audio monitors (eye tube and 5″ speaker). Noise locator, wattmeter, VTVM/Scope output. 9x10x5″. 117 VAC.

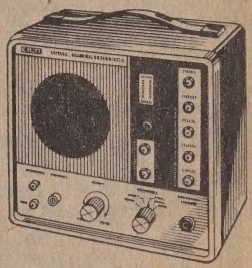
775-0147. 10 lbs. 49.95



MODEL 950W R-C BRIDGE

R-C Bridge/R-C-L Comparator reads 0.5 ohm to 500 megohms and 10 pF to 5000 μF (in 4 ranges). Has .05-20 comparator range. Variable 0-500 volt DC source tests capacitors for shorts and leakage. Also measures power factor of electrolytics. Less leads. Size, 8x10x4¾″. For 105-125 V, 60 Hz AC. Shpg. wt., 10 lbs.

775X0950 ..... 44.95



MODEL 150W SIGNAL TRACER

Has RF and audio inputs, each with probe. Solid-state. 400 mw continuous power output. Both speaker and calibrated meter output indicators. Substitution amplifier, output transformer, and speaker. For 105-132 VAC. 7½x8½x5″. Shpg. wt. 6 lbs.

775-0150 ..... 69.95

MODEL 540W READI-TESTER

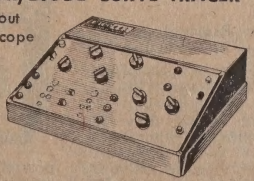
- Large 3½″ Meter
- Tests Car Batteries, Electric Appliances, Electric Circuits

Ranges: AC-DC volts, 0-7.5-15-150-300; AC-DC amps, 0-15; Resistance, 0-1000 ohms. Neon indicator checks continuity of resistors from 1K to 2 meg, capacitors above .0005 μF. "Good-Bad" reading on 6/12-volt auto batteries. Aluminum panel, bakelite case, 6½x3¾x3½″. With leads and batteries. Shpg. wt., 3 lbs.

775-0540 ..... 19.95

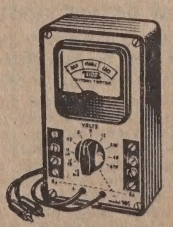
TRANSISTOR/DIODE CURVE TRACER

- Direct Readout on Any Scope
- Solid-State



Model 443W. Displays DC characteristics of semiconductor devices. Diode test: I_F; 0-1-100 mA. I_R: 1, 10 and 100 μA/div. PIV variable, 0-1000 V. Five transistor tests. 3x11½x9½″. For 115 VAC. Wt., 10 lbs.

775U0443 ..... 119.95

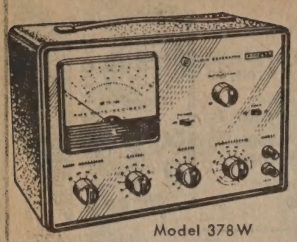


MODEL 585 BATTERY TESTER

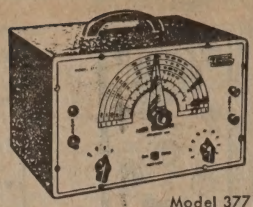
Rapidly tests all common batteries under typical load conditions. Rotary switch selects proper series resistor and shunt resistive load for following types: 1.5 (#6 cell), 1.5 (C, D cells), 1.5 (AA cell), 4.5, 6, 9, 12, 22.5, 45, 67.5 volts. Spare position and resistor terminals for other types. Test leads provided. Size, 6¼x3¾x2″. Shpg. wt. 2 lbs.

775-585 ..... 15.95

Test Equipment

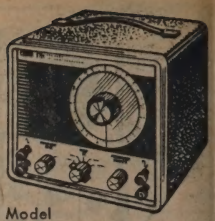


Model 378W



Model 377W

Model 324W



Model 379W

MODEL 378W DELUXE AUDIO GENERATOR

Low-distortion sine wave output, 1 Hz to 110 kHz. Detent switches select 1 Hz, 10 Hz, 100 Hz, 1 kHz, and 10 kHz steps. Has 8-step attenuator. Adjustable output, 0-10 volts rms. Easy-to-read 4½" meter. Accuracy: ±5%. 8½x12½x9". For 117 VAC.
775X0378. Shpg. wt. 16 lbs.....89.95

MODEL 377W SINE-SQUARE WAVE GENERATOR

Sine-wave range: 20-200,000 Hz in 4 bands. Square-wave range: 60-50,000 Hz in 4 bands. 5% tilt at 60 Hz, 5% rounding at 50,000 Hz. Response: ±1½ dB, 60 Hz to 150 kHz. Output: 10 volts across 1000 ohms. Wien Bridge oscillator circuit, with 1% resistors. Choke filtered power supply. 6½" dial with 0-100 scale. Accuracy: ±3%, or 1 Hz. Hum: under 0.4% of rated output. Aluminum panel; gray wrinkle steel case, 7⅛x11⅛x7⅝". For 105-125 V, 50-60 Hz AC.
775X376. Shpg. wt. 14 lbs.....59.95

MODEL 324W RF SIGNAL GENERATOR

Expanded frequency range, covering 150 kHz to 145 MHz in six fundamental bands. One harmonic band covers 111-435 MHz. 400-Hz sine wave output, variable 0-50%; takes external modulation sources. Accuracy: ±1.5%. RF attenuators. 8x10x4¾". 115 VAC.
775-0324. Shpg. wt. 8 lbs.....47.95

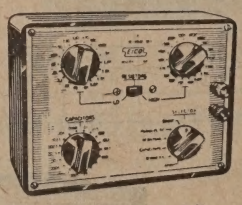
MODEL 379W SOLID-STATE AUDIO GENERATOR

Generates simultaneous sine and square wave outputs; ideal for checking hi-fi amplifiers and transducers, and for sonar apparatus. Sinusoidal output variable 0-7.5 V into hi-Z load; 6.5 V into 600-ohm load. Covers 20 Hz to 2 MHz in 5 bands; output level, ±1 dB except ±2 dB on highest band. Square wave output, 20 Hz to 200 kHz, 0-10 V p-p; rise time, less than 0.1 μsec at 20 kHz. Accuracy: ±3%, 100 Hz to 1 MHz. 7½x8½x8½". 105-132 V 50/60 Hz AC.
775-0380. Shpg. wt. 9 lbs.....94.50

MODEL 955W BRIDGE-TYPE CAPACITOR TESTER

Tests capacitors for shorts, opens, and value, in or out of circuit. Short Test: up to 2000 μF, with shunt resistance as low as 1 ohm; maximum test voltage, 6.3 VAC (open leads), decreasing with decreasing impedance. Won't damage low voltage electrolytics. Open Test made on capacitors as low as 15 pF. Capacity measurement: from 0.1 to 50 μF in or out of circuit, with Wien Bridge circuitry; shunt resistance as low as 35 ohms for accuracy of ±10%. Uses one coax lead for all tests; detachable, with mike connector coupling. 8½x5¾x6". Less leads. For 105-130 V, 60 Hz AC. Shpg. wt., 6 lbs.
775-0955......39.95

MODEL 1100W RESISTANCE SUBSTITUTION BOX



Rapidly substitutes all resistance values that are decade multiples of 15, 22, 33, 47, 68, and 100 ohms. Overall range, 15 ohms to 10 megohms. Determines the best resistance value needed for circuit design; also finds values of worn or charred resistors. Uses standard 1-watt ±10% EIA resistors throughout. Convenient 5-way binding posts. Accuracy, ±10% at any setting. Continuous duty rating, 500 V. Case, 3¾x6½x3½". Less leads.
775-1101. Shpg. wt. 2 lbs.....16.95

MODEL 1180W CAPACITOR DECADE BOX

Useful for determining proper capacitance values in circuit design applications. Range: 100 pF to 0.111 μF in 100 pF steps. Rated 350 WVDC continuous, 500 WVDC intermittent. Precision silver-mica capacitors. ±1% accuracy. 7 pF zero capacitance. Ceramic wafer switches; low loss lucite terminal board; 5-way jack-type binding posts, for all popular lead terminals. Gray wrinkle steel case, 9x3½x5½". Less leads. Shpg. wt., 3 lbs.
775-1180......34.95

MODEL 1120W CAPACITANCE SUBSTITUTION BOX

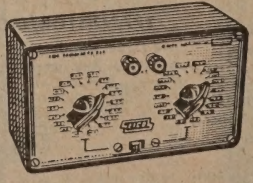
A must for the serviceman, experimenter, or hobbyist. Fast, accurate substitution of any one of 18 values from 0.0001 to 0.22 μF. Useful in checking for open capacitors, and determining values needed for optimum performance. ±10% accuracy. Capacitors are mica and molded plastic rated at 400 and 600 V. 5-way binding posts. 3¾x6½x3½". Less leads. Shpg. wt., 2 lbs.
775-1120......13.95

MODEL 1171W DECADE RESISTANCE BOX

- Has Range of 0-99,999 Ohms
- Determines the Exact Resistance Required
- 1-Watt Resistors, ½% Accuracy at Any Setting

Invaluable in the design, development, and adjustment of electronic and electrical equipment. Comparator position and binding posts permit instant substitution of accurate resistance values. Ideal for adjusting bridge circuits; calibrating ohmmeters; determining the exact values of meter multiplier-resistors and badly damaged or illegible resistors. Features wide range of resistance values: 0-99,999 ohms in 1-ohm steps with 5 decades. ½% accuracy: ½-watt precision resistors. Ruggedly constructed gray wrinkle finished heavy-gauge steel cabinet, 12x 3½x3". Well-designed, easy-to-read, sturdy aluminum panel. Less leads. Shpg. wt., 3 lbs.
775-1171......39.95

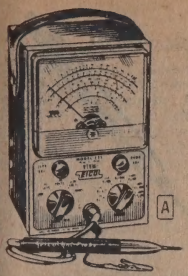
1140W SERIES-PARALLEL RESISTANCE-CAPACITANCE BOX



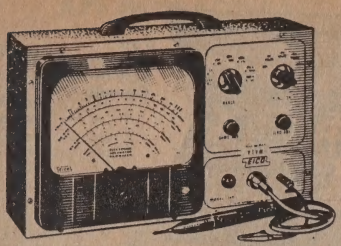
Ideal for laboratory and service applications, experimenters, and hobbyists. Eliminates messy individual components. A combination of the Model 1100W Resistance Box and the Model 1120W Capacitance Box, with additional switching facilities that permit selection of resistance alone, capacitance alone, or any combination of resistance and capacitance in either series or parallel. Makes possible the rapid substitution of all resistance values that are decade multiples of 15, 22, 33, 47, 68, and 100 ohms, from 15 ohms to 10 megohms. Provides quick substitution of a wide range of capacitance values from 0.0001 to 0.22 μF in 18 steps. Uses standard 1-watt ±10% tolerance EIA resistors and mica and molded plastic capacitors. Has open and short-circuit positions. Size, 5⅜x 6⅞x2⅝". Shpg. wt., 3 lbs.
775-1140......27.95

VOM's and VTVM's

EICO



A



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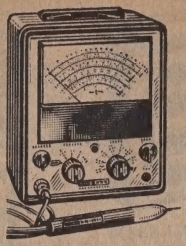


C

A MODEL 232W PEAK-TO-PEAK VTVM

Ideal for color TV and all general service. Gives true peak-to-peak measurements on separate scales. Includes all the deluxe features of Model 249W below, but has 4½" meter. With "Uni-Probe"—a great time saver—a half-turn of probe tip selects DC or AC/Ohms ranges. Ranges: p-p volts, 0-4-14-42-140-420-1400-4200 volts; DC/rms volts, 0-1.5-5-15-50-150-500-1500 volts; resistance, 0-1000 megohms in 7 ranges. Frequency Response, 30 Hz to 3 MHz. Size, 8½x5x5" For 105-125 volts, 50-60 Hz AC. Wt., 5 lbs.

775-0233.....49.95

B MODEL 249W PEAK-TO-PEAK VTVM

Highly efficient deluxe VTVM for bench or field use. Versatile, easy to use, accurate. Gives true peak-to-peak measurements on separate scales. Includes single DC/AC/Ohms Uniprobe. Electronically protected 7½" meter, balanced bridge circuit. Zero center scale and 1% precision ceramic multiplier resistors. Ranges: p-p AC Volts, 0-4-14-42-140-420-1400-4200; AC rms and DC Volts, 0-1.5-5-15-50-150-500-1500; Resistance, 0-1000 megs in 7 ranges. Frequency Response, flat from 30 Hz to 3 MHz. Size, 8½x13x5". For 105-125 volts, 50-60 Hz AC. Shpg. wt., 9 lbs.

775-0250.....59.95

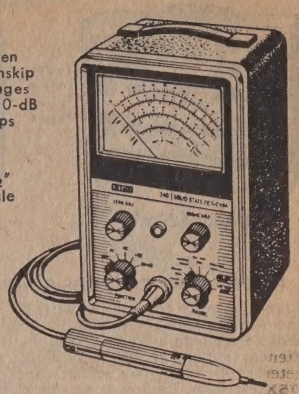
C MODEL 235W PROFESSIONAL VTVM

Good enough to meet the rigid requirements in testing modern electronic equipment. True peak-to-peak measurements on separate scales. Has 1% precision multiplier resistors. Features unique, time saving, dual-purpose "Uni-Probe"—one probe performs all functions—a half-turn of probe tip selects DC or AC/Ohms. Ranges: p-p volts, 0-4-14-42-140-1400-4200; AC rms and DC volts, 0-1.5-5-15-50-150-1500, plus 0-0.5 on DC; resistance, 0-1000 megohms in 7 ranges. Frequency Response, 3 Hz to 3 MHz. With batteries and leads. 8½x7½x5". For 117 volts, 50-60 Hz AC. Wt., 10 lbs.

775-0237.....79.95

Seven Nonskip Ranges in 10-dB Steps

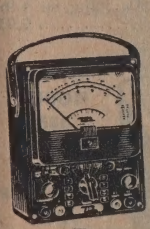
4½" Scale



240W FET SOLID-STATE VOM

General-purpose FET VOM, ideally suited for semiconductor circuit testing too. Operates from AC line or self-contained batteries. Big 4½" scale. Reads accurately down to 0.05 volt, useful readings to 0.01 volt. Includes single DC/AC/Ohms Uniprobe. Input Impedance: DC, 11 megs; AC, 1 meg. Balanced transistor meter circuit, stable regulated power supply, and 1% multiplier resistors. Response 25 Hz to 2 MHz. Input FET is protected against damage. Ranges: p-p AC Volts, 0-2.8-8.5-28-85-280-850-2800; AC rms and DC Volts, 0-1-3-10-30-100-300-1000; Resistance, 0.2 ohm to 1000 megs in 7 ranges. 7½x8½x5". 105-132 VAC or 3 Neda #1604 (or equiv.) 9V batteries and a "D" cell.

775-0241. Shpg. wt. 6 lbs.....79.95



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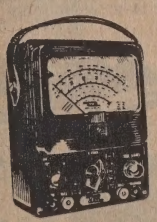
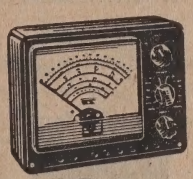


E

F



G

D 565W 20,000 OHMS/VOLT VOM

Accurate VOM for TV and FM, AM radio servicing. High current range for complete appliance testing. Big 4½" meter. Ranges: AC/DC Volts, 0-2.5-10-50-100-500-5000 (AC sensitivity 1000 ohms/volt); DC Current, 0-100 μA, 0-10-100-500 mA, 0-10 amps; Resistance, 0-2000-200k ohms, 0-20 megs; Decibels, −12 to +55 in 5 ranges. With batteries. Less leads. 6¾x5¼x3".

775-0565. Shpg. wt., 4 lbs.....34.95

775-0551. 555W. Above, 1% resistors.39.95

E 566W 1000 OHMS/VOLT VOM

Features divider resistors and rectifier in dual half-wave circuit. Has full-scale 0-1 volt range. Large 4½" meter. Ranges: AC/DC Volts, 0-1-5-10-50-100-500-5000 (Sensitivity, 1000 ohms/volt); AC/DC Current, 0-1-10 mA and 0.1-1 amps; Resistance, 0-5000-100k ohm, 0-1 meg; Decibels, −20 to +69 in 6 ranges. Complete with batteries. Less leads. Size, 6¾x5¼x3".

775-0567. Shpg. wt., 3 lbs..... 27.95

775-0557. Above, 1% resistors..... 29.95

F 536W 1000 OHMS/VOLT VOM

Wide-range voltage, current, resistance, and decibel measurements for fast, accurate servicing of electrical equipment. 0-1 volt full-scale range for accurate low-voltage readings. 3" meter. Lightweight, compact, and packaged in a high-impact case, it is sturdy and portable for any shop or field use. Ranges: AC/DC Volts, 0-1-5-10-50-100-500-5000; Current, 0-1-10 mA, 0-0.1-1 amp; Resistance, 0-5000-100k ohms, 0-1 meg; Decibel, −20 to +69 in 6 ranges. 6½x3¾x2¾". With batteries. Less leads.

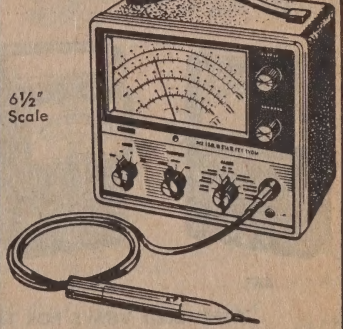
775-0537. Shpg. wt., 3 lbs.....22.95

G 567W 20,000 OHMS/VOLT VOM

Efficient portable VOM with self-contained battery; designed for accurate bench or field use. Features 0.25-volt full scale for accurate low-voltage readings. Big 4½" meter protected by special silicon-diode circuit. Ranges: AC/DC Volts, 0-0.25-2.5-10-50-250-1000-5000 (AC sensitivity 5000 ohms/volt); DC Current, 0-100 μA, 0-10-100-500 mA; 0-10 amps; Resistance, 0-2000 ohms, 0-0.2-20 megs; Decibels, −12 to +55 in 5 ranges. Complete with test leads. Less batteries. Size, 6¾x5¼x3".

775-0569. Shpg. wt., 3 lbs.....44.95

6½" Scale

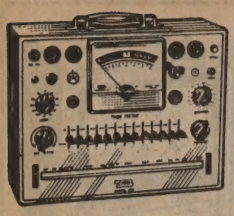


242W FET SOLID-STATE VOM

Versatile FET VOM tests both vacuum-tube and semiconductor circuits. Big 6½" meter and accurate milliammeter scales let you measure AC and DC current from 10 μA to 1 amp. Accurate voltage readings down to 0.05 volt, useful readings to 0.01 volt. Ohmmeter allows testing circuit-semiconductors without risking damage to these delicate components. Includes DC/AC/Ohms/Milliamperes Uniprobe. Input Impedance: DC, 11 megs; AC, 1 meg. Response 25 Hz to 2 MHz. Balanced transistor meter circuit, regulated power supply, 1% multiplier resistors for high accuracy and stability. Ranges: p-p AC Volts and Milliamperes, 0-2.8-8.5-28-85-280-850-2800; AC rms and DC Volts and Milliamperes, 0-1-3-10-30-100-300-1000; Resistance, 0.2 ohm to 1000 megs in 7 ranges. 117 VAC or 3 Neda #1603 9-V batteries and "D" cell.

775-0245. Shpg. wt., 5¾ lbs....94.50

Eico Factory Assembled Test Equipment



Tests Latest Tube Types

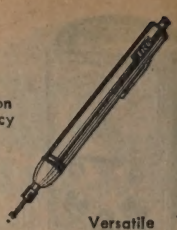
Model 628W

Portable 3-in-1 Tester

Model 636W

Fast Accurate Easy-to-Operate

Precision Accuracy



Versatile Test Probes

Model 667W

MODEL 628W CATHODE-CONDUCTANCE TUBE TESTER

Easy-to-operate tube tester with big 4½" meter having numerical and 3-color scales. Tests 5-pin nuvistors, 7-pin nuvistors, 7-pin miniatures, octals, loctals, combination 9- and 10-pin miniatures, combination novar and pilot light, compactrons. "Speedroll" 3-column roll chart gives settings and simplifies finding and reading tube test-data. Each active tube element can be connected by 3-position lever switches to plate, screen, grid, filament voltage, ground. Makes interelement short and continuity tests. Has line-voltage adjuster; pin straighteners for 7 and 9-pin miniatures; circuit overload lamp. 9½x12½x4¼". 105-135 VAC.

775X0628. Shpg. wt. 11 lbs. **79.95**

MODEL 667W TUBE AND TRANSISTOR TESTER

Combines mutual conductance (Gm) and plate conductance (Gp) tests into dynamic and peak emission tests to give a single reading of tube quality. Spots bad transistors by gain and leakage tests. Checks nuvistors, novars, compactrons, miniatures, subminiatures, octals, loctals. Also special purpose tubes, VR's, cold cathode regulators, and electron-ray indicators. Has multicircuit lever switch, 12 tube-element pushbutton switches. Easy-to-read 4½" D'Arsonval meter with 200 μA sensitivity. Roll-chart for fast, easy test setups. 4½x15x12". Latching cover. For 105-135 VAC.

775U0667. Shpg. wt. 23 lbs. **139.95**

775-1701. CRU CRT Adapter. For 667 and 628 testers. 1 lb. **9.95**

MODEL 636W TUBE/BATTERY/CONTINUITY TESTER

Advanced design, highly versatile portable 3-in-1 combination tester checks tubes, batteries, and continuity to make it extremely useful as a general-purpose instrument for the technician or hobbyist. Quick-tests over 800 modern TV, radio, and Hi-Fi tubes for cathode emission, leakage, shorts, opens, and intermittents. Built-in sockets for octals, loctals, 7 and 9-pin miniatures, novars, nuvistors and compactrons.

Has 3-color Good/Replace scales; "Go/No-Go" continuity test; neon-lamp short indicator. Also tests, under load, commonly used batteries from 1.5 to 90 volts in 11 ranges. Front panel has simplified control system and is arranged for best efficiency and quick, easy tests. Has many deluxe features not expected at this moderate price—performance surpasses many testers priced much higher. You'll get dependable service from this quality instrument.

Handsome, bakelite case and convenient compact size, only 8⅝x 7½x3⅛". Metal carrying handle. Tube-data manual. 117 VAC.

775-0636. Shpg. wt. 4 lbs. **44.95**

PRECISION TEST PROBES

PSI SIGNAL INJECTOR PROBE. Pen-type pocket instrument troubleshoots AF, IF and RF stages. Injects signal covering AF, IF, RF spectrum. 5⅝x½" dia. Requires 1 AA cell. Shpg. wt. 6 oz.

775-2001 ..... **9.95**

MODEL HVP-2 HIGH VOLTAGE PROBE. For safe and accurate measurements up to 30,000 volts DC with any VTVM or 20,000 ohms/volt VOM. Multiplier resistor is included to match many popular test instruments. Supplied with 1090-megohm resistor for use with Eico Models 222, 232, 235, 249. Shpg. wt. ½ lb.

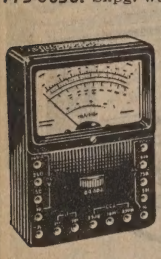
775-1801 ..... **8.95**

UNIPROBE. AC/DC/Ohms probe. A half-turn of probe tip selects DC or AC/Ohms. Use 15-megohm series isolating resistor for Eico Model 221; 1-megohm for all other Eico VTVM's. Instructions.

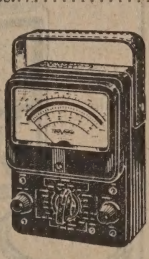
775-2399 ..... ½ lb. **7.95**

RF MEASURING PROBES. Permit measuring of RF voltages at frequencies up to 250 MHz. For 11-megohm input VTVM's. Shpg. wt. 1 lb.

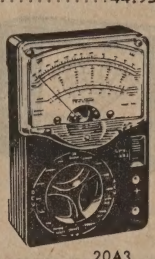
775-1980. PRF-11 ..... **5.95**



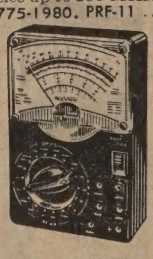
4A3



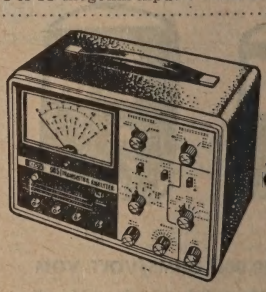
100A4



20A3
30A3



30A 4



MODEL 685 DYNAMIC SEMI-CONDUCTOR AND CIRCUIT ANALYZER

ASSEMBLED VOM'S FOR LABORATORY OR SERVICE BENCH

MODEL 100A4. 100,000 ohms/volt DC, 12,500 AC. Highly sensitive professional instrument with laboratory accuracy and versatility. Ranges: DC Volts, 0-500 mV, 0-2.5-10-50-250-500-1000 V; AC Volts, 0-2.5-10-50-250-1000; DC Current 0-10-250 μA, 0-2.5-250 mA, 0-10 amps; Resistance, 0-20K-200k ohms, 0-2-20 megs; Decibels, −20 to +62 in 5 ranges. 7½x5¼x3¼". Batteries and leads.

775-0185. Shpg. wt. 4 lbs. **34.95**

MODEL 20A3. 20,000 ohms/volt DC, 10,000 AC. Precision pocket portable, ideal for accurate general service. Ranges: DC Volts, 0-0.25-2.5-10-50-250-1000; AC Volts, 0-10-50-250-500-1000; DC Current, 0-50 μA, 0-25-250 mA; Resistance, 0-7k-700k ohms, 0.7 megs; Decibels, −10 to +36. 5⅛x3⅜x 1⅜". Batteries and leads.

775-0020. Shpg. wt. 1¼ lbs. **12.95**

MODEL 30A4. 30,000 ohms/volt DC, 10,000 AC. Fine pocket portable with mirror-back scale and 1% resistors. Ranges: DC Volts, 0-0.6-3-12-60-300-600-1200-3000; AC Volts, 0-6-30-120-600-1200; DC Current, 0-30 μA, 0-60-600 mA. Resistance, X1, X100, X1K, X10K; Decibels, −20 to +63 in 5 ranges. Batteries and leads.

775-0030. Shpg. wt. 1¼ lbs. **19.95**

MODEL 30A3. 30,000 ohms/volt DC, 14,000 AC. Palm-size instrument gives minimal circuit loading. Mirror-back scale prevents error due to viewing parallax. 1% resistors; Ranges: DC Volts, 0-0.6-3-12-60-300-1200. AC Volts, 0-12-60-300-1200. DC Current: 0-60 μA, 0-12-300 mA. Resistance, X1, X100, X1000. Decibels, −10 to +23 (good to 7 kHz). Complete with batteries and test leads. 5⅛x3⅜x1⅜". Shpg. wt. 1¾ lbs.

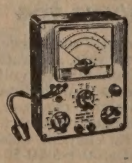
775-0029 ..... **15.95**

MODEL 4A3. 4000 ohms/volt DC, 2000 AC. Miniature pocket portable with 3% accuracy makes a small but versatile general utility instrument. Ranges: DC Volts, 0-10-50-250-1000; AC Volts, 0-10-50-250-500-1000. DC Current: 0-250 μA, 0-10-250 mA. Resistance, 0-10,000 ohms, 0-1 megohm. Decibels, −20 to +36. 4¾x3⅞x1⅝". Shpg. wt. 1¼ lbs.

775-0004 ..... **9.95**

Tests can be made on Unijunction transistors, silicon-controlled rectifiers, power rectifiers, signal diodes, Zener diodes and FET's. AC Beta (in and out of circuit) 2-100 at I_C=0.2 ma for RF devices, 2-100 and 2-1000 at I_C=20 ma for power devices; I_{CBO} 0-5 ma (30 μa center scale); I_{CEO} 0-5 ma (30 μa center scale. 12½x8½x6". 115 VAC. Shpg. wt. 4 lbs.

775U0685 ..... **139.95**



680W TRANSISTOR CHECKER AND VOM

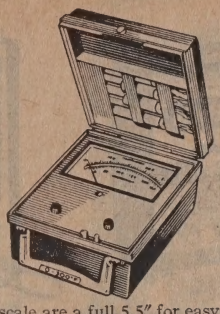
Transistor/circuit tester and VOM measures basic transistor and diode characteristics. Ranges: DC Volts, 0-5-50; DC Current, 0-50-500 μA, 0-5-50-500 mA. Resistance, 0-2-200k ohms, 0-20 megs (center scales at 12, 1200 and 120k ohms). 20,000 ohms/volt DC sensitivity; 50-μA movement. 3½" scale. Accuracy, ±2%. 3x5¼x6¾".

775-0680. Shpg. wt. 3 lbs. **49.95**

Pyrometers, Frequency Meters, Power Supply

API HIGH-ACCURACY PORTABLE PYROMETERS

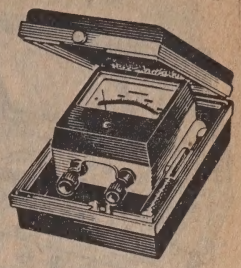
MODEL 6020



Precision, thermocouple-actuated portable pyrometer for general-purpose industrial uses. Can be applied to temperature checks of laboratory ovens, furnaces, refrigeration equipment, solder pots, oil baths, many other applications. Sensitive taut-band meter with ±1% accuracy. Temperature is indicated on mirrored scales which feature both Fahrenheit and Centigrade degrees. Fully compensated for ambient and copper error with bimetal and thermister for greater reliability. Calibrated for rustproof Chromel-Constantan (Cr/C) thermocouple probes (order below). Interchangeable probes fit into the compartment in the lid of meter case for convenience. Calibrations on the meter scale are a full 5.5″ for easy reading. Handle for easy carrying. Aluminum trimmed ABS plastic case for protection and better handling. Size, 7.3x8x3.3″. Shpg. wt. 1½ lbs.

Stock No.	RANGES °F	RANGES °C	EACH 1-24	EACH 25-99	EACH 100-Up
716C1041	−100 to +1100	.....	89.50	76.50	72.25
716C1040	−100 to +600	−70 to +310	89.50	76.50	72.25
716C1042	0 to +300	0 to +150	89.50	76.50	72.25
716C1043	0 to +500	0 to +260	89.50	76.50	72.25
716C1044	0 to +750	0 to +400	89.50	76.50	72.25
716C1045	0 to +1000	0 to +500	89.50	76.50	72.25
716C1046	0 to +1500	0 to +800	89.50	76.50	72.25

MODEL 3030



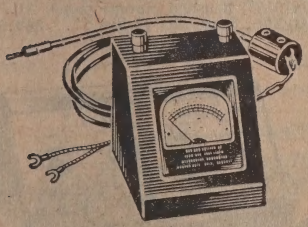
Thermocouple-actuated portable pyrometer provides accurate measurements of temperature. Some applications are: temperature checks of lab ovens, furnaces, refrigeration equipment. Handy portable feature plus pocket size make it great for quick checks in the field. Taut-band meter movement provides precise ±1% accuracy. Frictionless movement offers near perfect repeatability and high shock resistance. Fully compensated for ambient and copper error with bimetal and thermistor. Calibrated for rustproof Chromel-Constantan thermocouple probe. Compartment in the meter case stores interchangeable probes (listed below). Meter calibrations in both Fahrenheit and Centigrade degrees. Aluminum trimmed ABS plastic case for easy carrying. Clear 3″ meter scale for easy reading. Case size: 5.5x8x2.3″. Shpg. wt. 1 lb.

Stock No.	RANGES °F	RANGES °C	EACH 1-24	EACH 25-99	EACH 100-Up
716C1031	−100 to +1100	.....	71.60	61.20	57.80
716C1030	−100 to +600	−70 to +310	71.60	61.20	57.80
716C1032	0 to +300	0 to +150	71.60	61.20	57.80
716C1033	0 to +500	0 to +260	71.60	61.20	57.80
716C1034	0 to +750	0 to +400	71.60	61.20	57.80
716C1035	0 to +1000	0 to +500	71.60	61.20	57.80
716C1036	0 to +1500	0 to +800	71.60	61.20	57.80

THERMOCOUPLE PROBES FOR 6020 AND 3030 PYROMETERS ABOVE

716-1335. Straight Surface Probe. Wt., 4 oz.....Each 31.60
716-1331. Angle-Surface Probe. Wt., 4 oz.....Each 36.85
716-1333. Needle Probe. Wt., 4 oz.....Each 31.60
716-1332. General-Purpose Probe. Wt., 4 oz.....Each 31.60
716-1336. Wire. Shpg. wt., 4 oz.....Each 6.32
716-1334. Probe Handle. Wt., 4 oz.....Each 7.90

JBT PYROMETERS



- With Thermocouple and Lead
- Quick-Reading 2⅜″ Scale
- Overall Only 4¼x4⅛x4⅜″
- Temperature Compensated

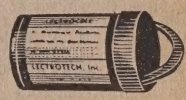
MODEL 32-J. Small, accurate instruments, mounted in sloping-front metal stands, 4¼x4⅛x4⅜″. Medium-resistance system damped for quick reading on 2⅜″ scale. Compensated for ambient temperature. ±2% accuracy. With thermocouple and lead supplied. Use only the type and resistance of thermocouple and lead provided; if lead is too long, coil it to maintain calibration. Protection tube is usually not required. For extra convenience, keep an extra thermocouple and lead on hand. Shpg. wt., 2 lbs.

826-5334. Temperature Range, 0-650° F to 350°C. With SA-91 0-650-1200° F thermocouple with 12″ conductors, SA-84 392° F 6-ft. leads, and CB-1 0-2000° F, 1½x1⅜″ dia. connector block.....41.20

826-5335. Temperature Range, 0-1200° F to 650° C. With SA-87 0-1200-2000° F thermocouple with 12″ conductors, SA-82 194° F 6-ft. leads, and CB-1 0-2000° F, 1½x1⅜″ dia. connector block.....41.20

826-5336. Temperature Range, 0-2000° F to 1100° C. With SA-87 0-1200-2000° F thermocouple with 12″ conductors, SA-82 194° F 6-ft. leads, and CB-1 0-2000° F, 1½x1⅜″ dia. connector block.....41.20

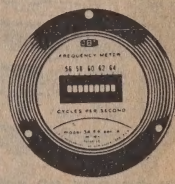
LECTROTECH POWER SUPPLY



Replaces Ohmmeter Battery in Most VTVM's

True miniature 1½-volt DC power supply replaces ohmmeter batteries in VTVM's. Takes only a few minutes to mount and wire. Eliminates need for replacement batteries; danger from battery bleeding and corrosion. Occupies same space as standard "D" cell. Fits any VTVM using standard grounded "D" cell for ohmmeter.
849-4004. Shpg. wt., 4 oz.....4.16

JBT REED FREQUENCY METERS



Feature unique, patented vibrating reed design for use where constant or known frequency is important to efficient operation of equipment. Have nine reeds with high Q for sharp, fast response, accuracy is within ±0.3% at 77° F. Remains unaffected by poor waveforms, external magnetic disturbances, or voltage fluctuations. No mechanical or moving parts to wear out and lose calibration. Flush panel, MIL-M-6B mounting. Flange, 3½″; body diameter, 2¹¹⁄₁₆″; depth, 2²³⁄₃₂″. Both models have rugged molded cases for added dependability. For operation from 100-130 volts.

MODEL 33-FX. For 400 Hz power sources, particularly aircraft. Range: 380 to 420 Hz with frequencies in 5-Hz steps. 1.5 watts power consumption, 90 ohms/volt.
826-5353. Shpg. wt., 12 oz.....41.78

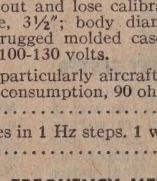
MODEL 34-FX. Range: 56-64 Hz, frequencies in 1 Hz steps. 1 watt, 110 ohms/volt.
826-5373. Shpg. wt., 12 oz.....33.45

JBT FG SERIES FREQUENCY METERS

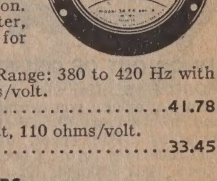
Modern-styled frequency meters designed to enhance any installation. 3½″ wide and 3″ high, designed for flush mounting. Specially designed to match most models of other manufacturer's meters.

Special design flexibility is provided by the use of a half-bezel adapter (listed in table at right) that acts as a "picture window" to outline a panel area 3.83x 2.27″ and effectively concentrate attention in the portion of the dial to be read. Permanently calibrated dials need no further adjustments.

High Q characteristics make them ideal for measuring frequency in electronic circuits. Retain high accuracy under almost all conditions, not affected by poor waveforms, external magnetic disturbances or line voltage fluctuations. Tightly sealed for long-life dependability. 100-130 VAC. Av. wt., 1 lb.



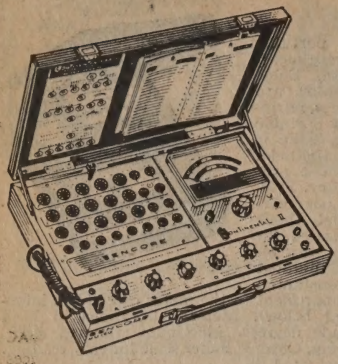
FG METER



PANEL MOUNT

Stock No.	Mfr's Type	No. of Reeds	Frequency Range, Hz	EACH
826-5301	30-FG-10	10	48-52, 58-62	37.89
826-5302	30-FG-18	18	46-54, 56-64	58.34
826-5323	31-FG-5	5	58-62	33.34
826-5324	31-FG-7	7	57-63	35.56
826-5370	34-FG-9	9	56-64	37.67
826-5364	34-FG-11	11	55-65	38.33
826-5365	34-FG-21	21	45-65	50.55
826-5001	13A-234	Half-Bezel Adapter		3.05

Sencore Test Equipment for Accurate Testing

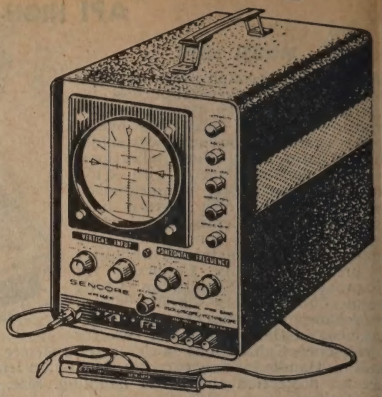


MUTUAL CONDUCTANCE TUBE TESTER

MODEL MU150. Dynamic mutual-conductance tester checks over 3000 foreign and domestic tubes. Provides a complete tube-quality test that includes cathode emission, mutual conductance, grid leakage, inter-element shorts, life. Tubes that won't perform are found quickly and positively. Every tube is checked for full rated cathode current, grid contamination through a 100-megohm leakage circuit, true mutual conductance with a 5000-Hz square wave, shorts between all tube elements with a stethoscopic test, intermittent operation and failure due to temperature sensitivity through a life test. Fast, easy test setups—so simple that new test setups can be made from any good tube manual before regular information is available. Vinyl-clad steel attache case, 17x11x14". With tube chart. AC.
949U2360. Shpg. wt. 20 lbs.....**269.50**

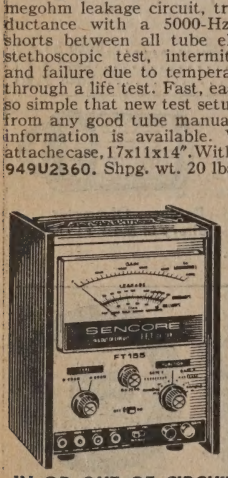
SWEEP AND MARKER GENERATOR

MODEL SM152. Solid-state generator with ultra-flat linear sweep covers all TV channels from 10 MHz to 920 MHz. Handles complete alignment of UHF tuner, VHF tuner, IF section, chroma bandpass. Any number of true post-injection markers can be pushbutton selected. Uses only three cables: RF in, detected signal out, and scope. Calibrated sweep-output variable from 10 μV to 0.1 volt. Sweep-width calibrated from 0.3 to 15 MHz. Six bands cover VHF, UHF, IF, including chroma for bandpass alignment. Special IF spot-align band for touching up and presetting IF adjustments before sweeping. Crystal-controlled markers for IF, chroma, FM-IF/bandwidth. RF video carrier markers for channels 4, 5, 10, 13, plus crystal-controlled sound and color reference markers. Two preset 3.58 MHz chroma outputs. Sweep-direction and response-curve polarity fully controllable. Big 10" dial. 13⅝x9½x5¾". With cables, pad, probes. AC.
949X2425. Shpg. wt. 17 lbs.....**450.00**



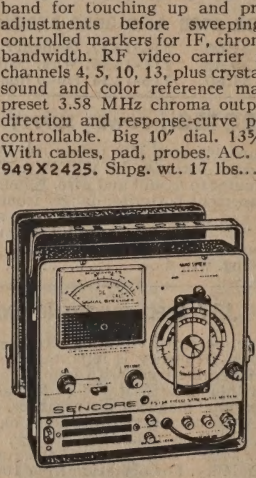
OSCILLOSCOPE/VECTORSCOPE

MODEL PS148. Combines a wideband oscilloscope with a professional vectorscope. Portable (only 22 lbs.) with 5" CRT makes it ideal for field, lab, production-line, or service applications. Converts instantly to vectorscope. Oscilloscope gives direct vertical p-p voltage readings from panel—measures exactly any voltage on display as easily as on a VTVM. Vertical bandwidth, 10 Hz to 5.2 MHz, ±1 dB. Rise time, 0.055 μsec. Vertical sensitivity, 0.017 Vrms/inch. Horizontal sweep, 5 Hz to 500 kHz in five overlapping ranges. Preset TV "H" and "V" sweep. Variable sync for precise control of complex waveforms. Input impedance, 27 megs shunted by 11 pF with built-in probe; 2.7 megs shunted by 107 pF with direct probe. Retrace blanking. Standby switch. 11x9x15½". Brushed chrome panel. AC.
949U2390. Shpg. wt. 22 lbs.....**269.50**



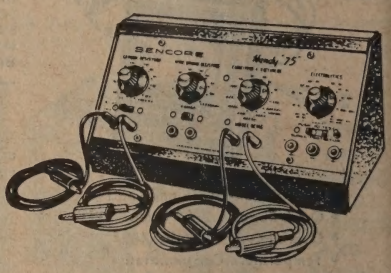
IN OR OUT OF CIRCUIT FET TESTER

MODEL FT155. Use with your present transistor tester and you can go all the way in any circuit. Tests all field-effect transistors, including MOS types, dual gates, new enchancement types. Checks transconductance, I_{g1ss} leakage, I_{g2ss} on dual gates. Special I_{dss} check for industrial culling of FET's. Book in rear compartment lists all FET's and over 12,000 regular transistors, providing universal information for your present tester. 9½x7½x6".
949X2345. Shpg. wt. 10 lbs.....**129.50**



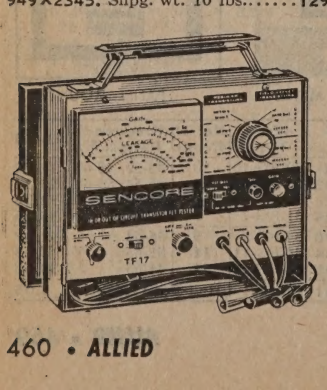
TV-FM FIELD-STRENGTH METER

MODEL FS134. UHF-VHF-FM, solid-state meter. Has 30-μV sensitivity. Calibrated 30-30,000 μV, (±3 dB on VHF-FM, ±6 dB on UHF), 0-60 dB. Built-in attenuators of 0, 20, and 40 dB (X1, X10, and X100). Big 4" 2%-accuracy meter. IF/image rejection over 50 dB on VHF, 30 dB on UHF. Input impedances of 75 and 300 ohms; built-in balun. Bandwidth 500 kHz. Speaker. 9x10x5". Uses 9 "C" batteries (not included).
949U2330. Shpg. wt. 9 lbs.....**229.50**



COMPONENT SUBSTITUTOR

MODEL RC146. Saves valuable servicing time and eliminates looking for exact components for substitution testing. Contains twelve 1-watt resistors from 10-5.6k ohms, twelve ½-watt resistors from 10k ohms to 5.6 megs, 20-watt resistors from 2.5-15k ohms, ten 600V capacitors from 100 pF to 0.5 μF, ten electrolytics from 2-250 μF at 450V, and universal selenium and silicon rectifiers. Surge protected. 10¼x4¾x4¾".
949X2400. Shpg. wt. 3½ lbs.....**69.95**

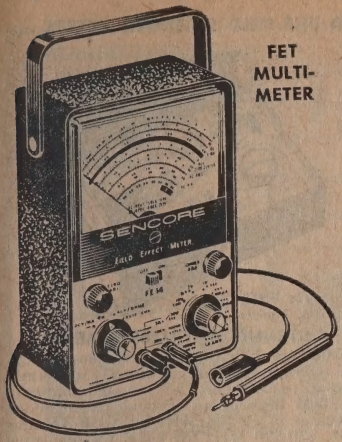


COMPACT IN-OR-OUT-OF-CIRCUIT TRANSISTOR AND FET TESTER

- **Tests Regular and Field-Effect Transistors Easily, Quickly, Accurately**
- **Rugged Construction and an All-Steel Case Let You Take Tester Anywhere**

MODEL TF17. Versatile tester is compact, lightweight, and reliable—makes servicing of solid-state equipment a breeze. Tests regular and field-effect transistors completely and accurately. Built for long, rugged service and the rigid requirements for servicing today's solid-state equipment. Makes all tests for thoroughly determining transistor condition. Tests FET's for true Gm gain in micromhos. Tests regular transistors for AC current gain in Beta. Checks leakage of FET's I_{GSS} and regular transistor's I_{CBO} in actual microamps. Has separate test for high-power transistors to pick out those troublesome output transistors requiring a heavy-duty test. Separate test for special RF transistors that may have been missed before. Special I_{DSS} current check for industrial culling and absolute matching of all FET's. Big 4½" meter. Vinyl-clad steel case, 9½x7¾x3¾". With manual. AC.
949X2450. Shpg. wt. 7 lbs.....**109.50**

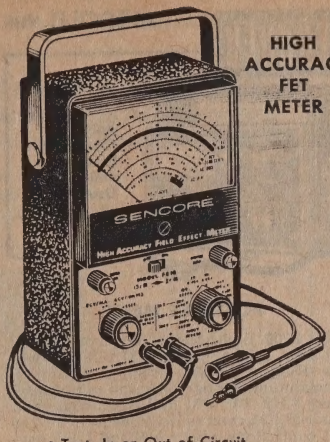
SENCORE Quality Test Instruments



FET MULTI-METER

- Instant stability—zero warm-up time
- Full protection—100 times AC overload
- Shielded input leads prevent RF pickup

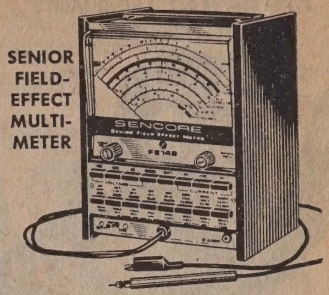
MODEL FE14. Combines the precision and accuracy of a VTVM with the compactness and portability of a VOM due to superior FET loading characteristics. Less circuit-loading than with a VTVM—15-meg input on DC, 10 meg on AC. FET's in differential circuit for zero warmup time, high stability. Accurate to within ±2.5% on DC ranges, to within ±4.5% over AC ranges. Mirrored, ½-V zero center scale. DCV/ACV rms: 0-1-3-10-30-100-300-1000. ACV p-p: 0-2.8-8.4-28-84-280-840-2800. Ohms: 0-1000-10k-100k, 0-100 meg. DC current, 0-100 μA, 0-1-10-100 mA, 1 A. 4½" meter. Built-in battery check. Leads, vinyl-clad steel case. Needs one 9V and "C" battery (not included). 7¼x5x3".
949-2314. Shpg. wt. 4 lbs.....**69.95**



HIGH ACCURACY FET METER

- Tests In or Out of Circuit
- Extremely Fine Accuracy
- VOM Portability, VTVM Precision

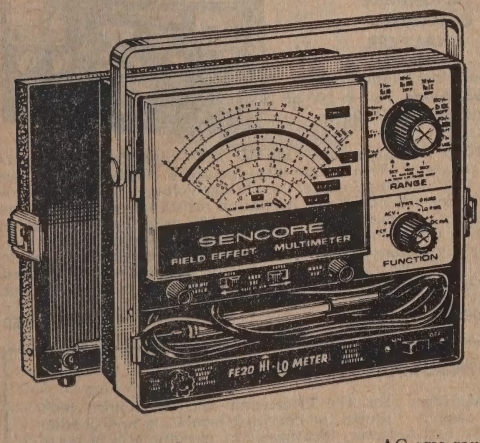
MODEL FE16. Accurately tests FET's in or out of circuit. Perfect for servicing black-and-white or color TV, hi-fi, etc., where many FET's are being used. Tests transistors, diodes, and rectifiers in their circuits without disconnecting a lead. Tests them just as reliably out of circuit. Accuracy over DC ranges to within ±1.5%, to ±3% on AC. 7 DC and AC voltage ranges from 1 to 1000 volts, AC peak-to-peak readings of 2800-volt maximum, with response of ±3 dB from 10 Hz to 10 MHz. 5 resistance ranges to 100 meg; 5 DC current ranges, 100 mA-1 A. 3 high voltage ranges: 3kV, 10kV, 30kV. 4½" high styled meter, special tilting metal handle. Steel case. Overall size, 5x7¾₁₆x3¹⁄₁₆".
949-2316. Shpg. wt. 4 lbs.....**84.50**



SENIOR FIELD-EFFECT MULTI-METER

- Simplified push-button operation
- 3-way power with instant stability
- Unmatched accuracy—1.5% DC, 3% AC

MODEL FE149. 99-range FEM produces negligible circuit loading—15 megohms on both AC and DC. Complete meter and circuit protection. Use this unit anywhere without waiting for warm-up or stabilization. Special ohms scale of 6 ohms center, .25-volt zero center for transistor servicing, and shielded input lead mean accurate measurements. Meter has 7" mirrored scale, built-in battery charging circuit, and battery checker. Eight DC ranges to 1500 volts. Eight AC ranges to 1500 volts rms, 4500 volts p-p. Eight resistance ranges to 6000 meg. Nine AC/DC current ranges to 5 amps. Vinyl-clad case. Size, 9x7½x6". Operates on rechargeable batteries or 105-130 VAC. Less batteries. High voltage probe increases 50, 150, and 500-volt DC ranges by a factor of 100. Increases DC input impedance to 1500 meg on all DC ranges. 9½x7½x6". Probe below.
949 U 2325. Shpg. wt. 7 lbs.....**169.50**
949-2326. Hi-Voltage Probe. 10 oz..**14.95**



NEW! HI-LO FIELD EFFECT MULTIMETER

- Minimum Loading, 15 meg Input Impedance on DC; 10 Meg on AC
- Great Versatility Use It Anywhere, Anytime
- Laboratory Accurate 1.5% on DC—3% on AC
- Probe to Extend Voltage Ranges to 3kV, 10kV, 30kV
- 30° Tilt Handle for Bench or Back-of-TV Work

MODEL FE20. A must for accurate measurements in solid-state circuits. You can use the versatile, readily portable unit any time of day, anywhere. Low voltage of .08 volts prevents transistors from conducting and misreading circuit . . . resistor will read properly. Also prevents transistor damage. High voltage of 1.5 volts causes semiconductors to conduct to read correct front-to-back ratio or conductivity of transistors. High-ohms reading essential for finding open circuits. Precision lab accuracy, ±1.5% on DC, ±3% on AC ranges. Input impedance: 15 meg on DC, 10 meg on AC. 9 DC voltage ranges from a tenth of a volt full scale to 1000 volts. 3 hi-voltage ranges of 3kV, 10kV, and 30kV. 9 DC zero center ranges from .05 volts to 500 volts . . . for delicate transistor bias measurements. 9 AC rms ranges from a tenth of a volt full scale to 1000 volts. 7 resistance ranges from 1000 ohms full scale to 1000 meg. 9 DC current ranges from 100 μA to 1 A. Complete battery test for long-life "C" cells and for the 1.5-volt ohms battery. Never worry about rundown batteries—push the switches under the meter and read. Protective cover automatically turns off the unit when shut so batteries do not run down when tester is not in use. Front panel ⅛ amp fuse protects ohms scale and milliamps scale if voltage or overload is accidentally applied. No factory repairs necessary . . just replace the fuse. High-voltage probe with 120k isolation resistor prevents AC pickup or circuit loading. Leave in normal position for most tests. 10x9¾x3½".
949-2320. Shpg. wt. 4 lbs.....**129.50**

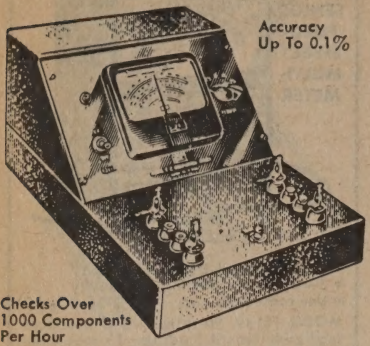
TRANSISTOR AND FET TESTER

- Checks AC Beta, Leakage
- Tests all Field Effect Transistors
- Large 6" Meter for high accuracy

MODEL FT151. In-or-out of circuit transistor and FET tester employs the proven signal injection method on transistors as on earlier models, but also tests all field effect transistors with a simple flip of the large function control. Checks transistors in or out of circuit for I_{CBO} leakage. Offers increased current check for high power transistors with high accuracy. Special test for critical RF transistors (GE9s, etc.) plus a true Gm mutual conductance test for all FET's. Also checks FET's out-of-circuit for I_{GSS} leakage. Provides special Gate 2 check for FET's with two gates, I_{DSS} (zero bias) current checks for matching or "culling;" positive bias test. Includes reference book with all necessary testing information. Size, 9½x7½x6".
949 X 2341. Shpg. wt. 9 lbs.....**129.50**

Test Equipment and Accessories

HATHAWAY LAB-QUALITY TEST BRIDGE



E-2 Comparison Bridge. For speedy and accurate value measuring, matching, and rejection of resistors, capacitors, and inductors. Extremely effective in labs and on assembly lines. Ease of operation permits even inexperienced, unskilled operators to obtain 0.1% accuracy (on the 1% range). Particularly valuable for "go, no-go" on-the-spot component matching. Checks over 1000 components per hour. Cream-colored enamel case. **SPECIFICATIONS: Comparison Range:** Resistance: 1 ohm to 5 megohms. Capacitance: 500 pF to 2000 μF. Inductance: 3 mH to 10,000 henrys. **Accuracy:** 1% Range, ±0.1%; 2.5% Range, ±0.25%; 5% Range, ±0.5%; 10% Range, ±1.0%; 25% Range, ±2.5%. Five ranges of full scale meter deflection: 1%, 2.5%, 5%, 10%, and 25% (eye resolution to 1 part in 10,000). **Bridge Input:** 6.3 V at 50-400 Hz. **Power Rating:** 20 watts (80-130 V at 50-400 Hz). 10x14x7".
809 U 1225. Shpg. wt. 15¾ lbs.....241.00

JERROLD® VHF AND UHF FIELD STRENGTH METERS

PORTABLE METER

MODEL 720B. Lightweight, battery-operated solid-state meter ideal for MATV applications. Rugged printed circuit construction for maximum compactness and portability. Covers VHF-TV, FM and commercial and industrial FM communications from 54-216 MHz continuous, plus wideband UHF coverage from 470-890 MHz continuous range.

Has 10-10,000 μV scale; —30 to 0 dB mV range; 3x20 dB and 1x6 dB attenuators for greatly increased operating versatility. Maximum meter ranges, 2 volts, +66 dB mV. Matched 75-ohm ("F") input provides low VSWR over entire range; input jack for headphone, oscilloscope or DC recorder. Four direct reading dB scales simplify calculations when 20 dB attenuator sequence is used. VSWR: VHF, 1.2:1 with one attenuator; 1.4:1 with no attenuator. UHF, 1.4:1 with one attenuator; 1.8:1, no attenuator.

Zero-control knob, battery test switch. Voltage regulating circuit operates on four 9-volt batteries. (Burgess 2MN6, Eveready 222, etc.). 8¼x4¼x2¼". "F" connector, crystal earphone, strap, batteries. 7 lbs.
829-3153.....425.00

ANTENNA INSTALLER'S METER

MODEL AIM-718. Lightweight, compact signal strength meter reads directly in dB mV and μV to show exact antenna requirements for best installation. Provides continuous coverage of 54-216 MHz for VHF-TV and FM, 470-890 MHz for UHF-TV. Features 75 or 300-ohm input with specially designed plug-in matching transformer supplied.

Two built-in 20 dB attenuators greatly increase μV and dB meter ranges. Reads: 50-2,000 μV basic scale; 500-20,000 μV with one attenuator; 5,000-200,000 μV with two attenuators. dB scales: VHF/UHF, —26 to 0 dB basic scale; —6 to +20 dB with one attenuator; VHF only, +14-40 dB with two attenuators. Accuracy: VHF, —3 dB; UHF, —6 dB. Sensitivity: 20 μV at 75 ohms; 40 μV at 300 ohms. Has 300-ohm receptacle; 4 spring terminals for Type "F" connector for 75-ohm use with transformer.

Rugged case with latching cover, special safety switch to turn off power when cover is closed. Operates on four 9-volt batteries (included). 9x6½x4". With audio output jack and crystal earphone. 4½ lbs.
829-3150.....232.50

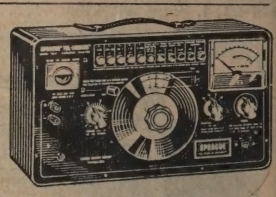
MUTRON INC. BMC CAPACITANCE SUBSTITUTION BOX

- 1 to 255 μF in Steps of 1 μF
- Accuracy of Up to 2%

Uses binary switching for greater range, more flexibility. High accuracy—lab measured values supplied with each box. Designed especially for use in development and precision testing of transistor circuits, the Binary Multiple Capacitance box uses high-quality electrolytic capacitors to achieve a range of 1 to 255 μF in steps of 1 μF. All these capacitors are rated at 50 WVDC. Tolerance in all switch positions is —10 to +30%. Using lab values supplied, accuracy to within 2% can be achieved. Sleek anodized case is permanently marked. Simple operating instructions are supplied. Case size is 9¾x3x3". Shpg. wt. 1¾ lbs.
895-9605.....38.70

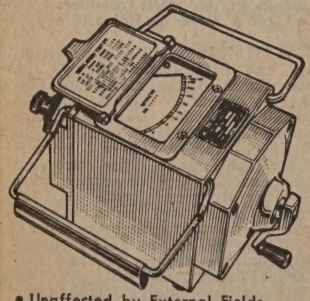
SPRAGUE TEL-OHMIKE CAPACITOR ANALYZER

- Extremely Low Bridge Voltage
- Low Cap. Range, 1 pF to 100 pF
- Tests Leakage up to 600 V



MODEL TO-6. For lab accurate checks of all capacitors. Five overlapping ranges of Wien bridge measure up to 2000 μF, with low-capacity 1 pF to 100 pF range. Low bridge voltage, 1.35 for electrolytics; 2.85 for others. Checks insulation resistance of paper, micas and ceramics in 2 ranges, 10k meg and 50k meg. Tests leakage at up to 600V, with leakage current in 4 ranges: 0-0.06-0.6-6-60 mA. Checks power factor to 50%. Also: overload protected meter; magic eye tube for bridge balancing; pushbutton range selectors. Rugged metal case with convenient carrying handle. 8⅞x14⅝x6⅛". For 110-120 V, 50-60 Hz AC. Wt. 16¾ lbs.
926 U 9000.....149.50

HITACHI INSULATION TESTERS



- Unaffected by External Fields
- Provides Accurate and Rapid Indications
- Sturdy Case Sealed Against Dust
- Compact and Lightweight for Portability

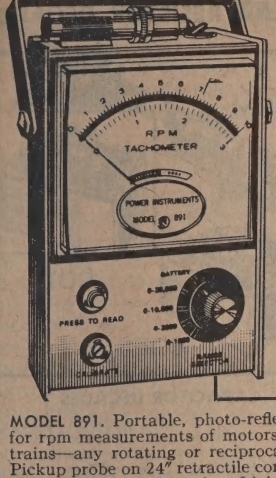
TYPE E17. Precision testers for measuring insulation resistance accurately and easily. Quickly locate intermittent shorts, bad electrical connections, insulation breakdown, conductor failures due to wear, moisture, abrasions, deterioration, corrosion, etc.

Insulation resistance is hand calibrated directly in megohms. Readout of insulation leakage from 5 ohms to 10,000 megohms. Cross-coil ohmmeter provides accurate readings, with automatic compensation for voltage and current variations. DC voltage outputs from 100 VDC to 2500 VDC.

Rigid construction (conforms with JISC-1301). Made of light alloy castings and special seals, protecting instrument against dust, moisture, vibration, shock, impact, and external magnetic fields. The design of this tester makes it an indispensable tool for the electrician and electronics technician for checking insulation and conductance, locating short circuits, etc. in both bench and field service operations.

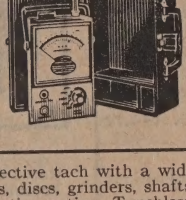
Stock No.	Mfr's Type	Voltage	Resistance	EACH
808-0502	E-17-02	100V	20 Megs	165.00
808-0504	E-17-04	250V	50 Megs	175.00
808-0506	E-17-06	500V	100 Megs	220.00
808-0507	E-17-07	500V	1000 Megs	225.00
808-0508	E-17-08	1000V	2000 Megs	275.00
808-0509	E-17-09	1000V	2000 Megs	275.00
808-0511	E-17-11	2000V	5000 Megs	350.00
808-0512	E-17-12	2500V	10,000 Megs	450.00
808-0513	E-17-13	500V/250V	100 Megs/50 Megs	300.00
808-0514	E-17-14	250V	50 Megs/10 Megs	300.00
808-0515	E-17-17		Leather Carrying Case/12-ft. Connector Leads	30.00

Professional-Quality Test Equipment



POWER INSTRUMENTS
PORTABLE BATTERY POWERED PHOTO-ELECTRONIC TACHOMETER

- Reads Low or High Speed
- Instant Field Calibration
- Direct-Reading Mirror Scale
- Silicon Photocell
- Solid-State
- Four Ranges



CARRYING CASE

Wood-covered with black simulated leather. Polyurethane foam inside. Metallic hinges, hardware. 4½x11x7⅜". 3 lbs.
889-6658.....15.00

MODEL 891. Portable, photo-reflective tach with a wide variety of applications for rpm measurements of motors, discs, grinders, shafts, turbines, engines, gear trains—any rotating or reciprocating action. Touchless to prevent torque loss. Pickup probe on 24" retractile cord contains lamp and high-speed response silicon photocell for speed sensing. Light is collimated and concentrated by lens at the end of probe. Ranges: 0-1000/3000/10,000/30,000 rpm. Accuracy, 1.5% of full scale. 4½x4⅛" clear-face dial with mirror-type scale for easy, accurate readings. Shockproof meter movement. Instant field calibration. Built-in battery test. Aluminum case, 7½x5⅛x2½". Shpg. wt., 4 lbs.
889-6650.....169.15

889-6659. Model 909. Same as above, but 0-10,000/30,000/100,000/300,000 rpm ranges. Shpg. wt., 4 lbs.....149.25

889 T 6662. Model 912. Same features and ranges as Model 891, but operates on 110-120 V, 50-60 Hz AC. Shpg. wt., 6 lbs.....200.69

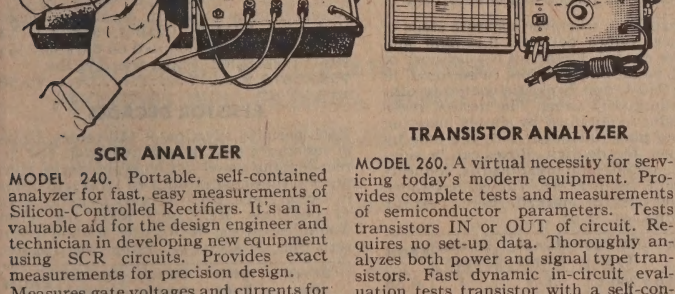
CALCOMP MODEL ACT-1
AUDIBLE CONTINUITY TESTER

- Eliminates Visual Check—Tone Shows Continuity
- Safe for Semiconductors and Delicate Circuits
- Low Voltage—No Danger of Inductive Kickback
- Short-Circuit Measurement Draws Only Six Milliamperes at Test Probes

Fully self-contained and portable audible continuity tester ideal for servicing radio, TV, hi-fi, intercom systems, other electronic equipment. Excellent for use on production lines also. Indicates circuit continuity with clear audible tone—eliminates need for visual checks. Pitch varies with resistance (0 to 50 ohms). Short-circuit measurement draws just 6 mA at probes. Safe for use even with semiconductors and other delicate circuits. Convenient 30" test probe leads. Uses single 9-volt battery. Overall size, 3¾x2¾x1⅜". Wt., 8½ oz.

759-0801. 1-9	Each 9.95	10-24	Each 8.25
25-99	Each 6.95	100-Up	Each 5.97

TESTERS FOR TUBES AND TRANSISTORS



SCR ANALYZER

MODEL 240. Portable, self-contained analyzer for fast, easy measurements of Silicon-Controlled Rectifiers. It's an invaluable aid for the design engineer and technician in developing new equipment using SCR circuits. Provides exact measurements for precision design.

Measures gate voltages and currents for matching and sorting to firing circuit requirements. Also permits accurate check of Peak Forward Voltage and Current as well as Peak Reverse Voltage and Current to pre-determine the proper SCR to use under various operating conditions. Provides facilities for matching of SCR's to particular voltage and current parameters, or sorting SCR's into matched pairs or threes to share the work load evenly in full-wave or three-phase rectifier applications. Has simultaneous two meter readout for precision voltage and current measurements.

Housed in durable, vinyl-covered carrying case with latching lid and handle. Insulated binding posts accommodate leads with either tip or banana plugs. Overall size, 10½x9x5". With detailed operating instructions. For 105-125 volts, 60 Hz AC. Shpg. wt., 8 lbs.
949X1450.....162.58

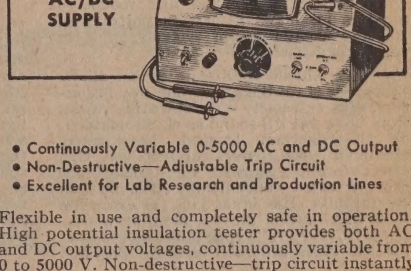
TRANSISTOR ANALYZER

MODEL 260. A virtual necessity for servicing today's modern equipment. Provides complete tests and measurements of semiconductor parameters. Tests transistors IN or OUT of circuit. Requires no set-up data. Thoroughly analyzes both power and signal type transistors. Fast dynamic in-circuit evaluation tests transistor with a self-contained oscillator circuit—gives fast "go-no-go" check. Dynamic test also lets you quickly identify NPN and PNP transistor types, in addition to lead connections. Out-of-circuit DC analysis is made by plugging transistor into universal speed-test socket mounted on front panel.

Test positions: Dynamic—for in-circuit testing; Beta—direct meter reading of DC gain; I_{ceo}—collector-to-emitter leakage; I_{ebo}—collector-to-base leakage. Dynamic test oscillator frequency, approximately 7 kHz. All test voltages are zener regulated.

Analyzer is mounted in a durable vinyl-covered carrying case. Has internally connected, insulated alligator-clip leads. Size, 8¾x7⅜x4¼". Complete with detailed operating instructions. For 105-125 volts, 50-60 Hz AC. Shpg. wt., 5 lbs.
949-1460.....74.26

MILWAUKEE ELECTRONIC INSULATION TESTERS



- Continuously Variable 0-5000 AC and DC Output
- Non-Destructive—Adjustable Trip Circuit
- Excellent for Lab Research and Production Lines

Flexible in use and completely safe in operation. High potential insulation tester provides both AC and DC output voltages, continuously variable from 0 to 5000 V. Non-destructive—trip circuit instantly de-energizes high voltage transformer when leakage current exceeds preset limits.

Current trip-out is adjustable in three ranges with adjustment tolerance ±10%. Highest sensitivity range, up to 1 mA. Maximum current, AC or DC, 5 mA. AC and DC voltages not to be used simultaneously. 4" meter reads rms voltage applied (±3%).

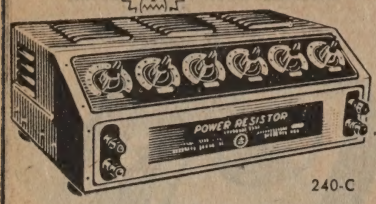
"HV On" and "Fault" lights plus reset button are provided. Safety features include: grounded metal case; high leakage transformer to limit max. current; one side of HV grounded; fused primary; 3-wire cord and plug. In convenient sloping panel case with carrying handle. With 6' leads. For 115 V, 50-60 Hz AC. 8¼x8¾x10½". Wt., 25 lbs.
859 U 5911.....324.60

MODEL ME-5KV—AC POTENTIAL

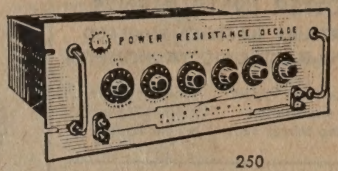
Similar to ME-5KVAD above but provides only AC. Max. leakage current 10 mA; high sensitivity 1 mA; low sensitivity, adj. 5 to 10 mA. 8¼x8¾x10½". 6' leads. 115 v., 50-60 Hz AC.
859 U 5910. Shpg. wt., 19 lbs.....263.38

Decade Boxes, Soundmeter, Scope Probe

RESISTOR DECADE BOXES



240-C



250

MODEL 240-C BENCH TYPE RESISTOR DECADE

Allows selection of any value from 1 to 999,999 ohms in 1-ohm increments. Six dials read Rx1, Rx10, Rx100, Rx1k, Rx10k and Rx100k for quick setting and direct readout. Dissipates up to 225 W; maximum, 1000 V DC, or 660 V AC per decade. All have 2% tolerance except Rx1 decade, 5%. Maximum current ratings range from 5 amps for Rx1 to 5 mA for Rx100k. Rugged, long-lasting Clarostat "Greenohm" wirewound power resistors used throughout. Two sets of terminals accept any of the following: banana plugs, spade lugs or plain wire connections. 8½x13x5¾". Wt., 13¾ lbs.

753-7840 ..... **144.72**

MODEL 250 RACK-PANEL TYPE RESISTOR DECADE

Electrically identical to 240-C, but mechanically rearranged to fit std. 19" relay rack panel. Size, 13¼x19x7". For use in systems or other non-bench applications. Wt., 24¼ lbs.

753U7850 ..... **197.00**

SCOTT
MODEL 450B SOUNDMETER

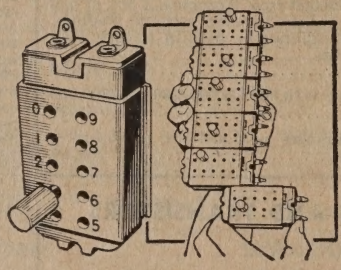
- Measures Sound Level, Response and Dispersion
- Transistorized and Battery-Operated
- Wide Operating Range, 26-141 dB

Pocket-size transistorized sound-level-meter, has a wide variety of applications. Can be used to survey noisy areas for possible ear damage, to estimate frequency response characteristics of speakers and rooms, to measure level and dispersion patterns of PA and theater sound systems, and for classroom acoustic experiments.

Compact, silicon solid-state design allows thousands of readings from one 30-volt battery. Has extremely wide operating range: from 26 to 141 dB sound level. Standard A, B, C weighting. Rugged, heavy-gauge aluminum case, perfect for field use. Has direct-reading scale with step-type attenuator or extra convenience. Also, built-in crystal mike. Has input jack for extension mike or vibration pickup, monitoring output jack, and 2½" 2-speed taut-band meter for the most accurate readings possible.

Completely non-microphonic—no spurious readings. Calibrates on 110-120° volt AC. Convenient battery check button. Uses Burgess U-20, Eveready 413, or equivalent 30-volt battery. Measures 6x3x2". Accessories include leather carrying case and safety wrist strap. Shpg. wt. 4 lbs.

949-1150 ..... **237.50**



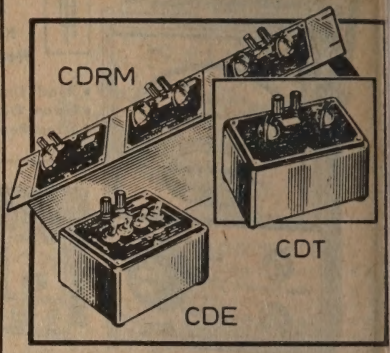
CLAROSTAT DECADE BOXES

- Provide Precision Resistance Values for a Wide Variety of Applications
- Easy-to-Join Tongue and Groove Units

Use Claro-Decs wherever accurate steps of resistance values between 0.1 ohm and 900K are needed. Each unit is a network of five 1% metal film-resistors (wirewound in Models 260-1, 260-2, plastic coated in others) graduated in value. The desired resistance value is obtained by simply inserting a banana plug (included) into the hole by the proper decade digit. Boxes can be side-stacked, mounted on breadboards, connected by wire jumper, etc. Values, resistance multiplier clearly marked. Size, 1½x⅞x 2¾". Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Range Ohms	Ohms/ Step	EACH
753-7860	260-1	.1-.9	.1	4.38
753-7861	260-2	1-9	1	4.38
753-7862	260-3	10-90	10	4.38
753-7863	260-4	100-900	100	4.38
753-7864	260-5	1000-9000	1k	4.38
753-7865	260-6	10k-90k	10k	4.38
753-7866	260-7	100k-900k	100k	4.38

CDE CAPACITOR AND RESISTOR DECADES



CAPACITOR DECADES

Rated at 600 volts DC, and 220 volts AC. Provide a reliable and accurate source of selected, precision values for breadboarding and substitution. Three different boxes, CDA-2, CDB-3 and CDC-3, can be easily paralleled to provide capacitances of 0 to 1.111 in 0.0001-μF steps. CDA-2 has a mica dielectric, others are oil-impregnated. CDT-5/10 is polarized tantalum foil, provides an extended range of values. Last figure in Mfr's Type No. indicates ±% tol. Each has chart giving exact value for all scale markings. *Indicates Aluminum Electrolytic Capacitor substitution box. 3 13/16x5x3 5/8". 2 lbs.

Stock No.	Mfr's Type	Range μF	μF/ Step	EACH
755-0601	CDA-2	.0001-.011	.0001	17.50
755-0604	CDB-3	.01-1.1	.01	19.75
755-0608	CDC-3	1.0-10	1.0	32.45
755-0613	CDE*	10-150	10.0	19.46
755-0618	CDT-5/10	10-1100	10.0	107.09

CDRM RACK-PANEL CAPACITOR DECADES

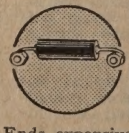
A combination capacitor decade unit consisting of CDA-2, CDB-3, and CDC-3 (described above) mounted on durable 3½x 19x4" rack panel. Shpg. wt., 7¼ lbs.

755X0616 ..... **90.50**

RESISTOR DECADES

Each permits selection of 110 values. Units of resistance may be selected from the direct-reading panel switch scale. Series connected, they cover from 1 to 1,111,110 ohms in 1-ohm steps. Have 2 rotary switches with 11 positions. RDA and RDB use wirewound resistors; RDC uses carbon resistors. Size, 3 13/16x5x3 5/8". Shpg. wt., 1¾ lbs.

Stock No.	Mfr's Type	Range Ohms	Ohms/ Step	EACH
755-3630	RDA	1-110	1	22.70
755-3633	RDB	100-11,000	100	25.03
755-3636	RDC	10,000-1,100,000	10,000	22.49

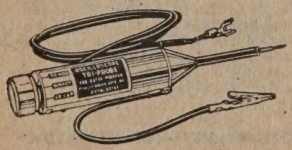


Metergard

Prevents Bent Pointers and Damaged Pivots, Due to Overloads

Ends expensive meter repairs. No larger than a paper capacitor. Metergard wires across any meter from 25μA to 25mA to protect against overloads of up to 10,000%. Will not change accuracy of meter. Shpg. wt., ¼ oz.

849-4002. 1-9 ..... Each 2.95
10-49 .... Each 2.60 50-99 ..... Each 2.39
100-249 .. Each 2.19 250-Up ..... Each 1.95



OSCILLOSCOPE TRI-PROBE
By ROLLERT INDUSTRIES

- Demodulation/Direct/Low-Cap Probe
- Operating Range, 0-250 Megahertz
- Adjusts for Various Input Ohms

This single-knob-operated probe ends bothersome switching. Just dial the section you need: Demodulation—traces waveforms in RF and IF stages; Direct—tests low frequency and low impedance circuits. Low-capacity—traces high imp. circuits, reduces distortion. Needle-point pierces light insulation for easy testing. With leads. 12x3x 3¼". Shpg. wt., 1 lb.

909-4400 ..... **33.28**

Make Allied Electronics Your Headquarters for Quality Test Equipment

Micronta® Test Equipment for Value and Performance

TRANSISTORIZED SIGNAL TRACER . . HANDY SERVICE TESTER CHECKS RF, IF, AUDIO SIGNALS FROM ANTENNA TO SPEAKER TO SPOT TROUBLES QUICKLY

8.95

- Find Trouble by Checking Signal Stage by Stage
- For Hobbyists, Do-it-yourselfers, Servicemen
- Unit Is Fully Assembled and Ready-to-use

Model 22-010. Signal tracer troubleshoots electronic equipment in the most basic way possible, by determining the manner in which the signal passing through the radio receiver, amplifier or other equipment is handled by the various circuits. If any stage or circuit mishandles the signal, creates distortion, fails to amplify, or attenuates the signal, it will be found easily by the signal-tracing method. Can be used to signal trace many types of electronic equipment including radios, amplifiers, tuners, hi-fi receivers, record players, Citizens Band transceivers and microphones. Easy for anyone with basic electrical knowledge to use. The signal tracer has a built-in 2" speaker to give an audible test indication and an adjustable volume control. Comes complete with 9-volt battery, test leads and complete instructions. Size, 11½x5⅝x2".
910-4510. Shpg. wt. 1 lb. **8.95**

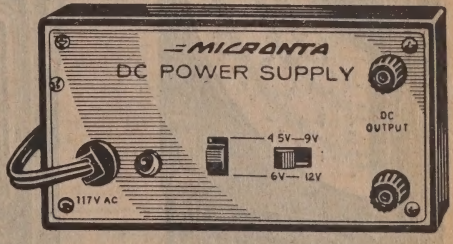
3½" DWELL TACHOMETER HELPS TUNE UP ANY CAR WHETHER IT HAS A 4, 6, OR 8 CYLINDER ENGINE

16.95

- Set Carburetor for Best Efficiency and Gas Economy
- Adjust Points With Distributor Cap Off, Engine Running
- Locate Correct Point-Gap Setting • Find Bad Spark Plugs

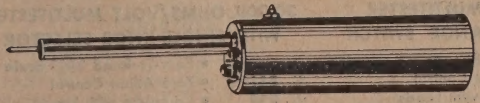
Model 22-1630. Make tests on your car engine that will save you time, money and perhaps prevent a breakdown in engine operation. Enables you to precisely adjust points, especially those that are slightly worn or pitted. Helps you find the best point setting without removing the distributor cap. Set points on "Window" distributors with the engine running. Adjust the carburetor to the car manufacturer's recommendations, to insure maximum gas economy and a quiet running engine. Locate a bad spark plug quickly. Make correct engine-rpm setting, necessary for proper operation; cars with automatic transmission must have correct rpm to maintain right fluid pressure in transmission. Rpm scale, 0-30; 8-cyclinder dwell, 5-45°; 6-cylinder dwell, 20-40°. 6¼x3¾x2".
910-4730. Shpg. wt. 2 lbs. **16.95**

SWITCHABLE SOLID-STATE POWER SUPPLY PROVIDES WELL-FILTERED, HIGHLY STABLE DC



Model 22-008. Transformer DC supply for 4.5, 6, 9 and 12 volts at up to 140 mA. Invaluable for repair operations or experimentation. Its output is well-filtered DC that can be used instead of batteries to operate many types of equipment. It is extremely useful for transistor radios or in the repair of any solid-state equipment needing low voltage. Desired voltage selected by front-panel slide switches. Has binding posts, pilot light. 5½x2⅝x2⅜". AC.
910-4508. Shpg. wt. 1¼ lbs. **7.95**

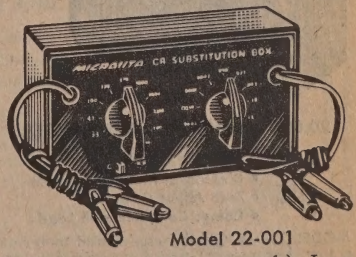
HAND-HELD SOLID-STATE SIGNAL-GENERATOR/PROBE/INJECTOR



Model 22-4032. Handiest little tester you may ever own—all-purpose signal generator with built-in signal-injection probe for quick, easy tube or transistor-circuit troubleshooting. Produces signals for tracing in AF, IF, and RF circuits. Pushbutton operation. Battery-strength indicator lamp. 5x1⅝" (less probe). Batts.
910-4382. Shpg. wt. ½ lb. **3.49**

RESISTANCE-CAPACITANCE SUBSTITUTION BOX

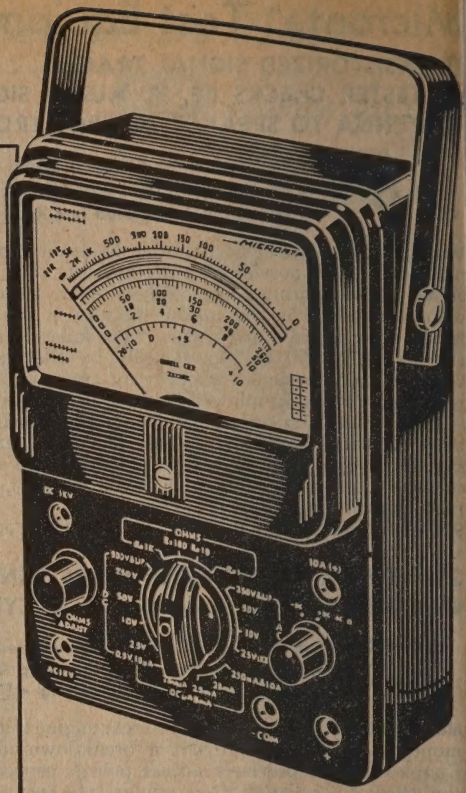
- 24 Resistor Values
- 9 Capacitor Values
- Switch Selected



Model 22-001

Resistance values in two ranges (12 steps each): Low, 15 to 10,000 ohms; High, 15,000 ohms to 10 megohms. Capacitance ranges: .0001, .0010, .0022, .0047, .010, .022, .047, .10, .22 μF. 5⅛x2¾x1¾". Comes complete with two sets of leads.
910-4501. Shpg. wt. 1 lb. **4.95**

Micronta Precision-Crafted Multitesters For Accuracy



100,000 OHMS-PER-VOLT SENSITIVITY MULTITESTER FEATURES 27 RANGES AND MIRRORED SCALE

29.95

- 100,000 Ohms-Per-Volt Sensitivity
- Boasts 27 Ranges For All Types of Tests
- Mirrored Scale For Accurate Readings

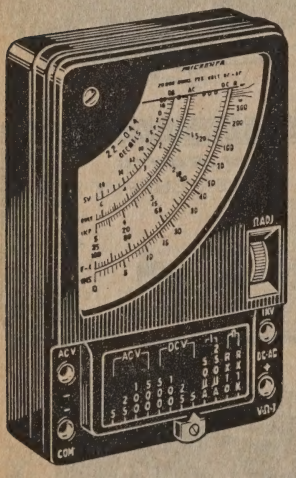
MODEL 22-152. Here is one of the finest portable as well as bench multimeters available today at this low, low price. Designed for any shop or field application, this compact, precision engineered instrument enables you to do quicker and more accurate testing in a wide variety of current, voltage and resistance ranges. Boasts double-jeweled 4" D'Arsonval movement meter with ±2% accuracy. Overload protection is provided by a matched pair of silicon diodes in a specially designed circuit to prevent accidental burnout. Sensitive 100,000 ohms-per-volt DC scale for professional accuracy. Use indoors on test bench with built-in AC power supply, or flip switch and use in the field with self contained batteries. Large, easy-to-read mirrored scale assures error-free measurements.

Ranges: DC Volts, 0-500 mV, 0-2.5-10-50-250-500-1000 volts at 100,000 ohms per volt sensitivity; AC Volts, 0-2.5-10-50-250-1000 volts at 12,500 ohms per volt sensitivity; DC Current, 0-10-25 μA, 0-2.5-25-250 mA, 0-10 A; Resistance, 0-20k, 200k ohms, 0-2-20 megohms; Decibels, −20 to +62 in 5 ranges. Zero-adjust control calibrates for any scale quickly and accurately—also compensates for changes in battery condition. Large, easy-to-read selector switch instantly lets you choose proper function and scale.

Folding easy-carry handle provides excellent grip for portable uses, folds back out of sight for use in the shop. Convenient battery storage compartment assures you of always having a fresh power supply on hand. Precision crafted to give years of reliable service. Unit comes complete with test leads, batteries and instructions. Size, 7x5¼x3¼". Order optional leather carrying case below.

910-4651. Shpg. wt. 6 lbs.....29.95
910-4652. Model 22-151 Leather Carrying Case. Shpg. wt. 8 oz.....3.95

PRECISION ECONOMY MULTITESTERS BY MICRONTA



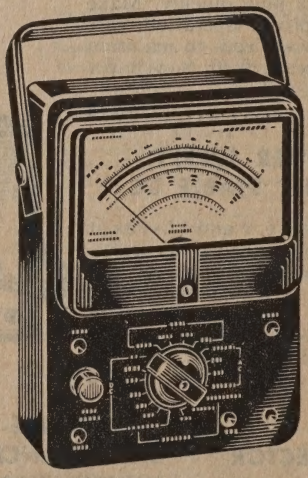
20,000 OHMS/VOLT MULTITESTER WITH TWO-COLOR SCALE

9.95

- D'Arsonval Meter Movement
- Zero Adjust Control
- Comes Complete with Leads

MODEL 22-044. Quality-engineered meter at a low, low price. Great for experimenters, hobbyists. Ranges: DC Volts, 0-5-25-100-500-1000; Current, 0-50 μA, 0-250 mA; Resistance, X10, X1000; dB, −20 to +16. Accuracy; DC, ±2%; AC, ±4%. 3x4x1¾". Complete with batteries, leads, instructions.

910-4544. Shpg. wt. 2 lbs.....9.95
910-4545. Model 22-045 Leather Case. Shpg. wt. 6 oz.....1.95



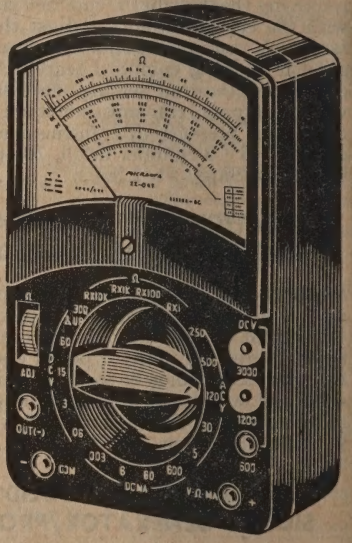
20,000 OHMS/VOLT MULTITESTER WITH SINGLE-KNOB RANGE SWITCH

14.95

- Boasts 28 Ranges
- Zero Adjust Control
- Complete with Leads

MODEL 22-022. Precision multitester boasts 28 ranges. DC Volts, 0-5-15-60-300-600-1200; AC Volts, 0-6-30-120-600-1200 at 10k ohms/volt; DC Current, 0-60 μA, 0-3-30-300 mA; Resistance, 0-12k-120k ohms, 0-1.2-12 megs (CS, 60, 600, 6k, 60k); dB, −20 to +63. 3¾x5⅜x1¼". Complete with batteries, leads, instructions.

910-4522. Shpg. wt. 2 lbs.....14.95
910-4521. Model 22-021 Case. 6 oz.....1.95



30,000 OHMS/VOLT MULTITESTER WITH SINGLE-KNOB SELECTOR

18.95

- Easy-To-Read 3½" Scale
- Zero Adjust Control
- Complete with Leads

MODEL 22-049. Boasts large 3½" meter. Ranges: DC Volts, 0-0.6-3-15-60-300-600-1200; AC Volts, 0-6-30-120-600-1200; Resistance, X1, X100, X1000, X10k; Current, 0-0.03-6-60-600 mA; dB, −20 to +63 in 5 ranges. Comes complete with batteries, leads and instructions. Size, 5⅜x4x2".

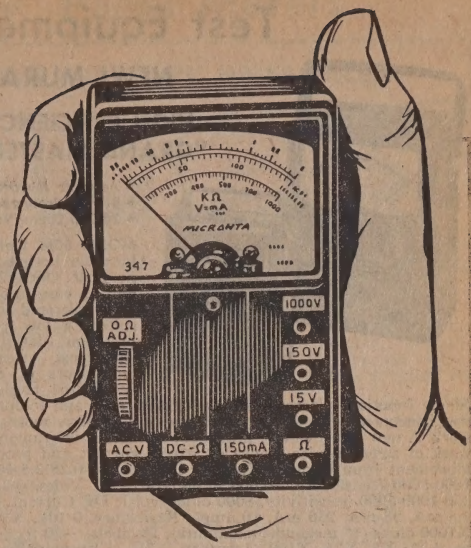
910-4549. Shpg. wt. 2 lbs.....18.95
910-4550. Model 22-050 Leather case. Shpg. wt. 6 oz.....2.49

Micronta Quality Crafted Precision Test Equipment

1000 OHMS/VOLT POCKET AC/DC MULTITESTER FOR HOBBYISTS AND DO-IT-YOURSELFERS

5.95

- Ultra Compact . . Only 3½x2⅛x1″
- Thumb Set Zero Adjust Control
- Pin Jacks for All Five Ranges

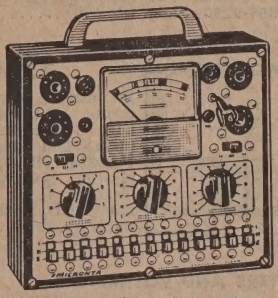


MODEL 22-4027. Keep one of these handy little multitesters in your home or workshop. Ideal for experimenters, do-it-yourselfers, hobbyists, etc. Measures AC volts, DC volts, current and resistance. Features pin-type jacks for all ranges. Two-color 1¾″ meter scale for quick, effortless and accurate readings. Ranges: AC Volts, 0-15-150-1000; DC Volts, 0-15-150-1000; DC Current 0-150 mA; Resistance, 0-100,000 ohms. Accuracy is ±3% of full scale on DC ranges; ±4% of full scale value on AC ranges. Convenient zero-adjust control assures precision readings on all scales—also helps compensate for changes in battery condition. Ultra-compact palm-size unit easily fits in your hand, pocket, etc., for quick and efficient testing in the field. Comes complete with a pair of test leads, battery and instructions. Enclosed in a rugged, hi-impact black bakelite case. Size, 3½x2⅛x1″. Take one with you where ever you go and be prepared for instant and accurate electronic repairs.
910-4827. Shpg. wt. 1 lb. **5.95**

COMPACT GENERAL-PURPOSE TUBE TESTER FOR PORTABLE OR BENCH OPERATION

39.95

- Tests Over 1500 Types
- Color-Scale Meter
- D'Arsonval Movement Double-Jeweled Meter
- For Portable or Bench Operation
- Large Tube Data Chart
- Compact and Reliable

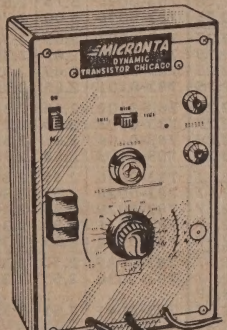


MODEL 22-012. Tests more than 1500 tube types for emission, shorts, leakage, filament continuity. Checks 7 and 9 pin miniatures, octals, loctals, standard 10-pin, compactrons, nuvistors and novars. Meter shows condition on 2-color scale. 8⅜x7¼x8⅜″. AC.
910-4512. Shpg. wt. 4 lbs. **39.95**

DYNAMIC TRANSISTOR CHECKER

9.95

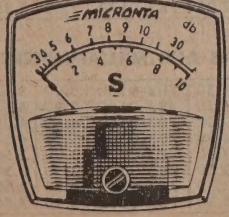
- Go/No-Go Tests
- Quick, Reliable
- Tests In Circuit



MODEL 22-024. Handy test instrument shows open and short circuits, current gain. Tests all low, medium and high power transistor types in or out of circuit. Quick-check front panel allows fast, sure testing. Supplied with clip-leads. Tests both PNP and NPN transistor types, also diode. Ideal for experimenters, hobbyists, do-it-yourselfers and radio-TV servicemen. Size, 6¼x3x2½″. Get one today!
910-4524. Shpg. wt. 2 lbs. **9.95**

MINIATURE PANEL METERS

Ideal for experimenters and hobbyists. Boast better than 2% accuracy. Available in AC volts, microamps, milliamps, as well as "VU" and "S" meter functions. Modernly designed scales are easy-to-read. 1¹³⁄₁₆x1⅛x1½″. Require 1⁹⁄₁₆″ hole. Shpg. wt. 8 oz. Order desired movement below.

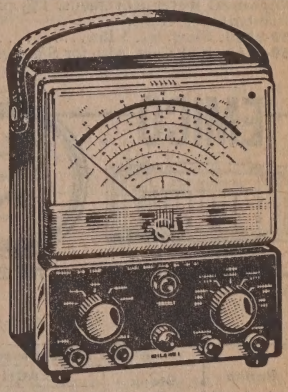


910-4516. 22-016. 0-150 VAC . . . **2.98**
910-4517. 22-017. 0-50 μV **4.95**
910-4518. 0-1 DC mA **2.98**
910-4519. 22-019. VU, −20 to +3 (0-100%) **3.95**
910-4520. 22-020. Sgl. Strength . . **2.98**

PRECISION 6½″ VACUUM TUBE VOLTMETER

39.95

- Mirrored Scale
- Peak-to-Peak and rms Voltages
- 200 μA Meter

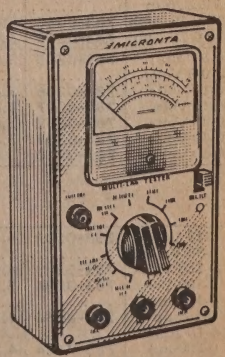


MODEL 22-025. Allows accurate measurements in critical circuits. Ranges: DC Volts, 0.1 to 1500 in 7 ranges; AC Volts (rms) 0.1 to 1500 in 7 ranges, (peak-to-peak) 4-4000 volts in 7 ranges; Resistance, 0.2 ohms to 1000 megohms in 7 ranges; Decibels, −20 to +65 in 7 ranges. Boasts direct reading measurements on all scales. Mirrored scale provides quick sure readings at a glance—eliminates parallax. Zero-center scale for alignment of FM circuits. 1% multiplier resistors used throughout for precision measurements. Meter is diode-protected against burnout; 200 μA movement. Zero-adjust control assures accurate readings for each scale. Easy-grip carrying handle, high-impact case. Vacuum tube voltmeter comes complete with all leads and instructions. For 117 V., 60 Hz AC.
910-4525. Shpg. wt. 7 lbs. **39.95**

7-IN-1 TESTER OFFERS FEATURES MOST NEEDED FOR RADIO AND TELEVISION SERVICING

13.95

- RF Generator
- AF Generator
- Built-in FSM



MODEL 22-009. Here's one of the most versatile test instruments ever designed. Get 7 indispensable units in one handy model, at one low price. Ideal for hobbyists, experimenters, servicemen. Measures AC volts, DC volts, 0-15-50-150-500; resistance, 0-100-1k-10k-100k ohms, 1 meg; capacitance, 0.002-0.005-0.02-0.01-10μF. Has built in RF field-strength meter, 1-140 MHz. RF generator produces 455 kHz signal for alignment uses. AF generator produces pure 400 Hz audio signal. Large, easy-to-read meter. One switch selection of 7 functions. Pin-type terminals for quick and easy lead termination. Size, 6¼x3¾x2½″.
910-4509. Wt. 2 lbs. **13.95**

Test Equipment and Panel Meters

NEW! MURA PRECISION MULTITESTERS

HIGH EFFICIENCY "GRAND MASTER"

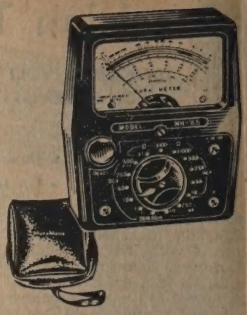
- Accurate Mirrored Scale
- Burnout-Protected
- 20,000 Ohms/Volt DC

MODEL 80M. Deluxe unit ideal for both bench and field use. Offers 26 ranges and an easy-to-read two-color mirrored scale. Despite its low price, its precision design meets the most exacting requirements of the professional technician. Single function selector makes operation easy and foolproof, lets you concentrate on circuit testing and do faster, more accurate work. A new safety device prevents overloading instrument; a network of safety diodes blocks off excess current and protects the movement from burnout. Ranges: DC Volts, 0-0.25-2.5-10-50-250-1000-5000 (sensitivity, 20,000 ohms/volt); AC Volts, 0-2.5-10-50-250-1000-5000 (sensitivity, 8000 ohms/volt); DC Current, 0-50 μA, 2.5 mA, 25 mA, 250 mA, 10 amps; Resistance, 0-10k, X10, X100, X1000 ohms (10 megohms maximum); Decibels, −20 to +10, −10 to +22: X5, X25, X100. Accuracy ±2%. Ultrasensitive 0.44-μA D'Arsonval meter movement. 1% precision resistors. 7x5¼x3½". With batteries, leads.

859-9580. Shpg. wt. 5 lbs..... 29.95

859-9169. H-8P Case. Also for Simpson 260, Micronta 22-150.. 7.95

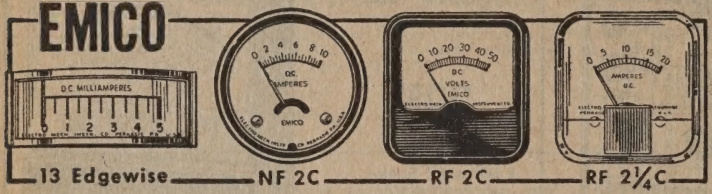
LOW-PRICED PRECISION COMPACT



- Single Function Switch
- Nonconductive Molded Case
- Diode Overload Protection

MODEL NH-65. Sensitive unit is small in size, but delivers big-tester performance. Ruggedly constructed for hard usage on the bench or in the field. Big multicolored mirrored scale is easy to read and gives a high degree of reading accuracy. Special diode circuit protects meter against burnout or damage. Ultra-low voltage and current ranges lets you do accurate transistor work, check relay circuits, measure voltage drop across low resistances, and test other circuits with low voltages. Even its shape is designed to make your work easier—it is double-wedge shaped to fit your hand. Has 20,000 ohms/volt DC sensitivity for more accurate measurements. 21 ranges: DC Volts, 0-0.25-1-10-50-250-500-1000; AC Volts, 0-10-50-250-500 (sensitivity, 8000 ohms/volt); DC Current, 0-50 μA, 10 mA, 250 mA; Resistance, 0-5k, X100, X1000 ohms (5 megohms maximum); Decibels, −10 to +22: X5, X25, X50. Has ultra-sensitive 0.44-μA D'Arsonval meter movement; 50 μA, ¼-VDC full-scale deflection. 1% precision resistors. Comes complete with NH-2P simulated leather pouch with handle, zipper; batteries, leads.

859-9290. Shpg. wt. 2 lbs..... 14.95



5% PANEL METERS

DC meters have "HI TORK" magnetic movements. AC units are moving iron-vane type. All have 5% accuracy. Calibrated in steel cases. Sizes (depth and flange): NF-2C, 1¼x2¼"; RF-2C, 1⅝x2¼"; RF-2¼C, 1⅝x2⅝"; Model 13 (all plastic), ¾x1⅓x2⅛". *Indicates unbreakable plexiglas front. Have screw-terminal binding posts and/or solder lugs. Complete with hardware. Av. shpg. wt. 9 oz.

DC MILLIAMMETERS, AMMETERS AND VOLTMETERS

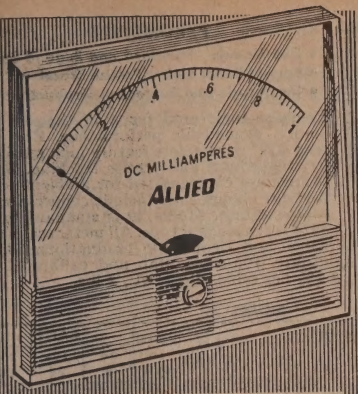
Range	Model 13 Edgewise				Model NF-2C				Model RF-2C				*Model RF-2¼C			
	Stock No.	EACH 1-24	25-49	50-99	Stock No.	EACH 1-24	25-49	50-99	Stock No.	EACH 1-24	25-49	50-99	Stock No.	EACH 1-24	25-49	50-99
0-1 mA	783-0125	4.25	3.82	3.61	783-0075	4.25	3.82	3.61	783-0093	4.25	3.82	3.61	783-0111	4.45	4.00	3.78
0-5 mA	783-0126	3.40	3.06	2.90	783-0077	3.15	2.83	2.68	783-0095	3.15	2.83	2.68	783-0113	3.60	2.97	2.80
0-10 mA	783-0127	3.25	2.92	2.75	783-0078	3.00	2.70	2.55	783-0096	3.00	2.70	2.55	783-0114	3.15	2.83	2.68
0-20 mA	783-0128	3.00	2.70	2.55	783-0079	2.65	2.35	2.25	783-0097	2.65	2.35	2.25	783-0115	2.90	2.60	2.46
0-30 mA	.....	.....	.....	.....	783-0081	2.65	2.35	2.25	783-0099	2.65	2.35	2.25	.....	.....	.....	.....
0-50 mA	783-0130	3.00	2.70	2.55	783-0082	2.65	2.35	2.25	783-0100	2.65	2.35	2.25	783-0117	2.90	2.60	2.46
0-100 mA	783-0131	3.00	2.70	2.55	783-0083	2.65	2.35	2.25	783-0101	2.65	2.35	2.25	783-0118	2.90	2.60	2.46
0-150 mA	783-0132	3.00	2.70	2.55	783-0084	2.65	2.35	2.25	783-0102	2.65	2.35	2.25	783-0120	2.90	2.60	2.46
0-200 mA	783-0133	3.00	2.70	2.55	783-0085	2.65	2.35	2.25	783-0103	2.65	2.35	2.25	783-0121	2.90	2.60	2.46
0-300 mA	783-0134	3.00	2.70	2.55	783-0086	2.65	2.35	2.25	783-0104	2.65	2.35	2.25	783-0122	2.90	2.60	2.46
0-500 mA	783-0135	3.00	2.70	2.55	783-0087	2.65	2.35	2.25	783-0105	2.65	2.35	2.25	783-0123	2.90	2.60	2.46
0-1 Amp	.....	.....	.....	.....	783-0005	2.55	2.30	2.17	783-0026	2.55	2.30	2.17	783-0047	3.00	2.70	2.55
0-5 Amp	.....	.....	.....	.....	783-0007	2.55	2.30	2.17	783-0028	2.55	2.30	2.17	783-0049	3.00	2.70	2.55
0-10 Amp	783-0065	3.00	2.70	2.55	783-0008	2.55	2.30	2.17	783-0029	2.55	2.30	2.17	783-0050	3.00	2.70	2.55
0-15 Amp	783-0066	3.00	2.70	2.55	783-0009	2.55	2.30	2.17	783-0031	2.55	2.30	2.17	783-0051	3.00	2.70	2.55
0-25 Amp	.....	.....	.....	.....	783-0011	2.55	2.30	2.17	783-0032	2.55	2.30	2.17	783-0053	3.00	2.70	2.55
0-30 Amp	783-0067	3.00	2.70	2.55	783-0012	2.55	2.30	2.17	783-0035	2.55	2.30	2.17	783-0054	3.00	2.70	2.55
3-0-3 Amp	.....	.....	.....	.....	783-0015	2.55	2.30	2.17	783-0036	2.55	2.30	2.17	.....	.....	.....	.....
20-0-20 Amp	783-0068	3.00	2.70	2.55	783-0019	2.55	2.30	2.17	.....	.....	.....	.....	783-0061	3.00	2.70	2.55
30-0-30 Amp	783-0069	3.00	2.70	2.55	783-0020	2.55	2.30	2.17	783-0041	2.55	2.30	2.17	783-0062	3.00	2.70	2.55
0-3 Volts	783-0205	3.00	2.70	2.55	783-0006	2.65	2.35	2.25	783-0171	2.65	2.35	2.25	783-0193	2.90	2.60	2.46
3-0-3 Volts	.....	.....	.....	.....	783-0150	2.65	2.35	2.25	783-0172	2.65	2.35	2.25	783-0194	2.90	2.60	2.46
0-10 Volts	783-0206	3.00	2.70	2.55	783-0153	2.65	2.35	2.25	783-0175	2.65	2.35	2.25	783-0197	2.90	2.60	2.46
0-15 Volts	783-0207	3.00	2.70	2.55	783-0154	2.65	2.35	2.25	783-0176	2.65	2.35	2.25	783-0198	2.90	2.60	2.46
0-20 Volts	783-0208	3.00	2.70	2.55	783-0155	2.65	2.35	2.25	783-0177	2.65	2.35	2.25	783-0199	2.90	2.60	2.46
0-30 Volts	783-0209	3.00	2.70	2.55	783-0156	2.65	2.35	2.25	783-0178	2.65	2.35	2.25	783-0200	2.90	2.60	2.46
0-50 Volts	783-0210	3.00	2.70	2.55	783-0157	2.65	2.35	2.25	783-0179	2.65	2.35	2.25	783-0201	2.90	2.60	2.46

AC VOLTMETERS, AMMETERS AND MILLIAMMETERS

0-15 Volts	783-0202	4.20	3.79	3.57	783-0138	3.90	3.50	3.30	783-0160	3.90	3.50	3.30	783-0182	4.10	3.70	3.48
0-50 Volts	.....	.....	.....	.....	783-0140	3.90	3.50	3.30	783-0162	3.90	3.50	3.30	783-0184	4.10	3.70	3.48
0-150 Volts	783-0203	4.90	4.40	4.16	783-0141	4.50	4.05	3.82	783-0163	4.50	4.05	3.82	783-0185	4.85	4.35	4.12
0-300 Volts	783-0204	5.20	4.68	4.42	783-0142	5.05	4.54	4.30	783-0164	5.05	4.54	4.30	783-0186	5.35	4.81	4.55
0-1 Amp	.....	.....	.....	.....	783-0001	3.90	3.50	3.30	783-0022	3.90	3.50	3.30	.....	.....	.....	.....
0-5 Amp	783-0064	4.20	3.79	3.57	783-0003	3.90	3.50	3.30	783-0024	3.90	3.50	3.30	783-0045	4.10	3.70	3.48
0-10 Amp	.....	.....	.....	.....	783-0004	3.90	3.50	3.30	783-0025	3.90	3.50	3.30	783-0046	4.10	3.70	3.48
0-500 mA	783-0124	4.20	3.79	3.57	783-0074	3.90	3.50	3.30	783-0092	3.90	3.50	3.30	783-0110	4.10	3.70	3.48

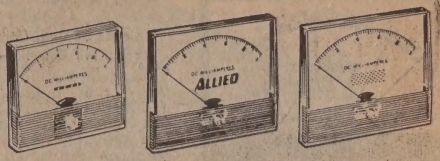
Specify Stock No., Range and Model No. when Ordering Meters

Allied's own "Clear View" Panel Meters



CUSTOM DESIGN YOUR OWN METER FACES

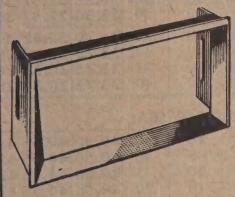
YOU CAN ORDER THESE ALLIED® PANEL METERS WITH DIAL FACES OF YOUR OWN DESIGN



HOW TO ORDER

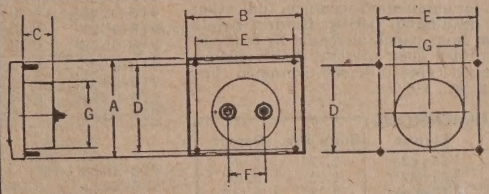
On orders for 25 or more of any one type of Allied meter shown on these pages, you can have your name or logo placed on the standard scale face. Extra charge for standard scale meters in quantities of 25-99, with your name or logo, $35.00. This is a one-time charge. No charge in quantities of 100 or more. For meters with scales in one color other than black, $60.00; 2 colors, $85.00; 3 colors, $110.00. Extra charges made one time only—no extra charges on subsequent orders with same meter face. To order, indicate the Stock No., and also include meter range, size, and send logo or print of scale wanted.

COMPLETE BEZEL KIT



Includes Bezel, Brackets, Screws

Fits all 4½" Allied meters.
701-0470 ..... 2.05
As above, but for 3½" meters.
701-0468 ..... 1.95



Dim.	2½"	3½"	4½"
A	2.38"	3.00"	4.00"
B	2.57"	3.44"	4.70"
C	1.06"	1.06"	1.06"
DxE	1.88" sq.	2.25" sq.	3.56" sq.
F	1.40"	1.40"	1.40"
G	2.18"	2.75"	2.75"

• Easy-to-read Knife Edge Pointer

Wide selection of rugged, easy-to-read panel meters. Have 2% full scale accuracy. Feature spring back jewels and shielded meter movement—can be mounted on ferrous panels without loss of accuracy. Supplied with all necessary mounting and terminal hardware. All have ¼-28x.43" terminals.

• Full Scale Accuracy of 2%

All mounting studs are .52". Mounting studs: 2½" and 3½" Models, 4-40x.53"; 4½", 6-32x.53". *Rectifier type. For prices on order for 100 or more meters of any one type—with either Allied standard or "Custom-Design" scale faces—contact the Allied facility nearest you. Av. shpg. wt., 1 lb.

DC MICROAMMETERS

Range	Ohms	2½" METERS Stock No.	EACH 1-9	10-24	25-49	50-99	3½" METERS Stock No.	EACH 1-9	10-24	25-49	50-99	4½" METERS Stock No.	EACH 1-9	10-24	25-49	50-99
25-0-25	3000	701-0010	19.76	16.00	15.10	14.20	701-0230	20.12	16.25	15.35	14.45	701-0309	21.72	17.55	16.60	15.60
0-50	3000	701-0011	19.64	15.90	15.00	14.15	701-0234	20.00	16.20	15.30	14.40	701-0311	21.56	17.45	16.45	15.50
50-0-50	2000	701-0012	17.90	14.50	13.70	13.00	701-0238	18.40	14.85	14.05	13.20	701-0313	20.50	16.60	15.65	14.75
0-100	2000	701-0013	17.49	14.15	13.35	12.55	701-0242	18.40	14.85	14.05	13.20	701-0315	20.39	16.50	15.55	14.65
100-0-100	600	701-0014	16.14	13.05	12.35	11.60	701-0245	17.96	14.50	13.70	12.90	701-0317	18.67	15.10	14.25	13.40
0-200	600	701-0015	16.14	13.00	12.25	11.50	701-0247	16.80	13.55	12.80	12.05	701-0319	18.39	14.85	14.05	13.20

DC MILLIAMMETERS

0-1	14	701-0020	15.25	12.35	11.65	10.95	701-0250	15.73	12.70	12.00	11.30	701-0321	16.77	13.55	12.80	12.05
0-3	5	701-0021	15.25	12.35	11.65	10.95	701-0252	15.73	12.70	12.00	11.30	701-0323	16.77	13.55	12.80	12.05
0-10	5.0	701-0022	15.25	12.35	11.65	10.95	701-0254	15.73	12.70	12.00	11.30	701-0325	16.77	13.55	12.80	12.05
0-15	3.3	701-0023	15.25	12.35	11.65	10.95	701-0256	15.73	12.70	12.00	11.30	701-0327	16.77	13.55	12.80	12.05
0-20	2.5	701-0024	15.25	12.35	11.65	10.95	701-0258	15.73	12.70	12.00	11.30	701-0329	16.77	13.55	12.80	12.05
0-50	1.0	701-0025	15.45	12.50	11.80	11.10	701-0260	17.12	13.85	13.05	12.30	701-0331	17.45	14.10	13.30	12.55
0-100	.5	701-0026	15.45	12.50	11.80	11.10	701-0264	17.12	13.85	13.05	12.30	701-0333	17.45	14.10	13.30	12.55
0-200	.25	701-0027	15.45	12.50	11.80	11.10	701-0266	17.12	13.85	13.05	12.30	701-0335	17.45	14.10	13.30	12.55

DC AMMETERS

0-1	.050	701-0001	15.45	12.50	11.80	11.10	701-0201	17.12	13.85	13.05	12.30	701-0301	17.45	14.10	13.30	12.55
0-5	.010	701-0002	15.45	12.50	11.80	11.10	701-0205	17.12	13.85	13.05	12.30	701-0303	17.45	14.10	13.30	12.55
0-10	.005	701-0003	15.45	12.50	11.80	11.10	701-0210	17.12	13.85	13.05	12.30	701-0305	17.45	14.10	13.30	12.55
0-15	.0033	701-0004	15.45	12.50	11.80	11.10	701-0215	17.12	13.85	13.05	12.30	701-0307	17.45	14.10	13.30	12.55

DC MILLIVOLTMETERS

0-50	10	701-0040	15.33	12.40	11.75	11.05	701-0268	17.00	13.75	13.00	12.20	701-0337	17.45	14.10	13.30	12.55
0-100	20	701-0045	15.23	12.40	11.75	11.05	701-0270	17.00	13.75	13.00	12.20	701-0339	17.45	14.10	13.30	12.55

DC VOLTMETERS (1000 Ohms/Volt)

0-10	.....	701-0100	16.14	13.05	12.35	11.60	701-0275	16.78	13.55	12.80	12.05	701-0341	18.39	14.85	14.05	13.20
0-15	.....	701-0105	16.14	13.05	12.35	11.60	701-0277	16.78	13.55	12.80	12.05	701-0343	18.39	14.85	14.05	13.20
0-30	.....	701-0110	16.14	13.05	12.35	11.60	701-0279	16.78	13.55	12.80	12.05	701-0345	18.39	14.85	14.05	13.20
0-50	.....	701-0115	16.14	13.05	12.35	11.60	701-0281	16.78	13.55	12.80	12.05	701-0347	18.39	14.85	14.05	13.20
0-100	.....	701-0120	16.14	13.05	12.35	11.60	701-0283	16.78	13.55	12.80	12.05	701-0349	18.39	14.85	14.05	13.20
0-150	.....	701-0125	16.14	13.05	12.35	11.60	701-0285	16.78	13.55	12.80	12.05	701-0351	18.39	14.85	14.05	13.20
0-300	.....	701-0130	16.14	13.05	12.35	11.60	701-0287	16.78	13.55	12.80	12.05	701-0353	18.39	14.85	14.05	13.20

AC VOLTMETERS (1000 Ohms/Volt)

0-150*	.....	.....	19.34	15.65	14.80	13.90	701-0445	17.56	14.20	13.40	12.60	701-0455	18.56	15.00	14.15	13.35
0-300*	.....	.....	19.34	15.65	14.80	13.90	701-0450	17.56	14.20	13.40	12.60	701-0460	18.56	15.00	14.15	13.35

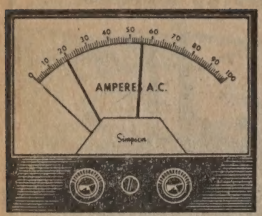
AC AMMETERS (3 Milliohms)

0-5	.....	.....	.....	.....	.....	.....	701-0401	14.67	11.85	11.20	10.55	701-0420	17.05	13.80	13.05	12.25
0-10	.....	.....	.....	.....	.....	.....	701-0403	15.55	12.60	11.90	11.20	701-0425	17.05	13.80	13.05	12.25

Specify Stock No., Model No., and Range on Panel Meter Orders

Simpson Controllers and Panel Instruments

CONTACTLESS METER RELAYS



- Rugged Seal® Construction
- In 3½", 4½" and 4x6" Sizes
- Single or Dual Control Points
- Fully Self-Contained

These relays combine the functions of an indicator, switch, and ultra-high gain amplifier in one unit. Photoconductor system activates relays at pre-set point on meter. Dual control types activate circuit at both high and low limit points. For use where utmost reliability on small differential or small power is desired. Ideal for alarm control or limit applications on equipment designed for unattended operation. Use infinite-life lamps, photoconductor sensors, all solid-state circuit. Built-in output relays for each control point handle 10 amps at 115 VAC resistive on each contact (DPDT types handle 20 amps total per point.) Fail-safe—relays open in case of power failure. Continuous indication, regardless of control point settings. Meter movement is independent of control functions, for unimpaired accuracy. Indication accuracy, ±2% of full-scale; dead-band, 0.25%. Control points are adjusted by gear drive from front panel, indicated by separate lance pointers. Metal case has thick glass window, dust-moisture sealing. Double and single-control types fully self-contained. For 115 V, 50-500 Hz AC. Av. shpg. wt., 1½ lbs.

METER DIMENSIONS

Model No.	Movement	Flange	Body Dia.	Depth
3323TXA	Taut-Band	3.25x3.25"	2.72"	5.05"
3323XA	Pivot/jewel	3.25x3.25"	2.72"	5.05"
3324TXA	Taut-Band	4.15x4.68"	2.72"	5.11"
3324XA	Pivot/jewel	4.15x4.68"	2.72"	5.11"
3344XA	Pivot/jewel	4.15x4.68"	2.72"	5.11"
3326XA	Pivot/jewel	4.62x5.84"	2.72"	5.11"

External power supply module (double control), 2.40x2.40x1.94".

MODEL 3323TXA 3½" TAUT-BAND

Range DC	Single Control (High Limit) Stock No.	EACH 1-9	10-24	25-Up	Double Control (High/Low) Stock No.	EACH 1-9	10-24	25-Up
0-100 µA	918-5532	113.10	101.97	96.13	918-5542	143.25	128.93	121.76

MODEL 3323XA 3½" PIVOT-AND-JEWEL

0-50 mV	918-5655	112.20	100.98	95.36	918-5665	142.50	128.25	121.13

MODEL 3324TXA 4½" TAUT-BAND

0-50 µA	918-5730	128.10	115.29	108.89	918-5741	158.25	142.43	134.52

MODEL 3324XA 4½" PIVOT-AND-JEWEL

0-500 µA	918-5834	116.40	104.76	98.94	918-5844	146.55	131.90	124.57
0-1 mA	918-5850	115.20	103.68	97.92	918-5860	145.50	130.95	123.68

MODEL 3344XA 4½" AC PIVOT-AND-JEWEL

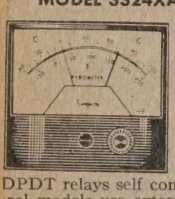
0-5 A*	918-6210	127.05	114.35	108.00	918-6220	157.35	141.62	133.75

*AC ranges.

MODEL 3326XA 4x6" PIVOT-AND-JEWEL

0-50 µA	918-6160	123.15	110.84	104.68	918-6164	153.30	137.97	130.31
0-50 mV	918-6163	118.80	106.92	100.98	918-6167	149.10	134.19	126.74

MODEL 3324XA 4½" TEMPERATURE CONTROLLERS

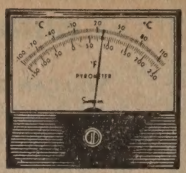


- Rugged Seal Construction
- Completely Self Contained
- Single or Double Control

Indicating pyrometer controllers have cold-end and copper compensation. Higher range controllers (500° and above) have thermocouple break protection. Calibrated for 5 or 10 ohms external; resistor assembly included for easy thermocouple calibration. DPDT relays self contained, handle over 2000 watts. Double control models use external power supply (included). Thermocouples not supplied. Shpg. wt. 1 lb.

Range	Ext. Ohms	Single Stock No.	Single EACH	Double Stock No.	Double EACH
−75° to +225°F	5	918C5880	120.00	918C5890	156.00
0° to +300°F	5	918C5881	120.00	918C5891	156.00
0° to +500°F	10	918C5882	117.00	918C5892	153.00
0° to +750°F	10	918C5883	117.00	918C5893	153.00
0° to +1000°F	10	918C5884	117.00	918C5894	153.00
0° to +1500°F	10	918C5885	117.00	918C5895	153.00

PYROMETERS



Model 3324

- Two Models—Standard and Rugged Seal
- Easy-to-Read Scales, Precise Tracking
- Centigrade and Fahrenheit Graduations

Precision-engineered for a lifetime of accurate, dependable performance. Easy-to-read 4½" pyrometers feature high sensitivity, ruggedness and precise tracking. Both models are compensated for ambient temperature changes and include copper circuit compensation. Model 29 is standard type, 3324 is rugged seal type. All meter scales are marked with both Fahrenheit and Centigrade graduations. Thermocouples listed in table are iron-constantan and calibrated to exactly 5 or 10 ohms, ±1% per table. Shpg. wt., 2 lbs.

MODEL 29

Stock No.	Range °F	Range °C	Ext. Ohms	Sens. in mA	EACH 1-9	EACH 10-24	EACH 25-Up
918-0525	−150-+250	−100-+120	10	.40	36.30	32.67	30.86
918-0526	0-300	−20-+150	5	.40	36.30	32.67	30.86
918-0527	0-500	−20-+260	10	.35	36.30	32.67	30.86
918-0528	0-750	−20-+400	10	.30	36.30	32.67	30.86
918-0529	0-1000	−20-+540	10	.28	36.30	32.67	30.86
918-0530	0-1500	−20-+820	10	.42	33.75	30.38	28.69
918-0531	0-2000	−20-+1200	10	.43	33.75	30.38	28.69
918-0532	0-2500	−20-+1380	10	.40	33.75	30.38	28.69

MODEL 3324 RUGGED SEAL

918-5910	−150-+250	−100-+120	10	.40	49.50	44.55	42.08
918-5911	0-300	−20-+150	5	.40	49.50	44.55	42.08
918-5912	0-500	−20-+260	10	.35	49.50	44.55	42.08
918-5913	0-750	−20-+400	10	.30	49.50	44.55	42.08
918-5914	0-1000	−20-+540	10	.28	49.50	44.55	42.08
918-5916	0-1500	−20-+820	10	.42	46.95	42.26	39.91
918-5915	0-2000	−20-+1200	10	.43	46.95	42.26	39.91
918-5917	0-2500	−20-+1380	10	.40	46.95	42.26	39.91

THERMOCOUPLES

*SS indicates Stainless Steel, GC indicates Glass Cloth.

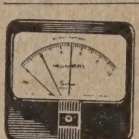
Stock No.	Resis. (ohms)	Over-braid*	Lgth. (in.)	Gauge	EACH 1-9	EACH 10-24	EACH 25-Up
918-4695	5	SS	162	20	14.10	12.69	12.00
918-4696	10	GC	137	24	4.95	4.41	4.21
918-4697	10	GC	34	30	4.20	3.78	3.57
918-4698	10	SS	325	20	25.65	23.09	21.80

1150 6" DC MICROAMMETERS

6" rectangular panel meters. Accuracy, of ±2%. Ranges 15 through 100 use high-flux movements designated as Model 1150H and cannot be calibrated for operation on steel panels. Ranges 200 through 500 use a 1 5/16" shallow-core movement designated as Model 1150E. Shpg. wt., 2 lbs.

2% ACCURACY

Stock No.	Range, µA	EACH 1-9	EACH 10-24	EACH 25-Up
918-2123	0-15	44.10	39.69	37.48
918-2124	0-25	39.45	35.50	33.53
918-2125	0-50	36.00	32.40	30.60
918-2126	0-100	34.50	31.05	29.32
918-2127	0-200	30.15	27.13	25.63
918-2128	0-500	29.40	26.46	24.99



29XA ADJUSTABLE METER RELAYS

Current or voltage actuated. Excellent for alarm, control, or limit-setting uses. Non-locking contacts can be positioned along scale arc with external control. Meter front is 4.66x4.20". Body dia., 2.75". Depth (body plus front), 1.66". Contact positioning control extends .34" from front. Shpg. wt., 1 lb.

Stock No.	Type	Range	1-9, EA.	10-24, EA.	25-49, EA.
918-0331	DC µA	0-50	58.95	53.06	50.11
918-0332	DC µA	0-100	56.40	50.76	47.90
918-0333	DC µA	0-500	52.05	46.85	44.24
918-0350	DC mA	0-1	50.85	45.77	43.22
918-0355	DC mV	0-50	51.00	45.90	43.35

See pages 470 thru 477 for the entire line of Simpson panel meters. Allied can supply Simpson panel meters in quantities larger than those shown. Simply contact the Allied Electronics facility nearest you for complete information.

Specify Stock No., Range and Model No. on All Meter Orders

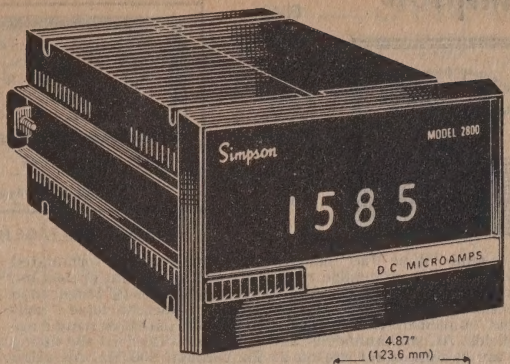
Simpson Panel Meters

Simpson

MODEL 2800 DIGITAL PANEL METERS

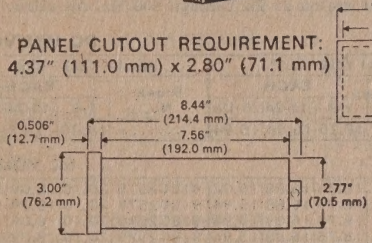
dvanced Solid-State Design with Integrated Circuits
near 15% Underrange Permits Reading Negative Values
00% Overrange Capability for Increased Versatility

al readout panel meters provide accurate numerical indica- of voltage and current. Feature easy-to-read non-blinking ay, front panel zero adjustment. Advanced solid-state circuit integrated circuits for outstanding reliability. 100% over- capability, flashing "1" lights to the left of other digits to ate overrange. Reverse polarity is indicated by a light to ight of other digits; linear 15% underrange permits reading lements of negative values. Storage circuitry holds in- ion until input changes. Common mode rejection: greater than B at 60 Hz with 1000-ohm unbalance. Series mode rejection: er than 35 dB. Ambient temperature range: +15° to +35° C ated accuracy of ±0.1%, ±1 digit. Cold-gas glow readout s have 200,000 hour life. Three full-time readout digits. Com- styling, see dimensions at left. 117 V, 60 Hz AC. 3½ lbs.



tock No.	Range DC	Maximum Indication (With Overrange)	Input Impedance *Voltage Drop	EACH
-5510	00.0-99.9 mV	199.9 mV	10k	295.00
-5512	.000-.999 V	1.999 V	100k	295.00
-5513	0.00-9.99 V	19.99 V	1 megohm	295.00
-5514	00.0-99.9 V	199.9 V	1 megohm	295.00
-5515	000.-999. V	1010. V	1 megohm	295.00
-5501	0.00-9.99 μA	19.99 μA	50 mV*	295.00
-5502	00.0-99.9 μA	199.9 μA	50 mV*	295.00
-5504	.000-.999 mA	1.999 mA	50 mV*	295.00
-5505	0.00-9.99 mA	19.99 mA	50 mV*	295.00
-5506	00.0-99.9 mA	199.9 mA	50 mV*	295.00

PANEL CUTOUT REQUIREMENT:
4.37" (111.0 mm) x 2.80" (71.1 mm)

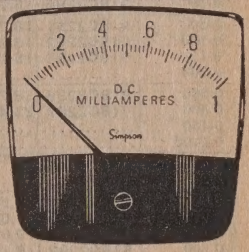


MOUNTING DIMENSIONS

2½" AND 3½" "BOLD-VUE" PANEL METERS

Three-Hole Mounting for Simplified Installation
Contemporary Styling, Easy-to-Read Numerals
• Annular DC Movements—Damped Iron-Vane AC Movements

ially designed three-hole mount meters with ern styling and bold numerals for easy read- Self-shielded meter movements are unaffected teel panels or stray magnetic fields. All have % full-scale accuracy. DC meters have annular ements; AC types equipped with magnetical- mped iron-vane movements. All have molded black phenolic cases with high-temperature plastic covers. Red tapered lance pointer. Recessed zero adjustments. Scale Lengths: 1222, 2.2"; 1223, 3.0"; 1252, 2.2"; 1253, 3.0". See mounting dimensions in table below, left. Supplied with necessary mounting and terminal hardware. Av. shpg. wt., 2½" meters, 11 oz.; 3½" meters, 13 oz.



DC VOLTMETERS

ange	Model 1223—3½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-49	Model 1222—2½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-49
10	918-2477	20.85	18.77	17.72	918-2377	20.10	18.09	17.09
15	918-2478	20.85	18.77	17.72	918-2378	20.10	18.09	17.09
30	918-2480	20.85	18.77	17.72	918-2380	20.10	18.09	17.09
50	918-2481	20.85	18.77	17.72	918-2382	20.10	18.09	17.09
100	918-2482	20.85	18.77	17.72				

DC MICROAMMETERS

50	918-2429	24.75	22.28	21.04	918-2329	24.30	21.87	20.66
100	918-2430	22.80	20.52	19.38	918-2330	21.75	19.58	18.49
200	918-2431	20.85	18.77	17.72				
-0-50	918-2434	22.80	20.52	19.38	918-2334	22.20	19.98	18.87

DC MILLIAMMETERS

1	918-2450	19.50	17.55	16.58	918-2350	18.90	17.01	16.07
50	918-2458	19.50	17.55	16.58				
100	918-2460	20.10	18.09	17.09				
500	918-2465	20.10	18.09	17.09				

DC AMMETERS

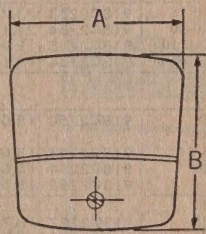
1	918-2400	20.10	18.09	17.09				
5	918-2404	20.10	18.09	17.09	918-2304	19.20	17.28	16.32
10	918-2405	20.10	18.09	17.09	918-2305	19.20	17.28	16.32

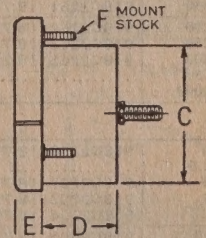
AC AMMETERS

Range	Model 1253—3½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-49	Model 1252—2½" Stock No.	EACH 1-9	EACH 10-24	EACH 25-49
5	918-2810	16.50	14.85	14.02	918-2704	15.60	14.04	13.28
10	918-2805	16.50	14.85	14.02	918-2705	15.60	14.04	13.28
15	918-2806	16.50	14.85	14.02	918-2706	15.60	14.04	13.28
25	918-2807	17.10	15.39	14.53	918-2707	16.35	14.72	13.90

AC VOLTMETERS

150	918-2883	20.55	18.50	17.47	918-2712	19.05	17.15	16.19
300	918-2886	20.55	18.50	17.47				





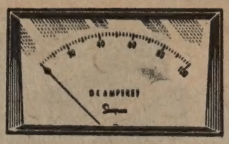
MOUNTING DIMENSIONS

Dim.	2½"	3½"
A	2¾"	3½"
B	2 1/16"	3½"
C	2.17"	2.75"
D	1.19"	1.19"
E	.47"	.47"
F	#4-40	#6-32

Simpson Easy-to-Read "Wide-Vue"® Panel Meters

FIVE SIZES

- 1½"
- 2½"
- 3½"
- 4½'
- 8"



- Smart, Modern Look
- For 3½" and 4½" Meters

BEHIND-PANEL BEZEL MOUNTS

For modern, streamlined appearance on 3½" and 4 "Wide-Vue" meters; also interchangeable with flush recess meters of many popular styles. Behind panel mo ing on thickness of ⅛" to 3/16". Black satin enamel fi With bezel, brackets, screws, template, instructions. 8

Stock No.	Mfr's Type	Meter Size	EAC
918-2799	1253	3½"	2.25
918-2122	1123	4½"	2.25

SEE FACING PAGE FOR METER DIMENSIONS

Easy-to-read "Wide-Vue" panel meters with specially formulated plastic covers for wide-angle readability and maximum protection. Feature longer meter scales—3½" meters have scales ½" longer than conventional types. DC and AC-rectifier meters have "self-shielded" movement that is unaffected by steel panels or stray magnetic fields. AC milliammeters and ammeters (listed on the facing page) are calibrated for use on 25 Hz through 800 Hz. All other AC meters have iron-vane movement. All meters are furnish black molded bakelite cases with recessed zero adjustments ished and spring-loaded jewels prevent damage from shoc vibration. Meter terminals are 8-32 studs with hex nuts. accuracy is ±2% of full scale, except Model 1214 AC-re types, ±3% of full scale. See opposite page for dimensions ters below. Av. shpg. wt., 1 lb.

DC MILLIVOLTMETERS

Range	Model 1212—1½" Stock No.	EACH 1-9	10-24	25-Up	Model 1227—2½" Stock No.	EACH 1-9	10-24	25-Up	Model 1327—3½" Stock No.	EACH 1-9	10-24	25-Up	Model 1329—4½" Stock No.	EACH 1-9	10-24
0-50	918C2271	18.75	16.88	15.94	.....	19.20	17.28	16.32	918C3270	20.10	18.09	17.09	918C3470	21.75	19.58

DC VOLTMETERS

0-5	918C2275	18.75	16.88	15.94	918C2575	20.10	18.09	17.09	918C3275	20.85	18.77	17.72	918C3475	22.80	20.52
0-10	918C2277	18.75	16.88	15.94	918C2577	20.10	18.09	17.09	918C3277	20.85	18.77	17.72	918C3477	22.80	20.52
0-15	918C2278	18.75	16.88	15.94	918C2578	20.10	18.09	17.09	918C3278	20.85	18.77	17.72	918C3478	22.80	20.52
0-25	918C2279	18.75	16.88	15.94	918C2579	20.10	18.09	17.09	918C3279	20.85	18.77	17.72	918C3479	22.80	20.52
0-30	918C2280	18.75	16.88	15.94	918C2580	20.10	18.09	17.09	918C3280	20.85	18.77	17.72	918C3480	22.80	20.52
0-50	918C2281	18.75	16.88	15.94	918C2581	20.10	18.09	17.09	918C3281	20.85	18.77	17.72	918C3481	22.80	20.52
0-100	918C2282	18.75	16.88	15.94	918C2582	20.10	18.09	17.09	918C3282	20.85	18.77	17.72	918C3482	22.80	20.52
0-150	918C2283	18.75	16.88	15.94	918C2583	20.10	18.09	17.09	918C3073	20.85	18.77	17.72	918C3483	22.80	20.52
0-200	.....	.....	.....	.....	918C2584	20.10	18.09	17.09	918C3284	20.85	18.77	17.72	918C3484	22.80	20.52
0-300	918C2286	18.75	16.88	15.94	918C2586	20.10	18.09	17.09	918C3286	20.85	18.77	17.72	918C3486	22.80	20.52
0-500	918C2287	23.40	21.06	19.89	918C2587	20.85	18.77	17.72	918C3287	21.75	19.58	18.49	918C3487	23.55	21.20
0-750	.....	.....	.....	.....	918C2588	25.35	22.82	21.55	918C3288	21.75	19.58	18.49	918C3488	23.55	21.20
0-1000	.....	.....	.....	.....	918C2589	26.10	23.49	22.19	918C3289	27.00	24.30	22.95	918C3489	23.80	21.42

DC MICROAMMETERS

0-50	918C2229	23.55	21.20	20.02	918C2529	24.30	21.87	20.66	918C3229	24.75	22.28	21.04	918C3429	26.85	24.17
0-100	918C2230	21.00	18.90	17.85	918C2530	21.75	19.58	18.49	918C3230	22.80	20.52	19.38	918C3430	25.35	22.82
0-200	918C2231	19.05	17.15	16.19	918C2531	19.80	17.82	16.83	918C3231	20.85	18.77	17.72	918C3431	22.80	20.52
0-500	918C2232	18.75	16.88	15.94	918C2532	19.50	17.55	16.58	918C3232	20.55	18.50	17.47	918C3432	22.20	19.98
25-0-25	918C2233	23.70	21.33	20.15	.....	.....	.....	.....	918C3233	25.05	22.55	21.29	918C3433	27.00	24.30
50-0-50	918C2234	21.15	19.04	17.98	918C2534	22.20	19.98	18.87	918C3234	22.80	20.52	19.38	918C3434	25.50	22.95
100-0-100	918C2235	19.20	17.28	16.32	918C2535	20.10	18.09	17.09	918C3235	21.00	18.90	17.85	918C3435	23.10	20.79
500-0-500	918C2236	18.15	16.34	15.43	918C2536	19.05	17.15	16.19	918C3236	19.80	17.82	16.83	918C3436	21.00	18.90

DC MILLIAMMETERS

0-1	918C2250	18.00	16.20	15.30	918C2550	18.90	17.01	16.07	918C3250	19.50	17.55	16.58	918C3450	20.85	18.77
0-3	.....	.....	.....	.....	918C2552	18.90	17.01	16.07	918C3252	19.50	17.55	16.58	918C3452	20.85	18.77
0-5	918C2253	18.00	16.20	15.30	918C2553	18.90	17.01	16.07	918C3253	19.50	17.55	16.58	918C3453	20.85	18.77
0-10	918C2254	18.00	16.20	15.30	918C2554	18.90	17.01	16.07	918C3254	19.50	17.55	16.58	918C3454	20.85	18.77
0-15	918C2255	18.00	16.20	15.30	918C2555	18.90	17.01	16.07	918C3255	19.50	17.55	16.58	.....	.....	.....
0-20	.....	.....	.....	.....	918C2556	18.90	17.01	16.07	918C3256	19.50	17.55	16.58	918C3456	20.85	18.77
0-25	918C2257	18.75	16.88	15.94	918C2557	19.20	17.28	16.32	918C3257	20.10	18.09	17.09	918C3457	21.75	19.58
0-50	918C2259	18.75	16.88	15.94	918C2558	19.20	17.28	16.32	918C3258	20.10	18.09	17.09	918C3458	21.75	19.58
0-100	918C2260	18.75	16.88	15.94	918C2560	19.20	17.28	16.32	918C3283	20.10	18.09	17.09	918C3460	21.75	19.58
0-150	918C2261	18.75	16.88	15.94	918C2561	19.20	17.28	16.32	918C3261	20.10	18.09	17.09	918C3461	21.75	19.58
0-200	918C2262	18.75	16.88	15.94	918C2562	19.20	17.28	16.32	918C3262	20.10	18.09	17.09	918C3462	21.75	19.58
0-250	918C2263	18.75	16.88	15.94	918C2563	19.20	17.28	16.32	918C3263	20.10	18.09	17.09	918C3463	21.75	19.58
0-500	918C2265	18.75	16.88	15.94	918C2564	19.20	17.28	16.32	918C3265	20.10	18.09	17.09	918C3465	21.75	19.58
0-750	.....	.....	.....	.....	.....	.....	.....	.....	918C3266	20.10	18.09	17.09	918C3466	21.75	19.58
0-1000	.....	.....	.....	.....	918C2567	19.20	17.28	16.32	918C3267	20.10	18.09	17.09	918C3467	21.75	19.58

DC AMMETERS (*Require shunts, see page 483)

0-1	918C2200	18.75	16.88	15.94	918C2500	19.20	17.28	16.32	918C3200	20.10	18.09	17.09	918C3400	21.75	19.58
0-1.5	.....	.....	.....	.....	918C2501	19.20	17.28	16.32	918C3201	20.10	18.09	17.09	.....	.....	.....
0-2	918C2202	18.75	16.88	15.94	918C2502	19.20	17.28	16.32	918C3202	20.10	18.09	17.09	918C3402	21.75	19.58
0-3	918C2203	18.75	16.88	15.94	918C2503	19.20	17.28	16.32	918C3203	20.10	18.09	17.09	918C3403	21.75	19.58
0-5	918C2204	18.75	16.88	15.94	918C2504	19.20	17.28	16.32	918C3204	20.10	18.09	17.09	918C3404	21.75	19.58
0-10	918C2205	18.75	16.88	15.94	918C2505	19.20	17.28	16.32	918C3205	20.10	18.09	17.09	918C3405	21.75	19.58
0-15	918C2206	18.75	16.88	15.94	918C2506	19.20	17.28	16.32	918C3206	20.10	18.09	17.09	918C3406	21.75	19.58
0-25	.....	.....	.....	.....	918C2507	19.20	17.28	16.32	918C3207	20.10	18.09	17.09	918C3407	21.75	19.58
0-30	.....	.....	.....	.....	918C2508	19.20	17.28	16.32	918C3208	20.10	18.09	17.09	918C3408	21.75	19.58
0-50	918C2209	18.75	16.88	15.94	918C2509	19.20	17.28	16.32	918C3209	20.10	18.09	17.09	918C3409	21.75	19.58
*0-100	.....	.....	.....	.....	918C2511	19.20	17.28	16.32	918C3211	20.10	18.09	17.09	918C3411	21.75	19.58
*0-150	.....	.....	.....	.....	918C2512	19.20	17.28	16.32	918C3212	20.10	18.09	17.09	.....	.....	.....
*0-200	.....	.....	.....	.....	918C2513	19.20	17.28	16.32	.....	.....	.....	.....	918C3413	21.75	19.58
*0-300	.....	.....	.....	.....	918C2514	19.20	17.28	16.32	918C3214	20.10	18.09	17.09	918C3414	21.75	19.58
*0-500	.....	.....	.....	.....	.....	.....	.....	.....	918C3215	20.10	18.09	17.09	918C3415	21.75	19.58
15-0-15	.....	.....	.....	.....	.....	.....	.....	.....	918C3218	21.15	19.04	17.98	.....	.....	.....
30-0-30	.....	.....	.....	.....	.....	.....	.....	.....	918C3219	21.15	19.04	17.98	.....	.....	.....

Specify Stock No., Range and Model No. on Panel Meter Or

"Wide-Vue" Panel Meters (Cont'd)

Simpson

METER DIMENSIONS

Model No.	Flange	Body Dia.	Depth	Scale Length
1212	1.76x1.76″	1.5″	1.37″	1.5″
1227	2.47x2.47″	2.17″	1.06″	2.5″
1327	3.25x3.25″	2.73″	1.08″	3.14″
1329	4.00x4.68″	2.75″	1.08″	3.93″
1214	1.76x1.76″	1.5″	1.37″	1.5″

Model No.	Flange	Body Dia.	Depth	Scale Length
1247	2.47x2.47″	2.17″	1.06″	2.5″
1347	3.25x3.25″	2.73″	1.08″	3.14″
1349	4.00x4.68″	2.75″	1.08″	3.93″
728†	6.50x8.00″	3.00″	2.31″	6.9″
1257	2.47x2.47″	2.17″	1.15″	2.5″

Model No.	Flange	Body Dia.	Depth	Scale Length
1357	3.25x3.25″	2.73″	1.22″	3.14″
1359	4.00x4.68″	2.75″	1.20″	3.93″
1327T	3.25x3.25″	2.73″	1.08″	3.14″
1329T	4.00x4.68″	2.75″	1.08″	3.93″
1379	4.00x4.68″	2.75″	1.20″	3.93″

RECTIFIER-TYPE AC VOLTMETERS

Range	Model 1214—1½″ Stock No.	EACH 1-9	10-24	25-Up	Model 1247—2½″ Stock No.	EACH 1-9	10-24	25-Up	Model 1347—3½″ Stock No.	EACH 1-9	10-24	25-Up	Model 1349—4½″ Stock No.	EACH 1-9	10-24	25-Up
5	.....	.....	.....	.....	918C2675	24.00	21.60	20.40	918C3575	27.30	24.57	23.21	918C3675	30.30	27.27	25.76
10	918C2291	25.80	23.22	21.93	918C2677	24.00	21.60	20.40	918C3577	27.30	24.57	23.21	918C3677	30.30	27.27	25.76
50	.....	.....	.....	.....	.....	.....	.....	.....	918C3581	27.30	24.57	23.21	918C3681	30.30	27.27	25.76
150	918C2294	25.80	23.22	21.93	918C2683	24.00	21.60	20.40	918C3583	27.30	24.57	23.21	918C3683	30.30	27.27	25.76
300	.....	.....	.....	.....	918C2686	24.00	21.60	20.40	918C3586	27.30	24.57	23.21	918C3686	30.30	27.27	25.76

8″ TAUT-BAND DC MICROAMMETER

ensitive DC icroammeter oasts scale early 7″ ng. Offers xceptional adability, 2% full- ale accuracy. Av. shpg. wt., 1 lb.

Model 728T—8″

Range	Stock No.	EACH 1-9	10-24	25-Up
0-25	918C1926	44.10	39.69	37.49
0-50	918C1927	38.85	34.97	33.02
0-100	918C1928	37.50	33.75	31.88

AC VOLTMETERS

Range	Model 1257—2½″ Stock No.	EACH 1-9	10-24	25-Up	Model 1357—3½″ Stock No.	EACH 1-9	10-24	25-Up	Model 1359—4½″ Stock No.	EACH 1-9	10-24	25-Up
0-15	918C2978	18.15	16.34	15.43	918C3778	19.05	17.15	16.19	918C3878	21.30	19.17	18.11
0-50	918C2981	18.15	16.34	15.43	918C3781	19.05	17.15	16.19	918C3881	21.30	19.17	18.11
0-150	918C2983	19.05	17.15	16.19	918C3783	20.55	18.50	17.47	918C3883	21.75	19.58	18.49
0-300	918C2986	19.05	17.15	16.19	918C3786	20.55	18.50	17.47	918C3886	21.75	19.58	18.49

AC MILLIAMMETERS

0-50	918C2958	17.25	15.53	14.66	918C3758	18.15	16.34	15.43	918C3850	19.35	17.42	16.45
0-100	918C2960	17.25	15.53	14.66	918C3760	18.15	16.34	15.43	918C3860	19.35	17.42	16.45
0-500	918C2965	17.25	15.33	14.66	918C3765	18.15	16.34	15.43	918C3865	19.35	17.42	16.45

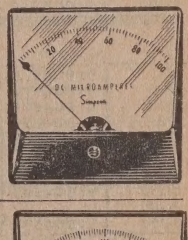
AC AMMETERS

0-5	918C2904	17.25	15.53	14.66	918C3704	18.15	16.34	15.43	918C3804	19.35	17.42	16.45
0-10	918C2905	17.25	15.53	14.66	918C3705	18.15	16.34	15.43	918C3805	19.35	17.42	16.45
0-25	918C2907	18.00	16.20	15.30	918C3707	18.90	17.01	16.07	918C3807	20.10	18.09	17.09
0-50	918C2909	18.00	16.20	15.30	918C3709	18.90	17.01	16.07	918C3809	20.10	18.09	17.09

TAUT-BAND DC MICROAMMETERS

ide-Vue" microammeters h sensitive taut band move- nt for greatly increased eatability and lower re- ance. Have 25% fewer ts than meters with core gnet movements. Meet id quality and performance ndards. Black phenolic e, plastic cover. Dimen- ns above. Shpg. wt. 1 lb.

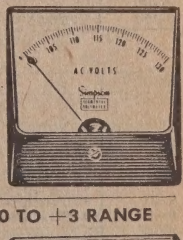
Range	Model 1327T—3½″ Stock No.	EACH 1-9	10-24	25-Up	Model 1329T—4½″ Stock No.	EACH 1-9	10-24	25-Up
0-10	918C3124	40.65	36.59	34.55	918C3324	43.95	39.56	37.36
0-15	918C3125	36.30	32.67	30.86	918C3325	39.60	35.64	33.66
0-25	918C3126	35.25	31.73	29.96	918C3326	38.25	34.43	32.51
0-50	918C3127	27.00	24.30	22.95	918C3327	28.95	26.03	24.61
0-100	918C3128	24.75	22.28	21.04	918C3328	27.30	24.57	23.21



SEGMENTAL VOLTMETERS

oes 1347, 1349. Indicate very small changes in input conditions—nificant portion of voltage range is expanded to full scale. easure voltage from 100-130 AC. Use for monitoring line voltage. erating frequency range, 20-20,000 Hz. Accuracy, ±0.5% center le at 25°C and 60 Hz sine wave. Dimensions: Frequency in- ence, less than 0.5%. Max. input, 150 Vrms. Model 1347, 3.25x 5x2.73″ mtg. dia. Model 1349, 4.68x4.00x2.75″ mtg. dia.
8C3582. Type 1347 3½″ Meter. Shpg. wt., 1½ lbs. 60.00
8C3682. Type 1349 4½″ Meter. Shpg. wt., 1½ lbs. 60.00

Type 1349 Multi-Range 4½″ Meter. Expanded scale ranges of 100-130, 200-260, 400-520 AC volts. Operating range, 20-20,000 Hz. Accuracy, ±0.5% center scale. Frequency influence, less than 0.5%. Max. input, 150/300/600 Vrms. For use in line voltage monitoring. Dimensions, 4.28x4.00x2.75″ mtg. dia. 1½ lbs.
918C3684 ..... 74.55



MODEL 1379 WIDE-VUE WATTMETERS

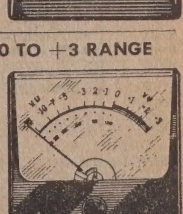
ynamometer-type meters for measurement of DC and single- ase AC power with frequencies to 250 Hz. Feature easy-to-read Vide-Vue" scales. All units can be used with power factors below % if maximum ratings are observed. All are calibrated for either agnetic or non-magnetic panels and for frequency range from 25 125 Hz. *In table below indicates compensated meter, accuracy 3% of full scale reading. Others have accuracy of ±2% of full ale reading. Dimensions above. Av. shpg. wt., 1 lb.

Stock No.	Range Watts	Max. Amps	Max. Volts	EACH 1-9	10-24	25-Up
18C3950	0-10*	.175	300	67.50	60.75	57.38
18C3951	0-20*	.400	300	67.50	60.75	57.38
18C3953	0-30*	.650	300	67.50	60.75	57.38
18C3955	0-75	1.0	150	50.55	45.50	42.97
18C3956	0-150	2.0	150	50.55	45.50	42.97
18C3957	0-300	4.0	150	50.55	45.50	42.97
18C3958	0-600	4.0	300	54.00	48.60	45.90
18C3959	0-750	10.0	150	50.55	45.50	42.97
18C3960	0-1500	10.0	300	54.00	48.60	45.90
18C3961	0-3000	20.0	300	54.00	48.60	45.90

"WIDE-VUE" VU METERS WITH −20 TO +3 RANGE

- Self-Shielded Annular Movement
- Not Affected by Magnetic Fields

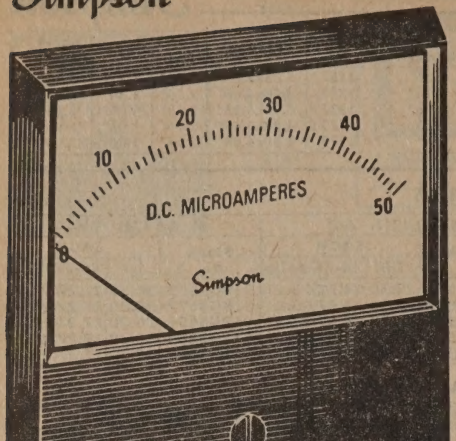
For broadcast and communications use. Have plastic covers for wide-angle readability; show volume level in both VU and percentage modulation. Type A scale stresses level in VU for monitoring wire lines. Type B scale stresses percentage use of transmitter output in radio communications. Dimensions above. Av. shpg. wt., 1½ lbs.



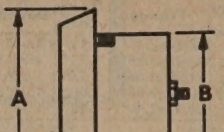
Stock No.	EACH 1-9	10-24	25-Up
Model 1214—A Scale—1½″			
918C2296	28.80	25.92	24.48
Model 1347—A Scale—3½″			
918C3596	32.55	29.30	27.67
Model 1349—A Scale—4½″			
918C3696	35.40	31.86	30.09

Stock No.	EACH 1-9	10-24	25-Up
.....	.....	.....	.....
Model 1347—B Scale—3½″			
918C3598	32.55	29.30	27.67
Model 1349—B Scale—4½″			
918C3697	35.40	31.86	30.09

Simpson "Century Series" Panel Meters



FEATURING EASY-TO-READ METER DESIGN CONCI



METER DIMENSIONS

Model	Front A	Body Dia. B	Depth C
2121	1.75″	1.51″	.90″
2124-2124TB	4.20″	2.69″	1.34″
2144	4.20″	2.69″	1.34″
2154	4.20″	2.69″	1.34″
2123-2123TB	3.00″	2.69″	1.34″
2143	3.00″	2.69″	1.34″
2153	3.00″	2.69″	1.34″
2122-2122TB	2.38″	2.16″	1.34″
2142	2.38″	2.16″	1.34″
2152	2.38″	2.16″	1.34″

- Lenses made of phenolic and glass
- AC meters magnetically damped
- DC meters self-shielded movements
- Longer scales than conventional ty

Easy-to-read "Century" panel me with specially formulated lenses of phe and glass for wide-angle readability maximum protection. Feature longer m scales—3½″ meters have scales ½″ lo than conventional types.

DC and AC-rectifier meters have "shielded" movements unaffected by panels or stray magnetic fields. All o AC meters have iron vane, magnetic damped movement. Recessed zero adj ments. Polished and spring-loaded je prevent damage from shock and vibrat Meter terminals are 8-32 size studs with type nuts. Suffix "TB" indicates Taut-B construction.

Offer a meter accuracy that is ±2% of scale reading. The AC rectifier types a meter accuracy that is ±3% of full s See chart and diagram at left for comp dimensions of meters below. Average s wt. 1 lb.

DC MILLIAMMETERS

Range	Model 2121-1½″ Stock No.	EACH 1-9	10-24	25-49	Model 2122-2½″ Stock No.	EACH 1-9	10-24	25-49	Model 2123-3½″ Stock No.	EACH 1-9	10-24	25-49	Model 2124-4½″ Stock No.	EACH 1-9	10-24	2
0-1	918C4550	18.00	16.20	15.30	918C4650	18.90	17.01	16.07	918C4750	19.50	17.55	16.58	918C4850	20.85	18.77	1
0-3	918C4552	.....	.....	.....	.....	.....	.....	.....	918C4752	19.50	17.55	16.58	.....	.....	.....	
0-5	918C4553	18.00	16.20	15.30	918C4653	18.90	17.01	16.07	918C4753	19.50	17.55	16.58	918C4853	20.85	18.77	1
0-10	918C4554	18.00	16.20	15.30	918C4654	18.90	17.01	16.07	918C4754	19.50	17.55	16.58	918C4854	20.85	18.77	1
0-25	918C4557	18.75	16.87	15.94	918C4657	19.20	17.28	16.32	918C4757	20.10	18.09	17.09	.....	.....	.....	
0-50	918C4558	18.75	16.87	15.94	918C4658	19.20	17.28	16.32	918C4758	20.10	18.09	17.09	918C4858	21.75	19.58	1
0-100	918C4560	18.75	16.87	15.94	918C4660	19.20	17.28	16.32	918C4760	20.10	18.09	17.09	918C4860	21.75	19.58	1
0-200	918C4562	18.75	16.87	15.94	918C4662	19.20	17.28	16.32	918C4762	20.10	18.09	17.09	.....	.....	.....	
0-300	.....	.....	.....	.....	.....	.....	.....	.....	918C4764	20.10	18.09	17.09	.....	.....	.....	
0-500	918C4565	18.75	16.87	15.94	918C4665	19.20	17.28	16.32	918C4765	20.10	18.09	17.09	918C4865	21.75	19.58	1

DC VOLTMETERS

0-5	918C4575	18.75	16.87	15.94	918C4675	20.10	18.09	17.09	918C4775	20.85	18.77	17.72	.....	.....	.....	
0-10	918C4577	18.75	16.87	15.94	918C4677	20.10	18.09	17.09	918C4777	20.85	18.77	17.72	918C4877	22.80	20.52	1
0-15	918C4578	18.75	16.87	15.94	918C4678	20.10	18.09	17.09	918C4778	20.85	18.77	17.72	918C4878	22.80	20.52	1
0-25	918C4579	18.75	16.87	15.94	918C4679	20.10	18.09	17.09	918C4779	20.85	18.77	17.72	.....	.....	.....	
0-30	918C4580	18.75	16.87	15.94	918C4680	20.10	18.09	17.09	918C4780	20.85	18.77	17.72	918C4880	22.80	20.52	1
0-50	918C4581	18.75	16.87	15.94	918C4681	20.10	18.09	17.09	918C4781	20.85	18.77	17.72	918C4881	22.80	20.52	1
0-100	918C4582	18.75	16.87	15.94	918C4682	20.10	18.09	17.09	918C4782	20.85	18.77	17.72	918C4882	22.80	20.52	1
0-150	918C4583	18.75	16.87	15.94	918C4683	20.10	18.09	17.09	918C4783	20.85	18.77	17.72	918C4883	22.80	20.52	1
0-300	.....	.....	.....	.....	918C4686	20.10	18.09	17.09	918C4786	20.85	18.77	17.72	.....	.....	.....	
0-500	918C4587	23.40	21.06	19.89	.....	.....	.....	.....	918C4787	21.75	19.58	18.49	.....	.....	.....	

DC MILLIVOLTMETERS

0-50	.....	.....	.....	.....	918C4670	19.20	17.28	16.32	918C4770	20.10	18.09	17.09	918C4870	21.75	19.58	1

‡Use external portable shunts

DC AMMETERS

0-1	918C4500	18.75	16.87	15.94	.....	.....	.....	.....	918C4700	20.10	18.09	17.09	918C4800	21.75	19.58	1
0-3	918C4503	18.75	16.87	15.94	918C4603	19.20	17.28	16.32	918C4703	20.10	18.09	17.09	.....	.....	.....	
0-5	918C4504	18.75	16.87	15.94	918C4604	19.20	17.28	16.32	918C4704	20.10	18.09	17.09	918C4804	21.75	19.58	1
0-10	918C4505	18.75	16.87	15.94	918C4605	19.20	17.28	16.32	918C4705	20.10	18.09	17.09	918C4805	21.75	19.58	1
0-15	918C4506	18.75	16.87	15.94	918C4606	19.20	17.28	16.32	918C4706	20.10	18.09	17.09	918C4806	21.75	19.58	1
0-25	918C4507	18.75	16.87	15.94	918C4607	19.20	17.28	16.32	918C4707	20.10	18.09	17.09	.....	.....	.....	
±0-50	918C4509	18.75	16.87	15.94	918C4609	19.20	17.28	16.32	918C4709	20.10	18.09	17.09	918C4809	21.75	19.58	1
±0-100	.....	.....	.....	.....	.....	.....	.....	.....	918C4711	20.10	18.09	17.09	918C4811	21.75	19.58	1
±0-200	.....	.....	.....	.....	.....	.....	.....	.....	918C4713	20.10	18.09	17.09	.....	.....	.....	

TB-Taut Band

DC MICROAMMETERS

0-10TB	.....	.....	.....	.....	.....	.....	.....	.....	918C4724	40.65	36.59	34.55	918C4824	43.95	39.56	3
0-15TB	.....	.....	.....	.....	.....	.....	.....	.....	918C4725	36.30	32.67	30.86	918C4825	39.60	35.64	3
0-25TB	.....	.....	.....	.....	918C4626	33.60	30.24	28.56	918C4726	35.25	31.73	29.96	918C4826	38.25	34.43	3
0-50	918C4529	23.55	21.19	20.02	918C4629	24.30	21.87	19.66	918C4729	24.75	23.28	21.04	918C4829	26.85	24.17	2
0-50TB	.....	.....	.....	.....	.....	.....	.....	.....	918C4727	27.00	24.30	22.95	918C4827	28.95	26.06	2
0-100TB	.....	.....	.....	.....	.....	.....	.....	.....	918C4728	24.75	23.28	21.04	918C4828	27.30	24.57	2
0-100	918C4530	21.00	18.90	17.85	918C4630	21.75	19.58	18.49	918C4730	22.80	20.52	19.38	918C4830	25.35	22.82	2
0-200	918C4531	19.05	17.15	16.19	918C4631	19.80	17.82	16.83	918C4731	20.85	18.77	17.72	.....	.....	.....	
0-200TB	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	918C4831	25.80	23.22	2
0-500	918C4532	18.75	16.89	15.94	918C4632	19.50	17.55	16.58	918C4732	20.85	18.77	17.72	918C4832	22.20	19.98	1
25-0-25	918C4533	23.70	21.33	20.14	.....	.....	.....	.....	918C4733	25.05	22.55	21.29	918C4833	27.00	24.30	2
50-0-50	918C4534	21.15	19.03	17.98	918C4634	22.20	19.98	18.87	918C4734	22.80	20.52	19.38	918C4834	25.50	22.95	2
100-0-100	918C4535	19.20	17.28	16.32	918C4635	20.10	18.09	17.09	918C4735	21.00	18.90	17.85	918C4835	23.10	20.79	1
500-0-500	918C4536	18.15	16.33	15.43	.....	.....	.....	.....	918C4736	19.80	17.82	16.83	918C4836	21.00	18.90	1

CENTURY SERIES PANEL METERS CONTINUED ON NEXT PAG

Panel Meters, Shunts and Transformers

Simpson

CENTURY SERIES PANEL METERS (Cont'd)

AC VOLTMETERS

ange	Model 2152-2½" Stock No.	EACH 1-9	10-24	25-Up	Model 2153-3½" Stock No.	EACH 1-9	10-24	25-Up	Model 2154-4½" Stock No.	EACH 1-9	10-24	25-Up
					918C5377	19.05	17.15	16.19				
					918C5378	19.05	17.15	16.19				
)	918C5283	19.05	17.15	16.19	918C5383	20.55	18.50	17.47	918C5483	21.75	19.58	18.49
)					918C5385	20.55	18.50	17.47	918C5485	21.75	19.58	18.49
)	918C5286	19.05	17.15	16.19	918C5386	20.55	18.50	17.47	918C5486	21.75	19.58	18.49

AC AMMETERS

	918C5200	17.25	15.53	14.66	918C5300	18.15	16.34	15.43				
					918C5302	18.15	16.34	15.43				
					918C5303	18.15	16.34	15.43				
	918C5204	17.25	15.53	14.66	918C5304	18.15	16.34	15.43	918C5404	19.35	17.42	16.45
	918C5205	17.25	15.53	14.66	918C5305	18.15	16.34	15.43	918C5405	19.35	17.42	16.45
	918C5206	17.25	15.53	14.66	918C5306	18.15	16.34	15.43	918C5406	19.35	17.42	16.45
	918C5207	18.00	16.20	15.30	918C5307	18.90	17.01	16.07	918C5407	20.10	18.09	17.08
	918C5209	18.00	16.20	15.30	918C5309	18.90	17.01	16.07	918C5409	20.10	18.09	17.09
					918C5310	18.15	16.34	15.43				
)					918C5311	18.15	16.34	15.43				
)									918C5413	19.35	17.42	16.45
)									918C5414	19.35	17.42	16.45

AC RECTIFIER VOLTMETERS

ange	Model 2142-2½" Stock No.	EACH 1-9	10-24	25-Up	Model 2143-3½" Stock No.	EACH 1-9	10-24	25-Up	Model 2144-4½" Stock No.	EACH 1-9	10-24	25-Up
0					918C5060	27.30	24.57	23.21	918C5160	30.30	27.27	25.76

SEGMENTAL VOLTMETERS

uracy is 0.5% in percent of center scale											
130					918C5050	60.00	54.00	51.00	918C5150	60.30	54.27	51.26

VU METER (Range −20 to +3 dB)

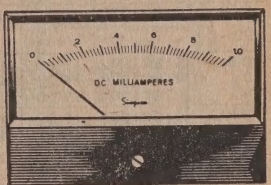
Scale	918C4996	31.80	28.62	27.03	918C5096	32.55	29.30	27.67	918C5196	35.40	31.86	29.99

DESIGNER SERIES® PANEL METERS

igner Series meters made to provide enhanced earance, easy-to-read scales, and low height design use in modern electronic equipment. Feature spring-led jewel movements, glass windows. Bright red e-edge pointers. DC types have "self-shielded" er movements—unaffected by stray magnetic fields. types have sensitive iron vane meter movement. % full-scale accuracy. Black phenolic cases and ers. Scale numbers are black on white background easy readability. With mounting hardware. See le at right for dimensions. Av. shpg wt., 1 lb.

METER DIMENSIONS

Model No.	Flange	Body Dia.	Depth	Scale Length
523	2.67x3.95"	2.16"	2.86"	3.129"
543	2.67x3.95"	2.16"	2.86"	3.129"
553	2.67x3.95"	2.16"	2.86"	2.822"
524	2.90x4.50"	2.16"	2.86"	3.510"
544	2.90x4.50"	2.16"	2.86"	3.510"
554	2.90x4.50"	2.16"	2.86"	3.160"



DC MICROAMMETERS

ange	Model 523—3½" Stock No.	EACH 1-9	10-24	25-Up	Model 524—4½" Stock No.	EACH 1-9	10-24	25-Up
5	918C1326	30.75	27.68	26.14	918C1426	33.90	30.51	28.82
)	918C1329	24.75	22.28	21.04	918C1429	26.85	24.17	22.82
00	918C1330	22.80	20.52	19.38	918C1430	25.35	22.82	21.55
00	918C1331	20.85	18.77	17.72	918C1431	22.80	20.52	19.38
0-50	918C1334	22.80	20.52	19.38	918C1434	25.50	22.95	21.68
-0-100	918C1335	21.00	18.90	17.85	918C1435	23.10	20.79	19.64

DC MILLIAMMETERS

	Model 523—3½"				Model 524—4½"			
	918C1350	19.50	17.55	16.58	918C1450	20.85	18.77	17.72
00	918C1360	20.10	18.09	17.09	918C1460	21.75	19.58	18.49

DC AMMETERS

	Model 523—3½"				Model 524—4½"			
0	918C1305	20.10	18.09	17.09	918C1405	21.75	19.58	18.49

1000 OHMS-PER-VOLT DC VOLTMETERS

Range	Model 523—3½" Stock No.	EACH 1-9	10-24	25-Up	Model 524—4½" Stock No.	EACH 1-9	10-24	25-Up
0-15	918C1378	20.85	18.77	17.72	918C1478	22.80	20.52	19.38
0-30	918C1380	20.85	18.77	17.72	918C1480	22.80	20.52	19.38
0-50	918C1381	20.85	18.77	17.72	918C1481	22.80	20.52	19.38
0-150	918C1383	20.85	18.77	17.72	918C1483	22.80	20.52	19.38

2000 OHMS-PER-VOLT AC AMMETERS

	Model 553—3½"				Model 554—4½"			
0-5	918C1751	18.15	16.34	15.43	918C1851	21.15	19.04	17.98
0-10	918C1752	18.15	16.34	15.43	918C1852	21.15	19.04	17.98
0-50	918C1755	18.15	16.34	15.43	918C1855	21.75	19.58	18.49

AC VOLTMETERS

	Model 553—3½"				Model 554—4½"			
0-150	918C1765	20.55	18.50	17.47	918C1865	21.75	19.58	18.49
0-300	918C1767	20.55	18.50	17.47	918C1867	21.75	19.58	18.49

VU METER (Range −20 to +3 db)

	Model 543—3½" A Scale				Model 544—4½" A Scale			
A Scale	918C1491	29.55	26.60	25.12	918C1493	32.10	28.89	27.29

CURRENT TRANSFORMERS

serted one turn primary type for use with switchboard and panel AC ammeters where ex-nal transformers are required. High-dielectric insulation. Secondary rated 5 amps. 1 lb.

mps	Stock No.	Mfr's Type	EACH	Amps	Stock No.	Mfr's Type	EACH
50	918-3053	1293	27.00	250	918-3066	1313	14.55
75	918-3065	1306	19.80	300	918-3059	1300	16.35
100	918-3057	1297	16.35	400	918-3061	1305	18.15
150	918-3058	1298	14.55	500	918-3060	1301	19.80

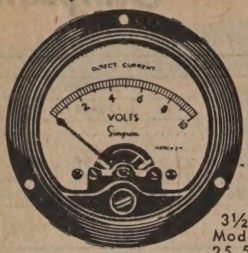
PORTABLE SHUNTS FOR DC AMMETERS

50 mV. 0.65 ohm. With 5-ft. leads.

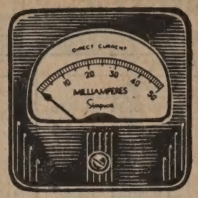
Amps	Stock No.	Mfr's Type	EACH 1-9	10-24	25-49
50	918-6709	6709	11.10	9.99	9.44
75	918-6711	6711	11.10	9.99	9.44
100	918-6713	6713	11.10	9.99	9.44
150	918-6714	6714	11.10	9.99	9.44
200	918-6715	6715	11.10	9.99	9.44

pecify Stock No., Range and Model No. on All Meter Orders

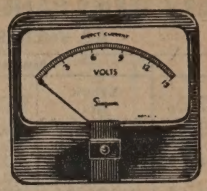
Simpson Round and Rectangular Panel Meters



3½" Models 25, 55



2½" Models 127, 157
3½" Models 27, 37, 57



4½" Models 29, 39, 59

±2% accuracy. AC meters have iron- movements, 20-100 Hz, except AC ammeters, ammeters, 20-1000 Hz. Ba cases. *Depth behind panel. †Sup with ext. multiplier. 1 lb.

METER DIMENSIONS

Model	Front	Body Dia.	Depth*	S Le
25	3.50"	2.75"	1.31"	2
27, 37	3.12x3.00"	2.75"	1.36"	2
29, 39	4.20x4.66"	2.75"	1.00"	3
55	3.50"	2.75"	1.41"	2
57	3.12x3.00"	2.75"	1.45"	2
59	4.20x4.66"	2.75"	1.09"	3
127, 157	2.37x2.37"	2.17"	1.45"	1

DC MILLIAMMETERS

Range	Model 127 2½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 25 3½" Rnd.	Model 27 3½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 29 4½" Rect.	EACH 1-9	EACH 10-24	EACH 25
0-1	918C1050	18.90	16.92	16.06	918C0150	918C0250	19.50	17.55	16.57	918C0450	20.85	18.76	17
0-5	918C1053	18.90	16.92	16.06	918C0153	918C0253	19.50	17.55	16.57	918C0453	20.85	18.76	17
0-10	918C1054	18.90	16.92	16.06	918C0154	918C0254	19.50	17.55	16.57	918C0454	20.85	18.76	17
0-50	.....	.....	.....	.....	918C0158	918C0258	20.10	18.09	17.08	918C0458	21.75	19.77	18
0-100	918C1060	19.20	17.28	16.32	918C0160	918C0260	20.10	18.09	17.08	918C0460	21.75	19.77	18
0-500	918C1065	19.20	17.28	16.32	918C0165	918C0265	20.10	18.09	17.08	918C0465	21.75	19.77	18

DC VOLTMETERS

†Have external multiplier resistors. 1.5-300 volt units are 1000 ohms/volt; 500-5000 volt units are 2000 ohms/volt.

0-3	918C1074	20.10	18.09	17.08	918C0174	918C0274	20.85	18.76	17.72	918C0474	22.80	20.52	19
0-5	918C1075	20.10	18.09	17.08	918C0175	918C0275	20.85	18.76	17.72	918C0475	22.80	20.52	19
0-10	918C1077	20.10	18.09	17.08	918C0177	.....	20.85	18.76	17.72	918C0477	22.80	20.52	19
0-15	918C1078	20.10	18.09	17.08	918C0178	918C0278	20.85	18.76	17.72	918C0478	22.80	20.52	19
0-25	918C1079	20.10	18.09	17.08	918C0179	.....	20.85	18.76	17.72	918C0479	22.80	20.52	19
0-50	918C1081	20.10	18.09	17.08	918C0181	918C0281	20.85	18.76	17.72	918C0481	22.80	20.52	19
0-100	918C1082	20.10	18.09	17.08	918C0182	918C0282	20.85	18.76	17.72	918C0482	22.80	20.52	19
0-150	918C1083	20.10	18.09	17.08	918C0183	918C0283	20.85	18.76	17.72	918C0483	22.80	20.52	19
0-250	918C1085	20.10	18.09	17.08	918C0185	.....	20.85	18.76	17.72	918C0485	22.80	20.52	19
0-300	.....	.....	.....	.....	918C0186	918C0286	20.85	18.76	17.72	918C0486	22.80	20.52	19
0-500	918C1087	20.85	18.76	17.72	918C0187	918C0287	21.75	19.77	18.49	918C0487	23.55	21.19	20
†0-1000	.....	.....	.....	.....	918C0189	918C0289	27.00	24.30	22 95	918C0489	28.80	25.92	24
†0-1500	.....	.....	.....	.....	.....	918C0290	27.00	24.30	22.95	918C0490	29.10	26.19	24
†0-5000	.....	.....	.....	.....	.....	918C0295	29.40	26.46	24.99	918C0495	31.20	28.08	26

DC MILLIVOLTMETERS

0-50	918C1070	19.20	17.28	16.32	918C0181	.....	20.10	18.09	17.08	918C0481	21.75	19.77	18

DC AMMETERS

0-2	918C1002	19.20	17.28	16.32	918C0102	918C0202	20.10	18.09	17.08	918C0402	21.75	19.77	18
0-3	918C1003	19.20	17.28	16.32	918C0103	918C0203	20.10	18.09	17.08	918C0403	21.75	19.77	18
0-5	918C1004	19.20	17.28	16.32	918C0104	918C0204	20.10	18.09	17.08	918C0404	21.75	19.77	18
0-10	918C1005	19.20	17.28	16.32	918C0105	918C0205	20.10	18.09	17.08	918C0405	21.75	19.77	18
0-25	918C1007	19.20	17.28	16.32	.....	918C0207	20.10	18.09	17.08	918C0407	21.75	19.77	18
0-50	.....	.....	.....	.....	918C0109	918C0209	20.10	18.09	17.08	918C0409	21.75	19.77	18

DC MICROAMMETERS

Range	Model 127 2½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 25 3½" Rnd.	Model 27 3½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 29 4½" Rect.	EACH 1-9	EACH 10-24	EACH 25
0-50	918C1029	24.30	21.87	20.66	918C0129	918C0229	34.75	22.27	21.04	918C0429	26.85	24.16	22
0-100	918C1030	21.75	19.77	18.49	918C0130	918C0230	22.80	20.52	19.38	918C0430	25.35	22.81	21
0-200	918C1031	19.80	17.82	16.83	918C0131	918C0231	20.85	18.76	17.72	918C0431	22.80	20.52	19
0-500	918C1032	19.50	17.55	16.57	918C0132	918C2032	20.55	18.49	17.46	918C0432	22.20	19.98	18
25-0-25	.....	.....	.....	.....	.....	918C0233	25.05	22.54	21.29	918C0433	27.00	24.30	22
50-0-50	.....	.....	.....	.....	918C0134	918C0234	22.80	20.52	19.38	918C0434	25.50	22.95	21
100-0-100	.....	.....	.....	.....	918C0135	918C0235	21.00	18.90	17.85	918C0435	23.10	20.79	19
500-0-500	.....	.....	.....	.....	.....	918C0236	19.80	17.82	16.83	918C0436	21.00	18.90	17

AC MILLIAMMETERS

Range	Model 157 2½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 55 3½" Rnd.	Model 57 3½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 59 4½" Rect.	EACH 1-9	EACH 10-24	EACH 25
0-100	918C1260	17.25	15.52	14.66	918C0760	918C0860	18.15	16.33	15.42	918C0960	19.35	17.44	16
0-250	918C1263	17.25	15.52	14.66	.....	918C0863	18.15	16.33	15.42	918C0963	19.35	17.44	16
†0-500	918C1265	17.25	15.52	14.66	918C0765	918C0865	18.15	16.33	15.42	918C0965	19.35	17.44	16

AC VOLTMETERS

0-5	.....	.....	.....	.....	918C0775	918C0875	19.05	17.14	16.19	918C0975	21.30	19.17	18
0-10	918C1277	18.15	16.33	15.42	918C0777	.....	19.05	17.14	16.19	918C0977	21.30	19.17	18
0-15	918C1278	18.15	16.33	15.42	.....	918C0878	19.05	17.14	16.19	918C0978	21.30	19.17	18
0-25	918C1279	18.15	16.33	15.42	918C0779	918C0879	19.05	17.14	16.19	918C0979	21.30	19.17	18
0-50	918C1281	18.15	16.33	15.42	918C0781	918C0881	19.05	17.14	16.19	918C0981	21.30	19.17	18
0-150	918C1283	19.05	17.14	16.19	918C0783	918C0883	20.55	18.49	17.46	918C0983	21.75	19.77	18
0-250	918C1285	19.05	17.14	16.19	918C0785	918C0885	20.55	18.49	17.46	918C0985	21.75	19.77	18
0-300	918C1286	19.05	17.14	16.19	918C0786	918C0886	20.55	18.49	17.46	918C0986	21.75	19.77	18
†0-500	.....	.....	.....	.....	918C0787	918C0887	25.95	23.35	22.06	918C0987	27.75	24.97	23

AC AMMETERS

Range	Model 157 2½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 55 3½" Rnd.	Model 57 3½" Rect.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 59 4½" Rect.	EACH 1-9	EACH 10-24	EACH 25-
0-1	918C1200	17.25	15.52	14.66	918C0700	918C0800	18.15	16.33	15.42	918C0900	19.35	17.41	16

ADDITIONAL LISTINGS ON FACING PAGE

Space-Saving Panel Meters

Simpson

AC AMMETERS (Cont'd)

ge	Model 157 2½" Rect.	EACH 1-9	10-24	25-Up	Model 55 3½" Rnd.	Model 57 3½" Rect.	EACH 1-9	10-24	25-Up	Model 59 4½" Rect.	EACH 1-9	10-24	25-Up
	918C1203	17.25	15.52	14.66	918C0703	918C0803	18.15	16.33	15.42	918C0903	19.35	17.41	16.45
	918C1204	17.25	15.52	14.66	918C0704	918C0804	18.15	16.33	15.42	918C0904	19.35	17.41	16.45
)	918C1205	17.25	15.52	14.66	918C0705	918C0805	18.15	16.33	15.42	918C0905	19.35	17.41	16.45
;	918C1206	17.25	15.52	14.66	918C0706	918C0806	18.15	16.33	15.42	918C0906	19.35	17.41	16.45
	918C1207	18.00	16.20	15.30	918C0707	918C0807	18.90	16.92	16.06	918C0907	20.10	18.09	17.08
)	918C1208	18.00	16.20	15.30	918C0708	918C0808	18.90	16.92	16.06	918C0908	20.10	18.09	17.08
)	918C1209	18.00	16.20	15.30	918C0709	918C0809	18.90	16.92	16.06	918C0909	20.10	18.09	17.08
;	.....	.....	.....	.....	918C0710	918C0810	18.15	16.33	15.42	918C0910	19.35	17.41	16.45

RF AMMETERS

nal thermocouple type. Self-shielding meter movment. Have accuracy full scale. Simpson's Annular meter movement and ated for non-magnetic panel. Model 37: mounting flange, ; depth, 1²³⁄₆₄"; body dia., 2¾". Model 39: mounting flange, ; depth, 1"; body dia., 2¾". Shpg. wt. 1 lb.

*	Model 37 3½" Rect.	EACH 1-9	10-24	25-Up	Model 39 4½" Rect.	EACH 1-9	10-24	25-Up
	.....	.....	.....	.....	918C0600	26.40	23.76	22.44
	918C0552	23.10	20.79	19.63	.....	.....	.....	.....
	918C0553	23.10	20.79	19.63	918C0604	26.40	23.76	22.44
	918C0555	23.10	20.79	19.63	918C0605	26.40	23.76	22.44

MODEL 79 WATTMETERS

illus.) Flange, 4.2x4.66"; 2.75" dia.; 1.68" dp. Av. wt. 1 lb.

tock No.	Range Watts	Max. Amps	Max. Volts	EACH 1-9	10-24	25-Up
3C0991	0-50	2.0	150	67.50	60.75	57.37
3C0992	0-75	1.0	150	50.55	45.49	42.97
3C0996	0-750	10.0	150	50.55	45.49	42.97
3C0997	0-1500	10.0	300	54.00	48.60	45.90

MODEL 47 AND 142 VU METERS

Volume level indicators for use in broadcasting and communications. Show level both in VU and percentage modulation. VU scale A, —20 to +3. 3900-ohm internal impedance across 600-ohm lines (zero reference, 1 mW). Meets all electrical and ballistic specifications of ASA and Bell Laboratories. Model 47: Flange, 3½" nom.; depth, 1²³⁄₆₄"; body dia., 2¾". Model 142: Flange, 4½"; depth, 1"; dia., 3¼". *Illuminated (6.8V). Shpg. wt. 1 lb.

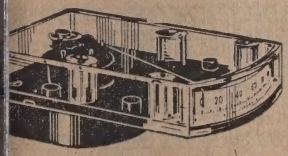
Stock No.	Model	EACH 1-9	10-24	25-Up
918C0696	47	32.55	29.29	27.67
918C1196	142	35.40	31.86	30.09
918C1198	142*	38.70	34.83	32.89

MODEL 27 DC GALVANOMETERS

D'Arsonval movements. Resistance: 500-0-500 μamp meter, 46 ohms: 75-0-75 μamp, 1850 ohms. Scale marked 50-0-50. 3½" rectangular case. Body dia., 2¾"; depth, 1.36".

Stock No.	Range	1-9, EACH	10-24, EACH	25-Up, EACH
918C0222	500-0-500	19.80	17.82	16.83
918C0221	75-0-75	22.20	19.98	18.87

1½", 2½" EDGEWISE PANEL METERS



- Save Panel Space
- Simple Installation

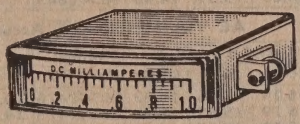
ıpact panel meters featuring "self-shielded" core magnet meter ements—calibrations remain unaffected by stray magnetic s. Meter accuracy is ±2% of full scale reading. DC voltmeters : 1000 ohms/volt sensitivity (except *2000 ohms/volt). In dust- of molded lucite cases. Solder lug terminals, except 0-5 DC neter (Type 1522), stud-type terminals. Standard scales with k numbers on white background Shipped with bezel and two d nuts. Av. shpg. wt., 12 oz.

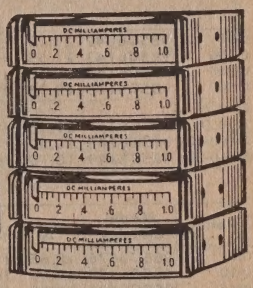
METER DIMENSIONS

Model No.	Flange with Bezel	Height, Barrel	Depth (Total)	Scale Length
1521	0.75x2.25"	1.13"	2.00"	1.375"
1522	1.00x3.25"	1.22"	3.50"	1.875"
1542	1.00x3.25"	1.22"	3.50"	1.875"

STACKING EDGEWISE PANEL METERS

- Miniature Size
- Easy-to-Mount
- ±2% Accuracy





Miniature meters for easy installation in panels, modern streamlined appearance for equipment. Boast "self-shielded" core magnet movement that eliminates protruding barrel. Meter scale extends to nearly full width and height of meter—no wasted space. Accuracy, ±2% of full scale reading. Type 1921: scale length, 1.37"; panel cutout, .525x1.718"; depth behind panel, 2.3". Type 1622: scale length, 1.85"; panel cutout, .562x2.312"; depth behind panel, 2.3". Av. shpg. wt., ¾ lb.

TYPE 1521 1½" METERS

tock No.	Mfr's Type	Range	EACH 1-9	10-24	25-Up
1C4063	1521	0-50 DC Voltmeter	18.15	16.34	15.43
1C4069	1521	*0-500 DC Voltmeter	18.45	16.61	15.68
1C4040	1521	0-1 DC Milliammeter	18.00	16.20	15.30
1C4042	1521	0-10 DC Milliammeter	18.00	16.20	15.30
1C4045	1521	0-100 DC Milliammeter	18.75	16.88	15.94
1C4048	1521	0-500 DC Milliammeter	18.75	16.88	15.94
1C4031	1521	0-50 DC Microammeter	24.15	21.74	20.53
1C4032	1521	0-100 DC Microammeter	21.30	19.17	18.11

TYPES 1522 AND 1542 2½" METERS

3C4163	1522	0-50 DC Voltmeter	20 10	18 09	17.09
3C4165	1522	0-150 DC Voltmeter	20.10	18.09	17.09
3C4169	1522	*0-500 DC Voltmeter	20.40	18.36	17.34
3C4120	1522	0-5 DC Ammeter	21.15	19.04	17.98
3C4140	1522	0-1 DC Milliammeter	19.80	17.82	16.83
3C4142	1522	0-10 DC Milliammeter	19.80	17.82	16.83
3C4145	1522	0-100 DC Milliammeter	20.70	18.63	17.60
3C4148	1522	0-500 DC Milliammeter	20.70	18.63	17.60
3C4131	1522	0-50 DC Microammeter	25.95	23.36	22.06
3C4132	1522	0-100 DC Microammeter	23.40	21.06	19.89
3C4196	1542	VU Meter "A" Scale	33.00	29.70	28.05

TYPE 1921 1½" METERS

Stock No.	Range	EACH 1-9	10-24	25-Up
918C4421	0-15 DC Voltmeter	21.30	19.17	18.10
918C4462	0-25 DC Voltmeter	21.30	19.17	18.10
918C4440	0-1 DC Milliammeter	21.00	18.90	17.85
918C4443	0-25 DC Milliammeter	22.05	19.85	18.74
918C4444	0-50 DC Milliammeter	22.05	19.85	18.74
918C4448	0-500 DC Milliammeter	22.05	19.85	18.74
918C4455	0-50 DC Millivoltmeter	22.35	20.12	19.00
918C4431	0-50 DC Microammeter	27.15	24.44	23.08
918C4434	0-500 DC Microammeter	21.75	19.58	18.49

TYPE 1622 2½" METERS

918C4361	0-15 DC Voltmeter	22.65	20.39	19.25
918C4362	0-25 DC Voltmeter	22.65	20.39	19.25
918C4365	0-150 DC Voltmeter	22.65	20.39	19.25
918C4340	0-1 DC Milliammeter	22.50	20.25	19.13
918C4343	0-25 DC Milliammeter	23.40	21.06	19.89
918C4344	0-50 DC Milliammeter	23.40	21.06	19.89
918C4348	0-500 DC Milliammeter	23.40	21.06	19.89
918C4355	0-50 DC Millivoltmeter	23.70	21.33	20.15
918C4331	0-50 DC Microammeter	28.35	25.52	24.11
918C4334	0-500 DC Microammeter	22.95	20.66	19.51

Weston Panel Meters

PIVOT AND JEWEL MOVEMENT

2% accuracy long-scale meters have clear-view plastic fronts sealed and treated to remain dust and static-free. Pivot mechanism uses spring-back jewels for rugged use. DC and AC rectifier meters are shielded to isolate movement from magnetic influence by steel panels or stray magnetic fields. AC meters have iron vane movement. With mounting hardware. Terminals are 8-32 studs with hex nuts; 5 amps and above terminals ¼-28. See facing page for meter dimensions.

BEHIND-PANEL BEZELS

Behind panel mounting. Max. panel t
ness ⅛". Black satin. Hardware, tem
8 oz.

Stock No.	Meter Size	EACH 1-9	10-24	25-49
985-6000	2½"	1.50	1.35	1.28
985-7000	3½"	1.65	1.49	1.40
985-8000	4½"	1.70	1.53	1.45

DC VOLTMETERS—CORE MAGNET (Self-Shielding)

Range	Model 1921 2½"	EACH 1-9	10-24	25-49	50-Up	Model 1931 3½"	EACH 1-9	10-24	25-49	50-Up	Model 1941 4½"	EACH 1-9	10-24	25-49	5
0-5	985C6177	19.15	17.24	16.28	15.32	985C6877	19.70	17.73	16.75	15.76	985C7877	21.00	18.90	17.85	1
0-10	985C6179	19.15	17.24	16.28	15.32	985C6879	19.70	17.73	16.75	15.76	985C7879	21.00	18.90	17.85	1
0-15	985C6180	19.15	17.24	16.28	15.32	985C6880	19.70	17.73	16.75	15.76	985C7880	21.00	18.90	17.85	1
0-25	985C6181	19.15	17.24	16.28	15.32	985C6881	19.70	17.73	16.75	15.76	985C7881	21.00	18.90	17.85	1
0-30	985C6182	19.15	17.24	16.28	15.32	985C6882	19.70	17.73	16.75	15.76	985C7882	21.00	18.90	17.85	1
0-50	985C6183	19.15	17.24	16.28	15.32	985C6883	19.70	17.73	16.75	15.76	985C7883	21.00	18.90	17.85	1
0-150	985C6185	19.15	17.24	16.28	15.32	985C6885	19.70	17.73	16.75	15.76	985C7885	21.00	18.90	17.85	1
0-500	985C6189	19.15	17.24	16.28	15.32	985C6889	19.70	17.73	16.75	15.76	985C7889	21.00	18.90	17.85	1

DC AMMETER (Self Contained)

0-1	985C6101	18.10	16.29	15.39	14.48	985C6801	18.65	16.79	15.85	14.92	985C7801	19.95	17.96	16.96	1
0-2	985C6102	18.10	16.29	15.39	14.48	985C6802	18.65	16.79	15.85	14.92	985C7802	19.95	17.96	16.96	1
0-5	985C6104	18.10	16.29	15.39	14.48	985C6804	18.65	16.79	15.85	14.92	985C7804	19.95	17.96	16.96	1
0-10	985C6105	18.10	16.29	15.39	14.48	985C6805	18.65	16.79	15.85	14.92	985C7805	19.95	17.96	16.96	1
0-30	985C6109	18.10	16.29	15.39	14.48	985C6809	18.65	16.79	15.85	14.92	985C7809	19.95	17.96	16.96	1

DC MILLIAMMETERS

0-1	985C6150	18.10	16.29	15.39	14.48	985C6850	18.65	16.79	15.85	14.92	985C7850	19.95	17.96	16.96	1
0-10	985C6154	18.10	16.29	15.39	14.48	985C6854	18.65	16.79	15.85	14.92					
0-20						985C6856	18.65	16.79	15.85	14.92					
0-50	985C6158	18.10	16.29	15.39	14.48	985C6858	18.65	16.79	15.85	14.92	985C7858	19.95	17.96	16.96	1
0-100	985C6160	18.10	16.29	15.39	14.48	985C6860	18.65	16.79	15.85	14.92					
0-200	985C6162	18.10	16.29	15.39	14.48	985C6862	18.65	16.79	15.85	14.92	985C7862	19.95	17.96	16.96	1
0-300	985C6164	18.10	16.29	15.39	14.48	985C6864	18.65	16.79	15.85	14.92	985C7864	19.95	17.96	16.96	1
0-500	985C6165	18.10	16.29	15.39	14.48	985C6865	18.65	16.79	15.85	14.92	985C7865	19.95	17.96	16.96	1

DC MICROAMMETERS

0-50	985C6142	23.10	20.79	19.63	18.48	985C6842	23.65	21.29	20.10	18.92	985C7842	25.00	22.50	21.25	20
0-100	985C6143	21.55	19.40	18.32	17.24	985C6843	22.00	19.80	18.70	17.60	985C7843	23.10	20.79	19.64	18
0-200	985C6144	20.50	18.45	17.43	16.40	985C6844	21.25	19.13	18.06	17.00	985C7844	22.30	20.07	18.96	17
0-500	985C6145	19.95	17.96	16.96	15.96	985C6845	19.95	17.96	16.96	15.96	985C7845	21.25	19.13	18.06	17
25-0-25											985C7846	25.00	22.50	21.25	20
50-0-50	985C6147	21.55	19.40	18.32	17.24	985C6847	22.00	19.80	18.70	17.60	985C7847	23.10	20.79	19.64	18
100-0-100	985C6148	20.50	18.45	17.43	16.40	985C6848	21.25	19.13	18.06	15.96	985C7848	22.30	20.07	18.96	17
500-0-500	985C6149	18.10	16.29	15.39	14.48	985C6849					985C7849	19.95	17.96	16.96	15

AC VOLTMETER—2% Accuracy (25-125 Hz)

Range	Model 1924 2½"	EACH 1-9	10-24	25-49	50-Up	Model 1934 3½"	EACH 1-9	10-24	25-49	50-Up	Model 1944 4½"	EACH 1-9	10-24	25-49	50
0-3	985C6476	18.65	16.79	15.85	14.92	985C7476	19.15	17.24	16.28	15.32	985C8476	19.95	17.96	16.96	15
0-10	985C6479	18.65	16.79	15.85	14.92	985C7479	19.15	17.24	16.28	15.32	985C8479	19.95	17.96	16.96	15
0-15	985C6480	18.65	16.79	15.85	14.92	985C7480	19.15	17.24	16.28	15.32	985C8480	19.95	17.96	16.96	15
0-25	985C6481	18.65	16.79	15.85	14.92	985C7481	19.15	17.24	16.28	15.32	985C8481	19.95	17.96	16.96	15
0-30	985C6482	18.65	16.79	15.85	14.92						985C8482	19.95	17.96	16.96	15
0-50	985C6483	18.65	16.79	15.85	14.92	985C7483	19.15	17.24	16.28	15.32	985C8483	19.95	17.96	16.96	15
0-150	985C6485	18.65	16.79	15.85	14.92	985C7485	19.15	17.24	16.28	15.32	985C8485	19.95	17.96	16.96	15
0-300	985C6488	18.65	16.79	15.85	14.92	985C7488	19.15	17.24	16.28	15.32	985C8488	19.95	17.96	16.96	15
0-500	985C6489	18.65	16.79	15.85	14.92						985C8489	19.95	17.96	16.96	15

AC AMMETER—2% Accuracy (250-125 Hz)

0-1	985C6401	17.85	16.07	15.17	14.28	985C7401	18.10	16.29	15.39	14.48	985C8401	19.15	17.24	16.28	15
0-2	985C6402	17.85	16.07	15.17	14.28	985C7402	18.10	16.29	15.39	14.48	985C8402	19.15	17.24	16.28	15
0-5	985C6404	17.85	16.07	15.17	14.28	985C7404	18.10	16.29	15.39	14.48	985C8404	19.15	17.24	16.28	15
0-10	985C6405	17.85	16.07	15.17	14.28	985C7405	18.10	16.29	15.39	14.48	985C8405	19.15	17.24	16.28	15
0-20	985C6407	17.85	16.07	15.17	14.28	985C7407	18.10	16.29	15.39	14.48	985C8407	19.15	17.24	16.28	15
0-50	985C6410	17.85	16.07	15.17	14.28	985C7410	18.10	16.29	15.39	14.48	985C8410	19.15	17.24	16.28	15
0-100*	985C6412	17.85	16.07	15.17	14.28	985C7412	18.10	16.29	15.39	14.48	985C8412	19.15	17.24	16.28	15
0-200*	985C6414	17.85	16.07	15.17	14.28	985C7414	18.10	16.29	15.39	14.48					
0-300*						985C7415	18.10	16.29	15.39	14.48					

*Amp range for use with external model 605 Current Transformer (not supplied)

AC MILLIAMMETER—2% Accuracy (25-500 Hz)

0-10	985C6454	17.85	16.07	15.17	14.28	985C7454	18.10	16.29	15.38	14.48	985C8454	19.15	17.24	16.28	15
0-50	985C6458	17.85	16.07	15.17	14.28	985C7458	18.10	16.29	15.38	14.48	985C8458	19.15	17.24	16.28	15
0-100	985C6460	17.85	16.07	15.17	14.28	985C7460	18.10	16.29	15.38	14.48					
0-200	985C6462	17.85	16.07	15.17	14.28	985C7462	18.10	16.29	15.38	14.48	985C8462	19.15	17.24	16.28	15
0-250	985C6463	17.85	16.07	15.17	14.28	985C7463	18.10	16.29	15.38	14.48					
0-500	985C6465	17.95	16.07	15.17	14.28	985C7465	18.10	16.29	15.38	14.48	985C8465	19.15	17.24	16.28	15

AC VOLTMETER (Rectifier Type)

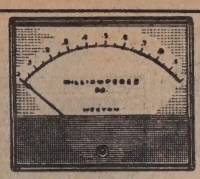
Range	Model 1922 3% accuracy	EACH 1-9	10-24	25-49	50-Up	Model 1932 3% accuracy	EACH 1-9	10-24	25-49	50-Up	Model 1942 2% accuracy	EACH 1-9	10-24	25-49	5
0-5	985C6277	24.95	22.46	21.21	19.96	985C7277	25.45	22.91	21.63	20.36	985C8277	26.80	24.12	22.78	2
0-15	985C6280	24.95	22.46	21.21	19.96	985C7280	25.45	22.91	21.63	20.36	985C8280	26.80	24.12	22.78	2
0-150	985C6285	24.95	22.46	21.21	19.96	985C7285	25.45	22.91	21.63	20.36	985C8285	26.80	24.12	22.78	2

Specify Stock No., Range and Model No. on Meter Ord

'eston Taut Band and Flat Edgewise Panel Meters

1% AND 2% TAUT-BAND PANEL METERS

-sensitive panel meters recognized for top reliability. Rated accuracy 1% for 4½" supplied knife-edge pointer and mirror scale, also ±2% acy for 3½" and 4½" size. Have specially treated Alnico 5 magnets for erm stability. "Taut Band" mechanisms provide high sensitivity. The panel meters have lance-type pointer and 100° arcs. Plastic fronts are ul® treated to remain static-free, also available with bakelite fronts and window. Screwdriver slotted zero correctors provided. Milliammeter with s of 30 mA or higher are shunted and have a 100 millivolt drop. Ammeters approximately 50 mV drop. All meet C-39.1 ASA specifications. Av. wt. 12 oz.



SURFACE MOUNTED TYPE

RECESS MOUNTING (Plastic Fronts Only)

4½" MODEL 1941 1% ±1 METERS

DC VOLTMETERS

Stock No.	Resis. Ω/V	EACH 1-9	10-24	25-49	50-Up
985C8175	1000	32.00	27.41	25.88	24.36
985C8179	1000	32.00	27.41	25.88	24.36
985C8180	1000	32.00	27.41	25.88	24.36
985C8182	1000	32.00	27.41	25.88	24.36
985C8183	1000	32.00	27.41	26.88	24.36
985C8185	1000	32.00	27.41	25.88	24.36
985C8189	1000	32.00	26.41	25.88	24.36

DC AMMETERS

985C8104	50	31.00	26.46	24.99	23.52
985C8105	50	31.00	26.46	24.99	23.52
985C8107	40	31.00	26.46	24.99	23.52

DC MILLIAMMETERS

985C8150	12.5	31.00	26.46	24.99	23.52
985C8153	3.0	31.00	26.46	24.99	23.52
985C8154	2.4	31.00	26.46	24.99	23.52
985C8156	2.4	31.00	26.46	24.99	23.52
985C8158	2.	31.00	26.46	24.99	23.52
985C8160	1.	31.00	26.46	24.99	23.52
985C8162	0.5	31.00	26.46	24.99	23.52
985C8165	0.2	31.00	26.46	24.99	23.52

DC MICROAMMETERS

985C8134	950	34.75	29.79	28.14	26.48
985C8135	350	34.25	29.30	27.67	26.04
985C8136	40	32.25	27.63	26.10	24.56

±2% ACCURACY TAUT BAND METERS

DC VOLTMETERS

Range	Stock No.	1931T 3½" Meters 1-9	10-24	25-49	50-Up	Stock No.	1941T 4½" Meters 1-9	10-24	25-49	50-Up
0-15	985C7083	22.75	19.40	18.32	17.24	.....	.....	.....	.....	.....
0-30	985C7086	22.75	19.40	18.32	17.24	985C8086	24.00	20.57	19.42	18.28
0-50	985C7087	22.75	19.40	18.32	17.24	985C8087	24.00	20.57	19.42	18.28
0-100	985C7088	22.75	19.40	18.32	17.24	.....	.....	.....	.....	.....
0-500	985C7089	22.75	19.40	18.32	17.24	.....	.....	.....	.....	.....

DC AMMETERS

0-1	985C7001	21.50	18.45	17.43	16.40	985C8001	23.00	19.62	18.53	17.44
0-5	.....	.....	.....	.....	.....	985C8004	23.00	19.62	18.53	17.44
0-10	.....	.....	.....	.....	.....	985C8006	23.00	19.62	18.53	17.44
0-30	985C7009	21.50	18.45	17.43	16.40	985C8030	23.00	19.62	18.53	17.44

DC MILLIAMMETERS

0-1	985C7050	21.50	18.45	17.43	16.40	985C8050	23.00	19.62	18.53	17.44
0-5	985C7053	21.50	18.45	17.43	16.40	985C8053	23.00	19.62	18.53	17.44
0-50	985C7060	21.50	18.45	17.43	16.40	985C8060	23.00	19.62	18.53	17.44
0-500	985C7065	21.50	18.45	17.43	16.40	985C8066	23.00	19.62	18.53	17.44

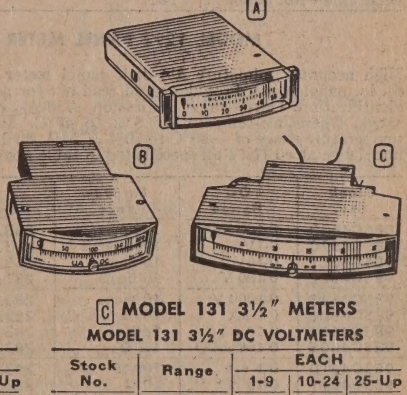
DC MICROAMMETERS

0-50	985C7030	27.50	23.40	22.10	20.80	985C8031	21.75	24.57	23.21	21.84
0-100	985C7032	25.75	21.96	20.74	19.52	985C8032	26.75	22.91	21.63	20.36
0-200	985C7033	24.25	19.64	19.64	18.48	985C8033	26.00	22.23	21.00	19.76
0-500	.....	.....	.....	.....	.....	985C8036	24.50	21.02	19.85	18.68

WESTON THIN-LINE EDGEWISE PANEL METERS

- mpletely Flat—Can be Stacked
- signed to Meet ASA C-39.1
- Cormag Mechanism Self Shielding
- Shock-Mounted Jewels

e-saving edgewise meters are completely flat in order to be easily stacked. shielded Cormag® mechanism, shock absorbing jewel movement. In-line pointer and scale to eliminate parallax. Also front mounted zero corrector pt Model III) is included. All DC voltmeters are 5,000 ohms/volt; AC volt- rs are 2000 ohms/volt. Easy horizontal mounting; clips fasten to meter behind l accuracy: 2% of full scale reading on DC meters, 3% on AC. Overall scale h 1½" size 1.24", 2½" size 1.875", 3½" size 2.75". Especially designed to meet C-39.1 specifications. Very compact and attractive design on all three panel r models. Avg. shpg. wt. ¼ lb.



A MODEL 111 1½" METERS

MODEL 111 1½" DC VOLTMETERS

ock lo.	Range	EACH 1-9	10-24	25-Up
1139	0-10 V	19.25	16.43	15.51
1141	0-25 V	19.25	16.43	15.51
1143	0-50 V	19.25	16.43	15.51
1144	0-100 V	19.25	16.43	15.51
1145	0-150 V	19.25	16.43	15.51
1146	0-300 V	19.25	16.43	15.51

½" SELF-CONTAINED DC AMMETER

1101	0-1 amp	19.25	16.43	15.51

ODEL 111 1½" DC MILLIAMMETERS

1125	0-1 mA	18.80	15.75	14.88
1129	0-25 mA	19.25	16.42	15.51
1131	0-100 mA	19.25	16.42	15.51
1134	0-500 mA	19.25	16.42	15.51

ODEL 111 1½" DC MICROAMMETERS

1115	0-50 μA	23.75	20.25	19.13
1116	0-100 μA	20.25	17.33	16.36
1118	0-500 μA	18.75	15.98	15.09
1120	50-0-50 μA	20.25	17.33	16.36

ODEL 112 RECTIFIER AC VOLTMETERS

1125	0-150 V	24.50	20.93	19.76
1158	0-300 V	24.50	20.93	19.76

B MODEL 121 2½" METERS

MODEL 121 2½" DC VOLTMETERS

Stock No.	Range	EACH 1-9	10-24	25-Up
985C1339	0-10 V	21.85	18.68	17.64
985C1341	0-25 V	21.85	18.68	17.64
985C1343	0-50 V	21.85	18.68	17.64
985C1344	0-100 V	21.85	18.68	17.64
985C1345	0-150 V	21.85	18.68	17.64
985C1346	0-300 V	21.85	18.68	17.64

2½" SELF-CONTAINED DC AMMETER

985C1300	0-1 amp	21.85	18.68	17.64

MODEL 121 2½" DC MILLIAMMETERS

985C1325	0-1 mA	20.65	17 78	17.69
985C1329	0-25 mA	21.85	18.68	17.64
985C1331	0-100 mA	21.85	18.68	17.64
985C1334	0-500 mA	21.85	18.68	17.64

MODEL 121 2½" DC MICROAMMETERS

985C1315	0-50 μA	20.25	22.50	21.25
985C1316	0-100 μA	22.50	19.35	18.28
985C1318	0-500 μA	21.00	18.00	17.00
985C1320	50-0-50 μA	22.50	19.35	18.28

MODEL 122 RECTIFIER AC VOLTMETERS

985C1355	0-150 V	26.75	22.95	21.68
985C1358	0-300 V	26.75	22.95	21.68

C MODEL 131 3½" METERS

MODEL 131 3½" DC VOLTMETERS

Stock No.	Range	EACH 1-9	10-24	25-Up
985C1539	0-10 V	24.25	20.70	19.55
985C1541	0-25 V	24.25	20.70	19.55
985C1543	0-50 V	24.25	20.70	19.55
985C1544	0-100 V	24.25	20.70	19.55
985C1545	0-150 V	24.25	20.70	19.55
985C1546	0-300 V	24.25	20.70	19.55

3½" SELF-CONTAINED DC AMMETER

985C1500	0-1 amp	24.25	20.70	19.55

MODEL 131 3½" DC MILLIAMMETERS

985C1525	0-1 mA	23.25	19.80	18.70
985C1529	0-25 mA	24.25	20.70	19.55
985C1531	0-100 mA	24.25	20.70	19.55
985C1534	0-500 mA	24.25	20.70	19.55

MODEL 131 3½" DC MICROAMMETERS

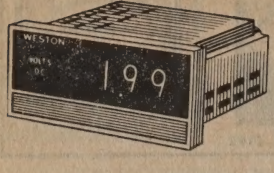
985C1515	0-50 μA	28.75	24.53	23.16
985C1516	0-100 μA	25.00	21.38	20.19
985C1518	0-500 μA	23.75	20.25	19.13
985C1520	50-0-50 μA	25.00	21.38	20.19

MODEL 132 RECTIFIER AC VOLTMETERS

985C1555	0-150 V	29.50	25.20	23.80
985C1558	0-300 V	29.50	25.20	23.80

cify Stock No., Range and Model No. on Meter Orders

Weston Panel Meters



Model 1260

Model 1290

Model 1292

Model 1294

Specifications	Model 1294	Model 1290	Model 1292	Model 1260
Accuracy	0.05% Rdg. ±1 Digit 25°C ±10°C 117V ±10%	±0.1% FS ±1 Digit 25°C ±10°C 117V ±10%	±0.1% FS ±1 Digit 26°C ±10°C 117V ±10%	±0.5% FS ±1 Digit 25°C ±10°C 117V ±10%
Reading/Sec	5/sec	6/sec	5/sec	10/sec
CMMR	80 db @ 60 Hz	80 db @ 60 Hz	80 db @ 60 Hz	80 db with 1000 ohm
NMRR	35 db @ 60 Hz	35 db @ 60 Hz	35 db @ 60 Hz	35 db @ 60 Hz
Power Requirements	117V ±10% 7 watts 60-400 Hz	117V ±10% 5 watts 60-400 Hz	117V ±10% 7 watts 60-400 Hz	117V ±10% 10 watt 50-400 Hz
Response Time to Full Scale	Less than 1 second	Less than 1 second	Less than 2 seconds	Approximately 1 sec
Approx. Wt.	1½ Lbs.	1¼ Lbs.	1¼ Lbs.	Less than 1 Lb.
Overrange	100% (1.9999)	100%	100%	25%
Full Buffered Display	Yes	Yes	Yes	No
Complete Mounting From Front of Panel	Yes	Yes	Yes	Yes
Dimension	1.75"Hx4"Wx4.25"D	1.75"Hx4"Wx4.25"D	1.75"Hx4"Wx4.25"D	1.75"Hx4"Wx4.25"D
BCD	None	Yes 1-2-4-8	Yes 1-2-4-8	No
Logic Levels	T^2L	"1" ≥ 1.0V "0" ≤ 0.4V	"1" ≥ 1.0V "0" ≤ 0.4V	None
Polarized Viewing Window	Yes	Yes	Yes	Yes
Burroughs Nixies PLUG IN No Soldering to replace	Yes	Yes	Yes	Soldered in Nixies
Reparable—Not potted	Yes	Yes	Yes	Yes

MODEL 1292 PANEL METER

High accuracy miniature 3½-digit panel meter occupies only 7 sq. in. panel space. Provides rapid read-out for positive numerical identification. Out-of-range indication ±300%, except on 1000V range. Operating temperature 5°C to 45°C. May be stored in temperature range of −40°C to 70°C. CMR: 80 dB with 1000 ohm unbalance at 60 Hz. Full specs listed in table above.

Stock No.	DC Range	Impedance	EACH 1-4	EACH 5-9
985C4630	0-100 mV	100 megs	283.50	268.50
985C4620	0-1V	1000 megs	283.50	268.50
985C4621	0-10V	10 megs	283.50	268.50
985C4622	0-100 V	10 megs	283.50	268.50
985C4623	0-1000 V	10 megs	283.50	268.50
985C4601	0-1 μA	100K Ω	283.50	268.50
985C4602	0-10 μA	10K Ω	283.50	268.50
985C4605	0-100 μA	1K Ω	283.50	268.50
985C4610	0-1 mA	100 Ω	283.50	268.50
985C4611	0-10 mA	10 Ω	283.50	268.50
985C4612	0-100 mA	1 Ω	283.50	268.50

985-4118. 9760 PC Connector. 4 oz. ..... Ea. 3.75

MODEL 1290 PANEL METER

Front-mounting, converts analog input to digital display. Takes 7 sq. in. panel space. Min. full scale range: 0-100 mV DC. Max. full scale range: 0-1000 VDC, Sensitivity: 100 mV, 10k ohms; 1 V 100k ohms; 10 V to 1000 V, 1 megohm. Rejection: common mode, 80 dB with 1000 ohm unbalance; normal mode, 35 dB. Dual slope integration with sensing intervals related to line frequency. Self-adjusting hardware included. Bezel front.

Stock No.	DC Range	Over-Range	EACH 1-4	EACH 5-9
985C4215	0-100.0 mV	199.9 mV	260.00	270.00
985C4206	0-1.000 V	1.999 V	260.00	247.00
985C4207	0-10.00 V	19.99 V	260.00	247.00
985C4208	0-100.0 V	199.9 V	260.00	247.00
985C4209	0-1000 V	.....	260.00	247.00
985C4201	0-10.00 μA	19.99 μA	260.00	247.00
985C4202	0-100.0 μA	199.9 μA	260.00	247.00
985C4203	0-1.000 mA	1.999 mA	260.00	247.00
985C4204	0-10.00 mA	19.99 mA	260.00	247.00
985C4205	0-100.0 mA	199.9 mA	260.00	247.00

MODEL 1260 PANEL METER

Precision miniature panel meter has 2½-digit scale, offers eco along with high quality, extreme accuracy. Bipolar digital r utilizes dual slope integrating technique to give extremely read-out of numerical data in fast-reading characters. Oper temperature range +5°C to +45°C. May be stored in tempera ranging from −40°C to +70°C. Full specification list for and all other meters on table above.

Stock No.	DC Range	Impedance	EACH 1-4	EACH 5-
985C4116	0-199 mV	20K Ω	133.50	126.
985C4109	0-1.99 V	200K Ω	133.50	126.
985C4110	0-19.9 V	2 megs	133.50	126.
985C4111	0-199 V	2 megs	133.50	126.
985C4115	0-100 kV	2 megs	133.50	126.
985C4102	0-19.9 μA	10K Ω	133.50	126.
985C4103	0-199 μA	1K Ω	133.50	126.
985C4105	0-1.99 mA	100 Ω	133.50	126.
985C4106	0-19.9 mA	10 Ω	133.50	126.
985C4107	0-199 mA	1 Ω	133.50	126.

985-4117. 9760 PC Connector. 4 oz. ..... Ea.

MODEL 1294 PANEL METER

Highly accurate miniature 4½ digit panel meter provides d display in legible, quickly-read characters to reduce possi of human reading error. Precise operation from a top-rated co nent. Utilizes dual slope integrating technique for rapid, readings. Nixies are plug-in type for quick repair, provide blinking, flicker-free display. Full specs in table above.

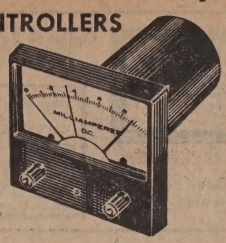
Stock No.	DC Range	EACH 1-4	EACH 5-9
985C4715	100.0 mV	375.00	356.25
985C4706	1.000 V	350.00	332.50
985C4707	10.00 V	350.00	332.50
985C4708	100.0 V	350.00	332.50
985C4709	1000 V	350.00	332.50
985C4701	10.00 μA	350.00	332.50
985C4702	100.0 μA	350.00	332.50
985C4703	1.000 mA	350.00	332.50
985C4704	10.00 mA	350.00	332.50
985C4705	100.0 mA	350.00	332.50

Specify Stock No., Range and Model No. on Meter Or

Accurate Controllers and Pyrometers api

LTIMETER" SOLID-STATE METER-RELAY CONTROLLERS

el 503-X. Relay control independent of meter movement, yet rol point is set with familiar red pointer. Solid-state, with rated circuits used for comparison functions. Wired failsafe, matic reset. Relay output, SPDT, 5A at 115 VAC resistive. % F. S. accuracy. Model 603 X temperature controllers have junction compensation and thermocouple break protection.



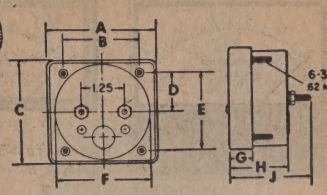


TABLE OF DIMENSIONS IN INCHES

e	A	B	C	D	E	F	G	H	J
	4.71	4.00	4.27	2.02	3.56	2.79	0.761	1.95	2.62
	5.75	5.25	4.36	2.15	3.00	2.79	0.761	1.95	2.62

MODEL 503 X Shpg. wt., 1½ lbs.

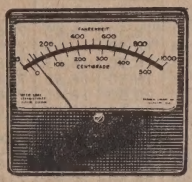
ge	Imp. Ohms	Single Set-Point, EA. Stock No.	1-9	10-24	Double Set-Point, EA. Stock No.	1-9	10-24
	10k	716C0480	168.50	152.00	716C0490	194.75	175.75
A	1000	716C0481	144.20	130.15	716C0491	160.00	144.40
A	200	716C0482	123.15	111.15	716C0492	149.50	134.90
0 μA	100	716C0493	128.45	115.90	716C0493	154.75	139.65
μA	100	716C0484	117.90	106.40	716C0494	144.20	130.15
A	10	716C0485	117.90	106.40	716C0495	144.20	130.15
V	10k	716C0486	128.45	115.90	716C0496	154.75	139.65
V	50k	716C0487	117.90	106.40	716C0497	144.20	130.65

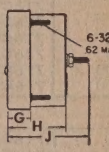
MODEL 603 X (*Thermocouple) Shpg. wt., 1½ lbs.

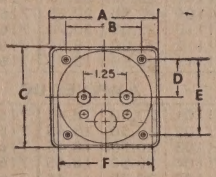
Range °F	*	Single Set-Point, EA. Stock No.	1-9	10-24	Double Set-Point, EA. Stock No.	1-9	10-24
0-150	I/C	716C0980	168.50	152.00	716C0990	194.75	175.75
0-300	I/C	716C0981	157.90	142.50	716C0991	184.20	166.25
0-500	I/C	716C0982	152.65	137.75	716C0992	179.00	161.50
0-750	I/C	716C0983	152.65	137.75	716C0993	179.00	161.50
0-1000	I/C	716C0984	152.65	137.75	716C0994	179.00	161.50
0-1500	C/A	716C0985	152.65	137.75	716C0995	179.00	161.50
0-2500	C/A	716C0986	152.65	137.75	716C0996	179.00	161.50

MODEL 503 PYROMETER—2% ACCURACY

mocouple-actuated with copper error-pensation. Automatic bimetal cold-tion correction. External resistor ad- for thermocouples up to 10 ohms. Mirrored F° and C° scales. Knife-edge pointers. I/C for Iron-Constantan; C/A for Chromel-Alumel; Cu/C, Copper Constantan. Phenolic case. Scale arc, 4". 2 lbs.







Adjustable External Resistor Compensates Up to 10 Ohms

tock No.	Temperature Range °F	°C	Thermo-couple	EACH 1-9	10-24
16C0601	−200/+100	−130/+40	Cu/C	54.10	39.10
16C0600	−75/+225	−60/+110	I/C	47.65	36.45
16C0602	0/300	0/150	I/C	46.50	33.58
16C0603	0/500	0/260	I/C	44.10	31.88
16C0604	0/750	0/400	I/C	44.10	31.88
16C0605	0/1000	0/500	I/C	43.55	31.45
16C0606	0/1500	0/800	C/A	43.55	31.45
16C0607	0/2000	0/1100	C/A	38.25	27.63
16C0608	0/2500	0/1650	C/A	38.25	27.63

MODEL 603-I PYROMETER—1% ACCURACY

e as Model 503 above, but offer 1% accuracy. Scale arc 5".

16C1001	0/300	0/150	I/C	59.40	42.95
16C1002	0/500	0/260	I/C	57.65	41.65
16C1003	0/750	0/400	I/C	57.65	41.65
16C1004	0/1000	0/500	I/C	57.05	41.23
16C1005	0/1500	0/800	C/A	57.05	41.23
16C1006	0/2000	0/1100	C/A	51.75	37.40
16C1007	0/2500	0/1370	C/A	51.75	37.40
16C1008	0/3000	0/1650	PLT 13%	57.65	41.65

TABLE OF DIMENSIONS IN INCHES

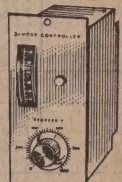
Type	A	B	C	D	E	F	G	H	J
503	4.71	4.00	4.27	2.02	3.56	2.79	0.76	1.95	2.62
603	5.75	5.25	4.36	2.15	3.00	2.79	0.76	1.95	2.62

2-MODE PROPORTIONAL TEMPERATURE CONTROLLERS

MODEL 227 SOLID-STATE CONTROLLERS

Stock No.	Temperature Range	Thermo-couple	EACH
716C0202	0-250° F	Type J	185.25
716C0203	0-300° F	Type J	185.25
716C0201	100-400° F	Type J	185.25
716C0204	0-500° F	Type J	185.25
716C0206	0-800° F	Type J	185.25
716C0207	0-1000° F	Type J	185.25
716C0205	500-1500° F	Type K	185.25

Low-cost proportional output controller with automatic reset to eliminate process "droop." For resistive loads to 10 amps at 120 or 240 VAC. Maintains 1° F straight line control. Temperature is set on calibrated dial. Control function independent of meter indication. Accuracy, ±1%, with 5% proportional band. Reset, fixed at 5 minutes per reset (field-changeable). Calibrated for iron-constantan (Type J) or chromel-alumel (Type K) thermocouples; handles up to 100-ohm thermocouple without adjustment. Electrical cold junction compensation, thermocouple break protection. Size, 6¾x2¾x7". Av. shpg. wt. 8 lbs.



DEL 232 HIGH-READABILITY SOLID-STATE TEMPERATURE CONTROLLER

WITHOUT TEMPERATURE INDICATOR METER

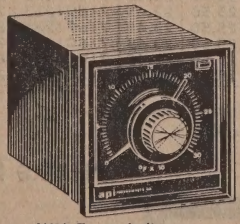
emp. ange	Model 232-1RN EACH Stock No.	1-9	10-24	Model 232-2RN EACH Stock No.	1-9	10-24
0°F	716C0230	94.45	80.75	716C0250	116.65	99.75
0°F	716C0231	94.45	80.75	716C0251	116.65	99.75
0°F	716C0232	94.45	80.75	716C0253	116.65	99.75
000°C	716C0234	94.45	80.75	716C0254	116.65	99.75
000°F	716C0235	94.45	80.75	716C0255	116.65	99.75
000°F	716C0238	94.45	80.75	716C0258	116.65	99.75
500°F*	716C0239	94.45	80.75	716C0259	116.65	99.75

WITH TEMPERATURE INDICATOR METER

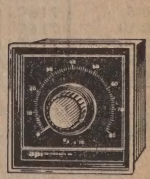
	232-1RM			232-2RM		
0°F	716C0240	116.65	99.75	716C0260	138.90	118.75
0°F	716C0241	116.65	99.75	716C0261	138.90	118.75
0°F	716C0243	116.65	99.75	716C0263	138.90	118.75
000°F	716C0244	116.65	99.75	716C0264	138.90	118.75
000°C	716C0245	116.65	99.75	716C0265	138.90	118.75
000°F	716C0248	116.65	99.75	716C0268	138.90	118.75
500°F	716C0249	116.65	99.75	716C0269	138.90	118.75

0.1 Degree Control Sensitivity

6.5 Inch Indicator Scale



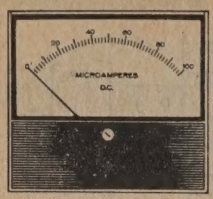
With Temp. Indicator



Without Indicator

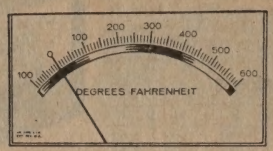
High resolution control and limit using integrated circuits. Push-turn center knob sets temperature; also doubles as push button reset for limit/alarm applications. High controller accuracy: ±2% of span. Handles up to 100-ohm thermocouple without adjustment. Cold junction compensation. Break-protected thermocouple of iron-constantan except *chromel-alumel. SPDT relay rated 5 amps. Model 232-IRN is on-off/limit; 232-2RNis time proportioning. 6 watts, 120/240 VAC. Size, 3¾x3¾x5³½". Wt. 4 lbs.

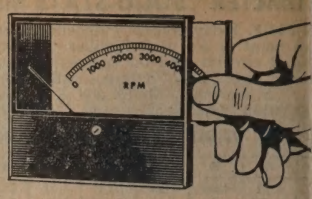
Sensitive "Changeable Scale" Panel Meters by AP



Feature Taut-Band Shielded Movement

Optional Bezel Mount





SERIES 7000 CHANGEABLE SCALE DC AND AC PANEL METERS

Precise and rugged, Series 7000 meters offer more versatility than any other line. All taut band shielded movements. Tracking, 1%; accuracy, ±2%. Phenolic cases and glass windows. Slip-in scales permit reduced inventory, multi-functional versatility. Mounting options provide maximum styling freedom. See chart right for complete dimensions. Av. shpg. wt. 1½ lbs.

MILLIAMPERES DC

Range	Model 7035—3½" Stock No.	EACH 1-9	EACH 10-Up	Model 7045—4½" Stock No.	EACH 1-9	EACH 10-Up
0-1	716C1113	18.50	16.65	716C1213	20.00	18.00
0-5	716C1114	18.50	16.65	716C1214	20.00	18.00
0-10	716C1115	18.50	16.65	716C1215	20.00	18.00
0-50	716C1116	18.50	16.65	716C1216	20.00	18.00
0-100	716C1117	20.50	18.45	716C1217	22.00	19.80
0-500	716C1118	20.50	18.45	716C1218	22.00	19.80

MICROAMPERES DC

0-20	716C1107	31.50	28.35	716C1207	33.00	29.70
0-50	716C1108	25.50	22.95	716C1208	27.00	24.30
0-100	716C1109	22.50	20.25	716C1209	24.00	21.60
50-0-50	716C1110	23.00	20.70	716C1210	24.50	22.05
100-0-100	716C1112	21.00	18.90	716C1212	22.50	20.25
0-200	716C1111	20.50	18.45	716C1211	22.00	19.80

AMPERES DC

0-1	716C1101	20.50	18.45	716C1201	22.00	19.80
0-3	716C1102	20.50	18.45	716C1202	22.00	19.80
0-5	716C1103	20.50	18.45	716C1203	22.00	19.80
0-10	716C1104	20.50	18.45	716C1204	22.00	19.80
0-15	716C1105	20.50	18.45	716C1205	22.00	19.80
0-25	716C1106	20.50	18.45	716C1206	22.00	19.80

MILLIVOLTS DC

0-10	716C1119	30.50	27.45	716C1219	32.20	28.80
0-50	716C1120	20.50	18.45	716C1220	22.00	19.80

VOLTS DC

0-15	716C1126	20.50	18.45	716C1226	22.00	19.80
0-30	716C1127	20.50	18.45	716C1227	22.00	19.80
0-50	716C1128	20.50	18.45	716C1228	22.00	19.80
0-150	716C1129	20.50	18.45	716C1229	22.00	19.80
0-300	716C1130	20.50	18.45	716C1230	22.00	19.80
0-500	716C1131	20.50	18.45	716C1231	22.00	19.80

VOLTS AC

0-10	716C1138	24.50	22.05	716C1238	26.00	23.40
0-15	716C1139	24.50	22.05	716C1239	26.00	23.40
0-100	716C1140	24.50	22.05	716C1240	26.00	23.40
0-300	716C1141	24.50	22.05	716C1241	26.00	23.40

AMPERES AC

0-1	716C1132	25.50	23.45	716C1232	27.00	24.80
0-5	716C1133	25.50	23.45	716C1233	27.00	24.80
0-10	716C1134	25.50	23.45	716C1234	27.00	24.80
0-30	716C1135	25.50	23.45	716C1135	27.00	24.80
0-50	716C1136	25.50	23.45	716C1236	27.00	24.80
0-150%*	716C1137	25.50	23.45	716C1237	27.00	24.80

*AC Load For Use with Current Transformer.

*See page 483 for Transformers.

METER DIMENSIONS FOR ALL SERIES 7000 METERS ON THIS PAGE

Model	Flange	Body Dia.	Dpth.	Model	Flange	Body Dia.	D
7035	3.01x3.51"	2.79"	1.94"	7045	4.05x4.61"	2.79"	1

PYROMETERS

Thermocouple actuated, direct reading millivolt pyrometer in ranges. Taut band movement. ±2% accuracy. Constant rep ability. Mirror scale standard. Thermistor type copper error c pensation. Sizes in table above. Av. shpg. wt. 1½ lbs.

Range	Model 7035—3½" Stock No.	EACH 1-9	EACH 10-Up	Model 7045—4½" Stock No.	EACH 1-9	EACH 10-
0-300°F	716C1175	36.00	32.40	716C1275	37.00	33
0-500°F	716C1176	36.00	32.40	716C1276	37.00	33
0-800°F	716C1177	36.00	32.40	716C1277	37.00	33
0-1000°F	716C1178	36.00	32.40	716C1278	37.00	33
0-1500°F	716C1179	34.00	30.60	716C1279	35.00	31
0-2000°F	716C1180	34.00	30.60	716C1280	35.00	31
0-2500°F	716C1181	34.00	30.60	716C1281	35.00	31

PLAIN SCALES

Divisions	For Model 7035—3½" Stock No.	1-9	10-Up	For Model 7045—4½" Stock No.	1-9	10-
40	716C1152	1.50	1.35	716C1252	1.50	1
50	716C1153	1.50	1.35	716C1253	1.50	1
60	716C1154	1.50	1.35	716C1254	1.50	1
75	716C1155	1.50	1.35	716C1255	1.50	1
100	716C1156	1.50	1.35	716C1256	1.50	1
Arc only	716C1150	1.50	1.35	716C1250	1.50	1
Blank	716C1151	1.50	1.35	716C1251	1.50	1
20-0-20	716C1157	1.50	1.35	716C1257	1.50	1
25-0-25	716C1158	1.50	1.35	716C1258	1.50	1
40-0-40	716C1159	1.50	1.35	716C1259	1.50	1
50-0-50	716C1160	1.50	1.35	716C1260	1.50	1
100-0-100	716C1161	1.50	1.35	716C1261	1.50	1

MIRRORED SCALES

40	716C1164	2.00	1.80	716C1264	2.00	1
50	716C1165	2.00	1.80	716C1265	2.00	1
60	716C1166	2.00	1.80	716C1266	2.00	1
75	716C1167	2.00	1.80	716C1267	2.00	1
100	716C1168	2.00	1.80	716C1268	2.00	1
Arc only	716C1162	2.00	1.80	716C1262	2.00	1
Blank	716C1163	2.00	1.80	716C1263	2.00	1
20-0-20	716C1169	2.00	1.80	716C1269	2.00	1
25-0-25	716C1170	2.00	1.80	716C1270	2.00	1
40-0-40	716C1171	2.00	1.80	716C1271	2.00	1
50-0-50	716C1172	2.00	1.80	716C1272	2.00	1
100-0-100	716C1173	2.00	1.80	716C1273	2.00	1

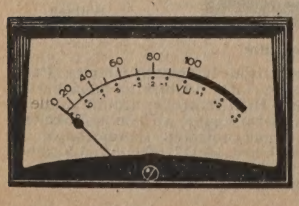
VU METERS

Conform to ASA C 16.5 (1954). A scale is for recording applicati B Scale is for percent modulation. Scales not changeable. Dir sions in table above. Av. shpg. wt. 1½ lbs.

Scale A	716-1195	33.00	29.70	716-1295	33.00	29
Scale B	716-1196	33.00	29.70	716-1296	33.00	29

716-1190. Type 7035 Bezel Kit. Shpg. wt. 10 oz.....
716-1191. Type 7035 Panel Lens. Shpg. wt. 5 oz.....
716-1290. Type 7045 Bezel Kit. Shpg. wt. 10 oz.....
716-1291. Type 7045 Panel Lens. Shpg. wt. 5½ oz.....

DELUXE HIGH-ACCURACY VU METERS



SLIM-BEZEL "STYLIST" VU METERS

For a wide variety of audio uses. Conform to all specifications of ASA C16.5 (1954). Mount through rectangular panel cutout. Only the slim bezel can be seen. Easily illuminated from behind panel through lucite window at top of case. 6-volt illumination bracket. Scale A is for recording applications; Scale B emphasizes percent modulation for broadcast uses. Model 561, 5x3", 4 13/16x2 3/4" cutout; 361, 3½x2", for 3 1/2x1 7/8" cutout. Shpg. wt., 1½ lbs.

Stock No.	Model	Scale	EACH 1-9	10-
716C0561	561	A	33.00	29
716C0562	561	B	33.00	29
716C0361	361	A	33.00	29
716C0362	361	B	33.00	29

Specify Stock No., Range and Model No. on Panel Meter Ord

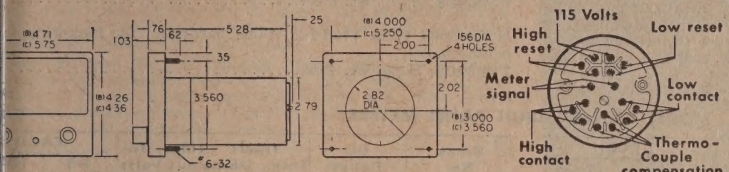
Compack I" Optical Meter-Relay Controllers

CONTACTLESS ADJUSTABLE SET-POINT INDICATING METER RELAY CONTROLLERS

Monitor or Control Any Signal Measurable on a Panel Meter:

- Motor Load, rpm
- Voltage
- Inductance
- Phase
- Resistance
- Current
- Pressure, Temp.
- Vacuum

Below set point: (on a high set point meter) light is focused on photocell keeping load relay coil energized (fail safe). At or above set point: light is abruptly cut off from photocell, instantly de-energizing coil and closing contacts. Operation unaffected by ambient light. Double set point units energize both relay coils when signal is between the two set points. Shpg. wt., 3 lbs.



Model 503 is (B) Dimension

Model 603 is (C) Dimension

Range DC	Model 503-KH Single Set Point				Model 503-KD Double Set Point			
	Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up	Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up
0 μA*	716C0341	146.40	132.05	125.10	716C0330	172.65	155.80	147.60
0 μA*	716C0342	134.70	120.65	114.30	716C0331	160.00	144.40	136.80
0 μA*	716C0343	127.45	114.95	108.90	716C0332	153.70	138.70	131.40
00 μA*	716C0344	122.15	110.20	104.40	716C0333	148.45	133.95	126.90
0-50 μA*	.....	.....	.....	.....	716C0334	148.95	143.43	127.35
-5 μA*	.....	.....	.....	.....	716C0335	172.65	155.80	147.60
mA	716C0345	114.75	103.55	98.10	716C0336	141.05	127.30	120.60
0 mV*	716C0346	126.35	114.00	108.00	716C0337	152.65	137.75	130.50
0 mV	716C0347	116.85	105.45	99.90	716C0338	143.10	129.20	122.40
mA AC	716C0348	118.95	107.35	101.70	716C0339	145.30	131.10	124.20
C Load	716C0349	118.95	107.35	101.70	716C0340	145.30	131.10	124.20

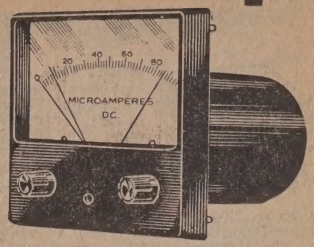
TRANSFORMERS AVAILABLE FOR AC LOAD METER (†)

Stock No.	Range Amps	EACH	Stock No.	Range Amps	EACH
716C2003	3	7.50	716C2015	15	7.50
716C2005	5	7.50	716C2025	25	7.50
716C2007	7.5	7.50	716C2030	30	7.50
716C2010	10	7.50	716C2050	50	7.50

Temp. Range °F	Thermo-couple	Model 603-KH Single Set Pt. Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up	Model 603-KD Double Set Pt. Stock No.	EACH 1-9	EACH 10-24	EACH 25-Up
00	I/C	716C0821	145.30	131.10	124.20	716C0801	171.60	154.85	146.70
00	I/C	716C0822	142.10	128.25	121.50	716C0802	168.50	152.00	144.00
00	I/C	716C0823	142.10	128.25	121.50	716C0803	168.50	152.00	144.00
000	I/C	716C0824	142.10	128.25	121.50	716C0804	168.50	152.00	144.00
00	C/A	716C0825	138.95	125.40	118.80	716C0805	165.30	149.15	141.30
00	C/A	716C0826	138.95	125.40	118.80	716C0806	165.30	149.15	141.30

MODEL 603-KTP TIME PROPORTIONING TEMPERATURE CONTROL

Stock No.	Temperature Range °F	Temperature Range °C	Thermo-couple	EACH 1-9	EACH 10-24	EACH 25-Up
6C0841	0-300	0-150	I/C	183.35	165.54	156.83
6C0842	0-500	0-260	I/C	181.50	163.64	155.03
6C0843	0-800	0-400	I/C	181.50	163.64	155.03
6C0844	0-1000	0-500	I/C	181.50	163.64	155.03
6C0845	0-1500	0-800	C/A	177.90	160.55	152.10
6C0846	0-2500	0-1370	C/A	177.90	160.55	152.10



OPTICAL METER RELAY FEATURES

Taut-Band Construction for Sensitive Meter Ranges . . . Continuous Reading Above and Below Set Point . . . Advanced Solid-State Circuitry, Wired Fail-Safe.

"COMPACK" CONTROL CIRCUITS

ON-OFF CONTROLS

MODELS 503-KH (SINGLE SET POINT) AND 503-KD (DOUBLE SET POINT). Package contains power supply, control circuitry and load relay coupled to Optical Meter-Relay. Connections are made to terminals in rear of meter barrel as shown right. Control circuit is simple phase-sensitive AC bridge which triggers an SCR on or off as the photocell changes resistance. The SCR "on" energizes the load relay coil. All circuit components are normally energized below set point, keeping the system fail-safe. May easily be converted to a push-button reset latching circuit. SPDT (Form C) relay contacts rated 5 amps at 115 VAC resistive. Scale arc length, 4". *Indicates taut-band meter movement.

†AC LOAD METER. Range 0.47 mA AC to match secondary of current transformers listed. Dial reads 0-150% of motor load. May be used with any transformer listed, to monitor or control motor load. When ordering AC Load Meter, order transformer appropriate to your application.

ON-OFF TEMPERATURE CONTROLS

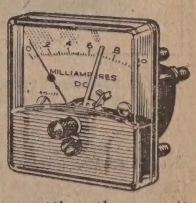
MODELS 603-KH (SINGLE SET POINT) AND 603-KD (DOUBLE SET POINT). Medium resistance, thermocouple actuated pyrometers with electrical cold junction and copper error compensation; automatic thermocouple break protection. Mirrored scales calibrated in °F and °C. Adjustable for thermocouples up to 10 ohms. May be used for control or alarm applications. Scale arc approx. 5". All have taut-band movements.

TIME PROPORTIONING TEMP. CONTROLS

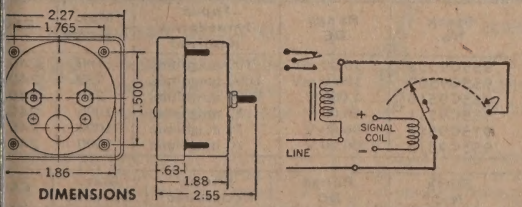
MODEL 603-KTP. Same compensation and thermocouple break protection as temperature controls above, but with proportional control from relay output. Ratio of relay "on" time to "off" time proportional to deviation from set point. Has approx. 3% PR band. Capable of straight line temperature control as close as ±1°F. Has adjustable time cycle and PR band. Taut-band meter.

LOW-COST ALARM METER-RELAY

- Indicating Meter, As Well As Alarm
- Full-Scale Adjustable Alarm Pointer
- Sensitivities to 100 Microamps



Used for monitoring motor load, gas content, overvoltage, current leakage, etc. Allows direct alarm action from meter relay contacts without need for a special DC power supply or amplifier. The indicating meter pointer carries a gold plated steel contact and the adjustable alarm pointer carries 2 small gold plated magnets for a contact. When the indicating pointer reaches an alarm setting, the magnet positively locks the contacts together, closing the alarm circuit. Operate reliably on as little as 6 volts, AC or DC, and will handle up to 115 volts, 100 mA. Manually reset. *Coil resistance, 2.5k. †AC Load Alarm, high set point. †† AC Load Alarm, low set point. Range, 0-47 mA to match current transformers listed in table above. When ordering, specify transformer primary range amps to match your application. Shpg. wt., 8 oz.



ck No.	Range	1-9, EACH	10-24, EACH	25-Up, EACH
C0120	0-1 mA DC	39.00	35.15	33.30
C0130	0-1 mA AC	43.20	38.95	36.90
C0140	0-100 μA DC*	45.80	41.33	39.15
C0150	0-50 mV DC	39.00	35.15	33.30
C0102	AC Load†	43.20	38.95	36.90
C0101	AC Load††	43.20	38.95	36.90

ecify Stock No., Range and Model No. on All Meter-Relay Orders

Digital Panel Meters and Comparators

API DIGITAL PANEL METERS

MODEL 4304. Digital panel meters have 7/8" high seven-bar segmented display for excellent readability. All are top-quality 3½-digit models, for front or rear panel mounting. Require only 1½" behind panel, with remotely mounted power supply. Standard features include autopolarity and T^2L/DTL compatible BCD output with printed circuit connector. Offer repeatability, resolution, and freedom from reading errors. Accuracy: 0.1% of reading, ±1 digit. Rejection: 100 dB common mode, 30 dB normal mode. Over-Range: 100%. Resolution: 0.05%. Input impedance: up to 1000 megohms, as shown in tables at left. Input connections by screw terminals or standard printed circuit card connector. Order connectors below. With front panel mounting hardware. 4½" w. x 3" h. x 3⅝" d. behind panel. Av. shpg. wt. 1½ lbs.

CONNECTORS AND ACCESSORIES

TYPE 345-207 INPUT CONNECTOR.
716-0212. Shpg. wt. 3 oz.

TYPE 345-215 BCD CONNECTOR.
716-0211. Shpg. wt. 3 oz.

INTERCONNECTING CABLE 1126-279 24" long. For remote mounti power supply. Has Amphenol connectors 143-010-01 and 133-01
716-0208. Shpg. wt. 8 oz.

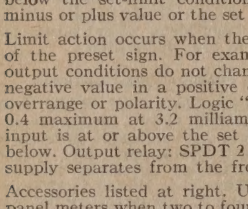
MOUNTING BEZEL 1125-208. With hardware, for mounting behind panel.
716-0209. Shpg. wt. 4 oz.

MODEL 4304 3½-DIGIT PANEL METERS

Stock No.	DC Range	Input Imp., Ohms	Max. Input Volts	EACH 1-9	EACH 10-Up
716C1075	0-199.9 mV	100 meg.	250	272.25	220.50
716C1076	0-1.999 V	1000 meg.	250	272.25	220.50
716C1077	0-19.99 V	10 meg.	1000	272.25	220.50
716C1078	0-199.9 V	10 meg.	1000	272.25	220.50
716C1070	0-19.99 μA	10,000	.....	272.25	220.50

Stock No.	DC Range	Input Imp., Ohms	Max. Input Volts	EACH 1-9	EACH 10
716C1071	0-199.9 μA	1000	.....	272.25	22
716C1072	0-1.999 mA	100	.....	272.25	22
716C1073	0-19.99 mA	10	.....	272.25	22
716C1074	0-199.9 mA	1	.....	272.25	22

API DIGITAL COMPARATORS AND ACCESSORIES



MODEL 4310. Panel-mounted 3½ or 4½ digit comparators compare the BCD 1, 2, 4 and 8 input data to a preselected high limit. For use with Model 4304 Digital Panel Meter (above). Models 4310-10 and 4310-20 let you choose limit setting with special thumbwheel switches. Indicator light shows above or below the set-limit condition. Polarity switch gives the choice minus or plus value or the set limit.

Limit action occurs when the input data reaches the limit point of the preset sign. For example, with a limit point of −.500, output conditions do not change until the input rises from a more negative value in a positive direction to −.500. Input indicates overrange or polarity. Logic "1" is 4 volts maximum, logic "0" is 0.4 maximum at 3.2 milliamps. Output: logic +4.0 volts when input is at or above the set limit, −0.4 volts when the input is below. Output relay: SPDT 2 amps, 120 VAC resistive. The power supply separates from the front in the thumbwheel models.

Accessories listed at right. Use optional buffer with API digital panel meters when two to four comparators are used. Optional 24" interconnecting cable connects logic circuitry to control module. Use type 1126-308 24" interfacing cable (optional) between API DPM and comparator (3-digit model). Use type 1126-309 24" interfacing cable (optional) between API DPM and two comparators (3-digit model). Optional input connector connects other instruments. Bezel trim for rear panel mounting only. Av. wt. 2 lbs.

MODEL 4310 DIGITAL COMPARATORS

Stock No.	Mfr's Type	Range	Input Data	EACH 1-9	EACH
716-1085	4310-10	±0-1999	3 digits overrange polarity	183.35	15
716-1087	4310-20	±0-9999	4 digits overrange polarity	216.70	18

CONNECTORS AND ACCESSORIES

TYPE 1126-330 BUFFER. Shpg. wt. 4 oz.
716-1090.

TYPE 1126-307 INTERCONNECTING CABLE. Shpg. wt. 4 oz.
716-1091.

TYPE 1126-401 INTERFACING CABLE. Shpg. wt. 4 oz.
716-1092.

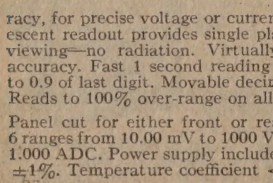
TYPE 1126-402 INTERFACING CABLE. Shpg. wt. 4 oz.
716-1096.

TYPE 345-240 INPUT CONNECTOR. Shpg. wt. 4 oz.
716-1093.

TYPE 345-215 BCD OUTPUT CONNECTOR. For use with API d panel meter. Shpg. wt. 2 oz.
716-1094.

TYPE 1125-208 BEZEL TRIM. For rear panel mounting only.
716-1095. Shpg. wt. 1 oz.

TRIPLETT 5020 DIGITAL PANEL METERS



A low cost 3½ digit model suitable for use in production testing, general tests, servicing and educational applications. Compact self-contained unit is ready for panel-mounted or bench-top use.

Unit employs a dual slope analog to digital conversion technique, providing high noise rejection, stability and accuracy, for precise voltage or current measurements. Seven bar fluorescent readout provides single plane display for wide angle ease of viewing—no radiation. Virtually no kickback current for true accuracy. Fast 1 second reading response. Wide dead band is 0.8 to 0.9 of last digit. Movable decimal point. Display hold capability. Reads to 100% over-range on all ranges except 1000 V.

Panel cut for either front or rear panel mounting. Available in 6 ranges from 10.00 mV to 1000 VDC and 7 ranges from 1.000 μA to 1.000 ADC. Power supply included. With molded case. *Tolerance: ±1%. Temperature coefficient <50 PPM/°C. Av. wt. 1 lb.

SPECIFICATIONS

Voltage accuracy: (+23°C, ±1°C) ±0.1% of reading, ±1 digit. Current accuracy: (+23°C, ±1°C) ±0.15% of reading, ±1 digit. Common mode rejection ratio: 80:1 dB. Normal mode rejection 30:1 dB (60 Hz). Operating range: 0 to 40°C. Temperature coef (100.0 mV and above): ±(.01% of reading + .005% of scale Temperature coefficient (10.00 mV): ±(.01% of reading +.01 scale)/°C. Power requirement: 105 to 125 VAC, 50-60 Hz, 2.0 Size: 2.359 max. x 4.140 max. x 4.846 max.

Stock No.	Range DC	Input Impedance nominal	Max. Voltage	EA
955C9508	10.00 mV	100 megohms	100	240
955C9509	100.0 mV	1000 megohms	250	240
955C9510	1.000 V	1000 megohms	250	240
955C9511	10.00 V	10 megohms	1000	240
955C9512	100.00 V	10 megohms	1000	240
955C9513	1000.00 V	10 megohms	1000	240

Stock No.	Range DC	Shunt Resistance*	Max. Current	EA
955C9502	1.000 μA	10 k ohms	2 mA	240
955C9503	10.00 μA	10 k ohms	2 mA	240
955C9504	100.0 μA	1 k ohms	10 mA	240
955C9505	1.000 mA	100 ohms	20 mA	240
955C9506	10.00 mA	10 ohms	100 mA	240
955C9507	100.0 mA	1 ohm	500 mA	240
955C9501	1.000 amps	.1 ohm	2.5 amps	240

Low-Cost Kits for Fiber Optics Demonstrations

RNESS AND TRANSMIT LIGHT WITH IS DELUXE ARCHER FIBER OPTICS KIT

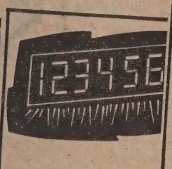
9.95

- Over 1600 Fibers Transmit Light Forever
- Fibers May Be Used Over and Over Again
- Accessory Kit has Variable Color Control

e fiber optic displays, light pipes, image pipes, or experiment any of 1000 dazzling uses with this deluxe plastic and glass optic light sensor kit. Light travels by means of multiple tion through these remarkable fibers. Each optically perfect cuts and bends like wire, guiding or piping light around ers or up walls. Can be used to trigger light sensitive devices. includes: 1400-12″ glass fibers, 200-14″ glass fibers in vinyl ets, 64-24″ plastic fiber light pipes.

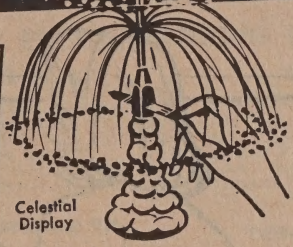
ssory kit has: 25-ft. 10 mil solid plastic light wire, 2″ image with ball magnifier, assorted light pipe jackets, 2 optical ters, 10-pc. kit of light pipe end fittings, 6-pc. heat shrink tube of optical adhesive, 9 assorted rigid vinyl stems, 4 "O" , 5 fiber optic instruction booklets.
6322. Type 272-302. Shpg. wt. 2 lbs.....9.95

Magic Fiber Wand



Numeric Display

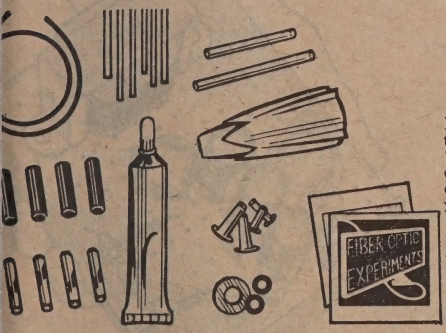
Optical Plaque



Celestial Display

Plastic/Glass Light Pipe

DESIGN UNIQUE DISPLAYS WITH THIS ARCHER GLASS FIBER OPTICS KIT



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- Safe and Easy-to-Use, as well as Educational
- Glass Fibers may be Cut or Bent Just Like Wire
- Includes New "Fiber Optic Experiments" Booklet

Discover the amazing properties of fiber optics. Light travels from one end to the other by means of multiple reflection through these thin glass fibers. These optically perfect glass fibers may be cut or bent just like wire. You can design and make light guides, pipes and practically limitless optical displays, create light effects that dazzle the imagination. Special "Re-Do" process allows you to use fibers over and over again for other fiber optic projects. You can make the exclusive Variable Color Control that allows you to change colors instantly or create a strobe effect. Kit includes: 1400-16″ glass fibers, vinyl sheathing, heat-shrink tubing, optical adapter, glass sensor adhesive, 3 "O" rings, optical stems, end fittings, clear rigid tubing, plus "Fiber Optic Experiments" booklet.
910-6320. Type 272-301. Shpg. wt. 1 lb.....5.95

HOBBYIST FIBER OPTICS KIT

1.98

- 200 Glass Fibers
- Optical Adapter
- Instruction Booklet

Hobbyist kit provides an excellent introduction to the fiber optics field. Consists of 200 optically perfect 24″ long glass fibers with vinyl jackets, lengths of 10 mil plastic fibers, an optical adapter and a booklet describing theories and applications of fiber optics. Ideal for beginners or experimenters learning the basics about fiber optics. Shpg. wt. ½ lb.
909-0603. Type 272-303.....1.98

3.98

14″ MAGIC FIBER WAND

- Multi-Color Magic Wand
- Cordless Light Source
- Variable Color Control

Unique multi-color magic fiber wand serves as an introduction to hundreds of optical displays. Features up to 1000 micro-lighted colored tips. Includes the exclusive variable color control. Can be used as a cordless light source for fiber optic experiments. It winks and blinks in color and produces psychedelic strobe effects. With light source. Less batteries. Shpg. wt. 1 lb.
910-6324. Type 272-304.....3.98

CROFON® PLASTIC LIGHT WIRE

2.98

- More Optical Light Than Glass Fiber
- Continuous Length

Make lines and ribbons of light, read-outs, micro light pipes, optical displays, panel lights and more. Plastic light wire carries eleven times more optical light than glass. Includes one continuous 100-foot length of 10 mil plastic light wire, 3 optical stems, and an assortment of heat shrinks plus an informative instruction booklet. Shpg. wt. ½ lb.
910-6325. Type 272-305.....2.98

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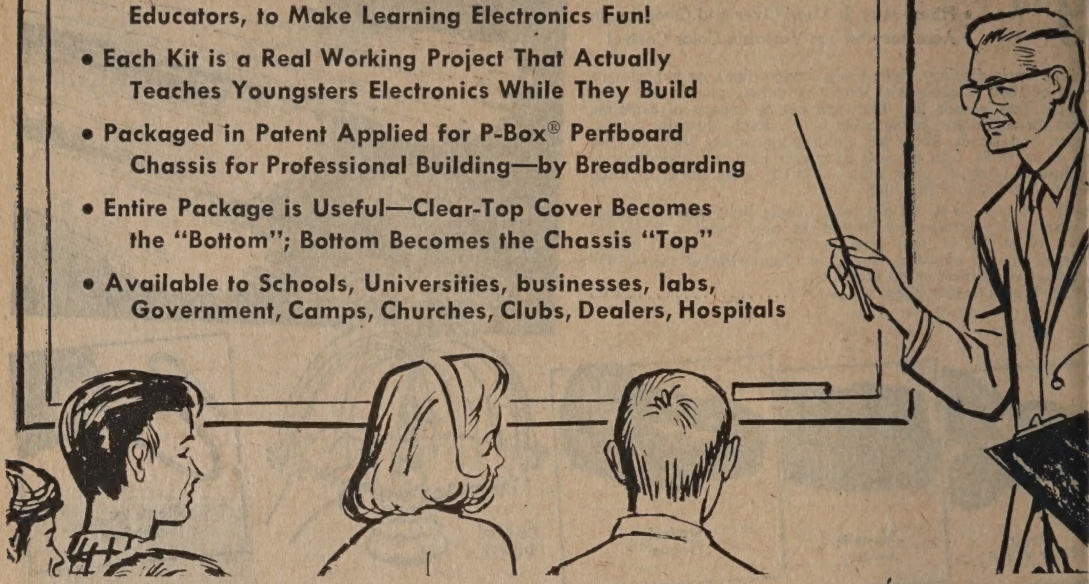
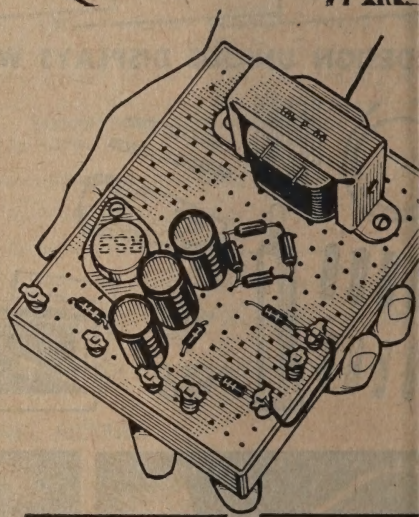
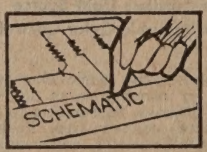


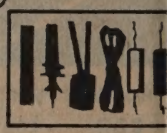


SPACE-AGE "P-BOX" PLUS ALL MATERIALS

Advanced P-Box material withstands soldering without damage—allows cutting of any size opening, remounting of parts and circuit changes. Lets you be your own engineer! Add or change your Science Fair Kits at will.



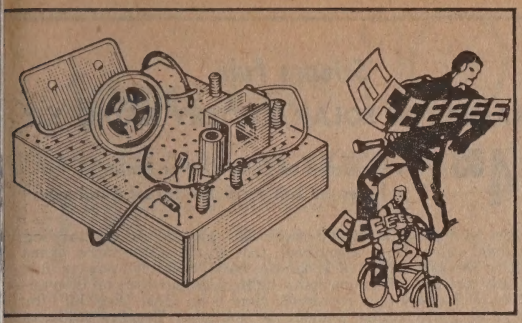
Each kit is complete—no extras to buy except the battery. All parts, step-numbered instructions and a schematic diagram are included. Kits are designed with practical, straight-forward circuitry and supplied with first-quality components. And, unlike other "kits" that m plug together, Scienc kits require thought, a ly teach important p ples of electronics. finished, each kit is a working project that be used with pride.



For Special Quotations on Quantities Over 12 Units, Write on Company or School Letterhead to: Sales Manager, Specia Market Sales, Science Fair Division, 2400 West Washington Blvd., Chicago, Illinois 60612

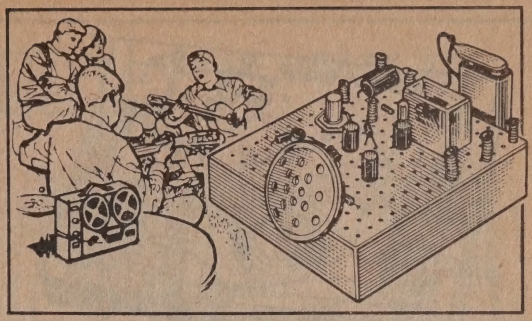
Science Fair Kits Are a Product of Allied Radio Sh

Discover the Wondrous World of Electronic Kits



MOISTURE-DETECTOR "ALARM" KIT

4.95 Sounds alarm when moisture touches pickup. Use as rain detector, burglar alarm, many other uses.
910-5432. Type 28-132. Wt. 1 lb. List.....5.95
1-5.....Each 4.95 6-11.....Each 4.45
910-5117. 1½V "AA" Batt. (req'd).....Each .10



VOICE-ACTIVATED "VOX-BOX" RELAY KIT

6.95 Your voice turns kit "on" or "off." Great for recorders, CB, more. DPST relay, sensitivity control.
910-5431. Type 28-131. Wt. 1 lb. List.....7.95
1-5.....Each 6.95 6-11.....Each 6.25
910-5112. 9V Batt. (1 req'd).....Each .35

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unes the entire 540-1600 kHz AM band. perates on low voltage DC. Completely fe. Full theory included. Takes one each: ½V "AA", 22½V batteries. Wt. 1 lb.
10-5400. Type 28-100. List.....5.95
5.....Each 4.95 6-11.....Each 4.45

ELECTRONIC ORGAN KIT

lays real music on a seven-note scale. ushbutton switches for scale; variable ming control. Two-transistor circuit. equires one 9V battery. Shpg. wt. 1 lb.
10-5401. Type 28-101. List.....6.95
5.....Each 5.95 6-11.....Each 5.35

LIGHT-OPERATED ALARM

roduces an alarm when light source is in-rrupted. Ideal burglar or door alarm day night. 4 "AA" batt. req'd. 1 lb.
10-5428. Type 28-128. List.....5.95
5.....Each 4.95 6-11.....Each 4.45

BELL/BUZZER CODE KEY KIT

earn theory of electro-magnetism, multi-ibration, current flow. You make a bell, uzzer and a Morse Code practice unit. One ½V "AA" battery required. Wt. 1 lb.
10-5412. Type 28-112. List.....1.99
5.....Each 1.49 6-11.....Each 1.35

STEREO AMPLIFIER KIT

uild your own economical stereo system round this powerful dual OTL amplifier. onnects to tuner, phono or mike. For 8-hm speaker. Requires one 9V batt. 1 lb.
10-5413. Type 28-113. List.....9.95
5.....Ehach 8.95 6-11.....Each 8.05

FIRE ALARM KIT

ives alarm if temperature rises above 20°F. Can be heard up to 100 yards. With ensor, test switch. 9V batt. req'd. 1 lb.
10-5417. Type 28-117. List.....5.95
5.....Each 4.95 6-11.....Each 4.45

FM WIRELESS MICROPHONE

Broadcast" through easy-to-build trans-nitter and be heard on 88-108 MHz FM and. Mike picks up sounds several feet way. Transmit range, up to 200'. Re-ponse. 50-10,000 Hz. Shpg. wt. 1 lb.
10-5409. Type 28-109. List.....7.95
5.....Each 6.95 6-11.....Each 6.25

METRONOME BEAT KIT

roduces steady or adjustable musical eat (click). Range from "Largo" to Presto". Uses one 9V battery. Wt. 1 lb.
10-5418. Type 28-118. List.....4.95
5.....Each 3.95 6-11.....Each 3.55

PHOTO NITE LITE KIT

Turns on a light automatically when room is in darkness. Self-contained with light, battery holder. Uses 1 "C" batt. Wt. 1 lb.
910-5426. Type 28-126. List.....4.95
1-5.....Each 3.95 6-11.....Each 3.55
910-5116. 1½V "C" Batt. (1 req'd) Each .17

EXTENSION SPEAKER KIT

Works with any 8-ohm audio amplifier. Ideal for use with other Science Fair kits such as intercom and amplifiers. 6-ft. cable incl. P-Box® becomes speaker case. 1 lb.
910-5423. Type 28-123. List.....2.45
1-5.....Each 1.95 6-11.....Each 1.75

TELEPHONE AMPLIFIER KIT

Lets you hear both sides of a telephone conversation through built-in speaker. Excellent for family or conference calls. Suction cup magnetic pick-up included. Operates on one 9V battery. Wt. 1 lb.
910-5416. Type 28-116. List.....7.95
1-5.....Each 6.95 6-11.....Each 6.25

THREE-WAY CODE OSCILLATOR

Teaches Morse Code the easy way. Can be connected for two-way transmission with a friend. Complete with speaker and code guide. Uses 4 1½V "AA" batteries. 1 lb.
910-5405. Type 28-105. List.....4.95
1-5.....Each 3.95 6-11.....Each 3.55

AC/DC POWER SUPPLY

Eliminates need for batteries. Use with Science Fair kits or any 6V to 9V project. Also recharges old batteries. Completely safe. AC cord included. Shpg. wt. 1 lb.
910-5404. Type 28-104. List.....7.95
1-5.....Each 6.95 6-11.....Each 6.25

WIRELESS AM MIKE KIT

Build your own transmitting station with this easy-to-assemble kit. Broadcast to any AM radio up to 20-ft. away. With mike; introduction to solid-state theory and practice included. One 9V battery required. 1 lb.
910-5403. Type 28-103. List.....4.95
1-5.....Each 3.95 6-11.....Each 3.55

"OTL" AUDIO AMPLIFIER

Hear hi-fidelity sound from tuners, mikes, and phono cartridges. Transformerless output. Powers 3.2-ohm to 8-ohm speakers. Requires four 1½V "AA" batteries. 1 lb.
910-5406. Type 28-106. List.....5.95
1-5.....Each 4.95 6-11.....Each 4.45

POWERFUL SIREN KIT

Very loud, automatic "rise-fall" sound—just like a police siren. Use as burglar alarm, "panic button" and with external speaker for even more volume. Four 1½V "AA" batt. req'd for portable use. 1 lb.
910-5407. Type 28-107. List.....6.95
1-5.....Each 5.95 6-11.....Each 5.35

TWO-TRANSISTOR AM RADIO

Assemble your very own solid-state AM radio in only an hour. Can also be used as a tuner. All parts and easy-to-follow instructions incl. One 9V battery req'd. 1 lb.
910-5402. Type 28-102. List.....4.95
1-5.....Each 3.95 6-11.....Each 3.55

THREE-TRANSISTOR SW RADIO

Tune in London, Moscow, Tokyo—international broadcasts around the world. Power comes from a regenerative high-gain detector with 2 high-gain audio stages. Crystal earphone incl. 9V batt. req'd. 1 lb.
910-5410. Type 28-110. List.....8.95
1-5.....Each 7.95 6-11.....Each 7.15

VOM METER KIT

Build your own all-purpose 9-range electronic tester at low cost. Measures AC and DC volts, DC current and resistance. Battery and test leads included. With instruction, operation and theory manual. 1 lb.
910-5422. Type 28-112. List.....7.95
1-5.....Each 6.95 6-11.....Each 6.25

SOLAR-OPERATED AM RADIO

Amazing radio kit lets you hear the entire AM broadcast band using only sunlight or strong lamp power. Battery holder included for night use. With solar cell and earphone; 1½V "AA" battery required. Wt. 1 lb.
910-5429. Type 28-129. List.....5.95
1-5.....Each 4.95 6-11.....Each 4.45

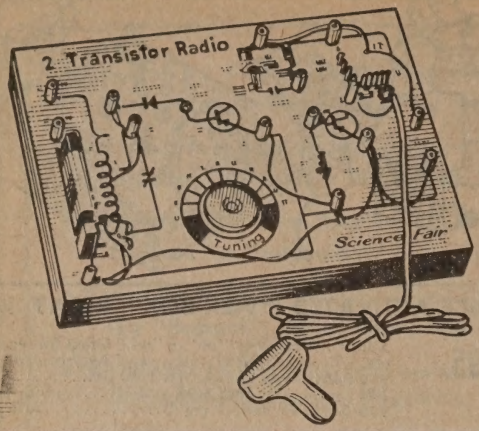
"GOOFYLITE" FLASHER

First safe, low-voltage neon lamp flasher. Fires five lamps either at random or in sequence. Uses 4 "AA" or 6V batt. 1 lb.
910-5430. Type 28-130. List.....6.95
1-5.....Each 5.95 6-11.....Each 5.35

TWO-WAY INTERCOM AMPLIFIER

Pair-a-phase amplifier for building a two-way intercom. Works over long distances. Just connect to a pair of speakers. Volume control, talk switch incl. One 9V batt. req'd. Order extension speaker kit at left. 1 lb.
910-5427. Type 28-127. List.....6.95
1-5.....Each 5.95 6-11.....Each 5.35

Science Fair ™ Electronic Project Kits at Low Cost



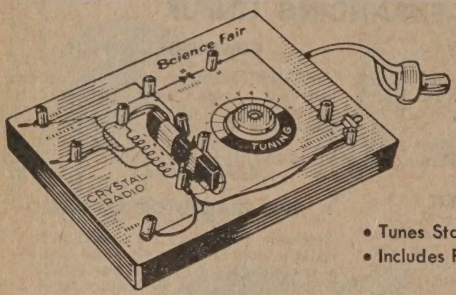
Science Fair
2-TRANSISTOR SOLAR/BATTERY RADIO KIT

4.95

- Operates on Solar Cell or Batteries
- Tunes the Entire AM Broadcast Band

Low cost and genuine utility make this kit a truly outstanding educational value. Once assembled, this all-transistor radio tunes the entire 535-1650 kHz AM broadcast band. Solar cell powers unit using only sunlight or strong lamp light. Also operates on conventional 9-volt battery (one required). Here is an ideal "first kit" for the beginning electronics student or hobbyist. Teaches students modern electronics as they build—provides an excellent introduction to solid-state circuitry. Utilizes a printed and coded circuit board for error-proof construction. Completely safe—no soldering needed. Includes all parts, earphone, solar cell and detailed manual.

910-5514. Type 28-214. Shpg. wt. 2 lbs. List.....5.95
1-5.....Each 4.95 6-11.....Each 4.45
910-51128.9-Volt Battery.....35



Science Fair
CRYSTAL RADIO KIT

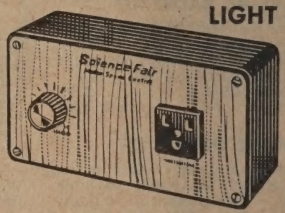
2.95

- Tunes Standard AM Broadcasts
- Includes Precision Crystal

Extra easy to assemble and really low priced. Uses the same type circuit Marconi used for the first radio transmissions. Complete—nothing else to buy. Can't wear out, no tubes or batteries.

910-5507.Type 28-207. Shpg. wt. 2 lbs. List.....3.95
1-5.....Each 2.95 6-11.....Each 2.65

MOTOR SPEED CONTROL/ LIGHT DIMMER

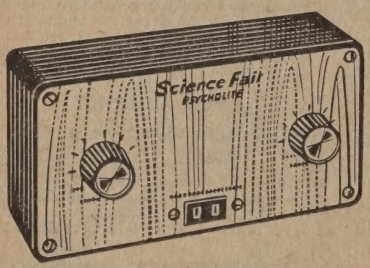


9.95

For AC or AC/DC Motors

Exclusive kit controls AC-only motors plus AC/DC power tools. Uses space-age quadrac equal to 2 SCR's and a trigger diode. Handles up to 6-amp motor or 600 watts of lights. Shpg. wt. 2 lbs.

910-5470. Type 28-170. List.....14.95
1-5.....Each 9.95 6-11.....Each 8.95



Science Fair
PSYCHO LITE KIT

14.95 Turns Any Sound Into Light Display

Connects to any incandescent lighting and sound source for a vivid display of flashing light. Doubles as 600W light dimmer. Sensitivity, background controls.

910-5471.Type 28-171. Shpg. wt. 2 lbs. List.....21.95
1-5.....Each 14.95 6-11.....Each 13.45

COMPLETE MICROSCOPE KIT

12.95

Science Fair
100X to 600X

Explore a new world. Battery-powered illumination. Contains 2 ocular, 3 subjective lenses, hand magnifiers, tweezers, dissecting needles, spatula, 2 prepared and 5 blank slides, 5 slide covers, labels, chemicals. Uses 2 "AA" batt. Type 28-208. 2 lbs.

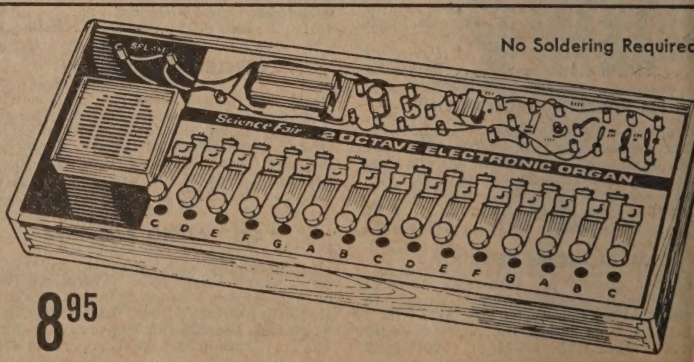
910-5508. List.....14.95
1-5.....Each 12.95
6-11.....Each 11.65
910-5117. Batt. Ea. .10

Science Fair
ELECTRONIC TWO-OCTAVE SOLID-STATE ORGAN KIT

Great for beginners of all ages. This 15-note organ kit plays any song in whole notes over a two-octave range. Educational and useful to students and hobbyists . . offers fun for the whole family. Safe, all spring clip assembly—needs no soldering. Printed and coded assembly board for fast, error-proof construction. Space-age solid-state circuitry. Detailed manual gives step-by-step instructions with pictorials and diagrams. Kit includes tuning control, speaker, batteries, all parts, precut wire and song book. Deluxe fitted hardwood case. Shpg. wt. 4 lbs.

910-5515. Type 28-215. List.....11.95
1-5.....Each 8.95 6-11.....Each 8.05

No Soldering Required



8.95

Allied Electronics Has A Wide Range of Kits for Students and Experimente

Educational Kits Explore the World of Electronics

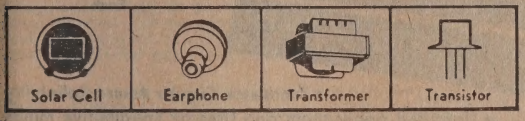
Science Fair™ 10 in 1 SOLAR ENERGY KIT

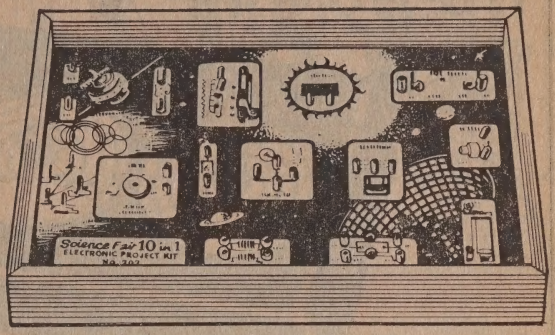
10 EASY-TO-BUILD WORKING PROJECTS

7.95 Each In lots of 1-5

- Uses All Solid-State Circuitry
- 18-page Illustrated Manual Included
- Completely Safe—No Soldering Required

THE "FUN" WAY TO GIVE A GROUND FLOOR INTRODUCTION TO MODERN ELECTRONICS





A great educational tool for beginners of all ages. Helps teach basic electronics with enjoyable, easy-to-build projects using solid-state circuitry. Many convenient features make this kit one of the best learning tools available on today's market. There are numbered parts for easy identification. Spring-clip connectors eliminate tedious soldering.

Best quality components are used for reliable performance. An 18-page fully-illustrated instruction manual gives complete step-by-step details on construction, theory and operation of ten varied projects. In addition, the student can design many more circuits using the same basic parts. Most of the suggested circuits can be powered exclusively by the included solar cell. Projects include a germanium crystal radio, two transistor radios, transistor amplifier, low-power broadcast transmitter, signal generator and tracer, code practice oscillator, telegraph system, and low-frequency oscillator.

Supplied with the kit are a crystal earphone, Morse Code key, solar cell, bar antenna, transistor and diode, low-frequency transformer, variable capacitor, fixed capacitors and resistors and more. Shpg. wt. 5 lbs.

910-5502. Type 28-202. List.....8.95
1-5.....Each 7.95 6-11.....Each 7.15

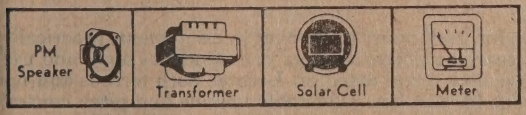
Science Fair™ 50 in 1 ELECTRONIC PROJECT KIT

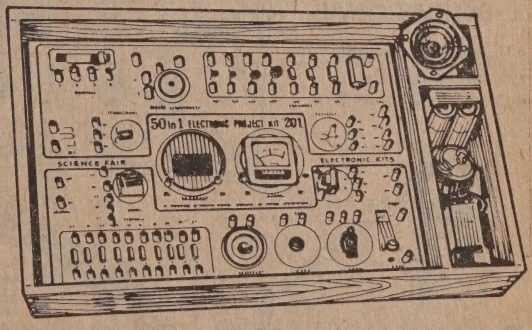
50 EASY-TO-BUILD WORKING PROJECTS

17.95 Each In lots of 1-5

- Detailed 56-page Instruction Manual
- Long-Lasting Fitted Hardwood Case
- Uses Safe Low-Power Solid-State Circuits

OUR MOST COMPLETE EDUCATIONAL KIT OPENS UP THE WORLD OF ELECTRONICS



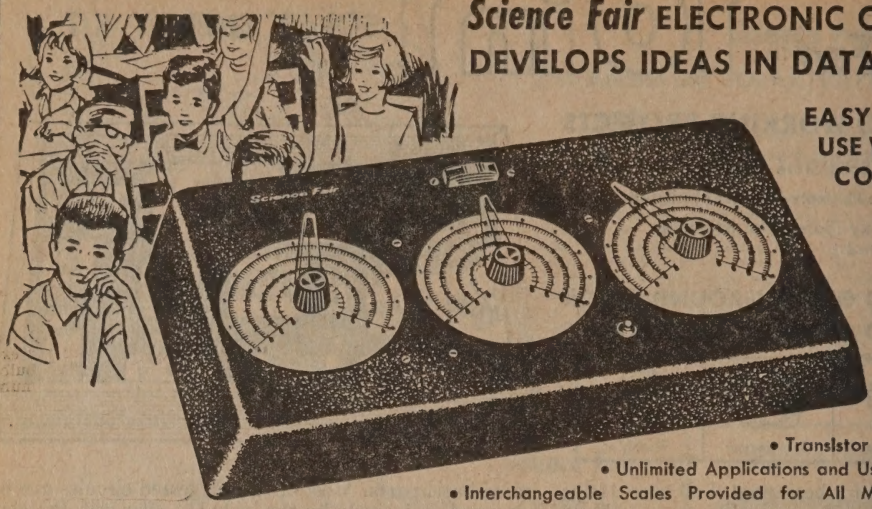


A complete, advanced educational electronic kit that has all the fine features of the kit above plus many extras. Includes many components such as a meter, permanent-magnet speaker, relay, potentiometer and more to make it possible for the student to build and learn about many more complex electronic circuits. All projects are safe, low-powered solid-state circuits operated exclusively by the included batteries and solar energy cell—no AC current is needed. All parts are numbered and use spring-clip connectors to simplify the wiring process and avoid dangerous soldering. A fully-illustrated 56-page instruction manual gives the complete theory of operation of all circuits in addition to complete construction details. Some of the many projects that can be built include transistor radios, Morse Code practice oscillators, phonograph amplifier, sound level meter, Wheatstone bridge, transparency indicator, practice broadcasting station, photoelectric relay, burglar alarm, tachometer, electronic metronome, telephone amplifier, transistor tester, cadmium cell switch, timing circuit, radio telegraph, field strength indicator and many more. Fitted hardwood case, 17½x11x2".

910-5501. Type 28-201. List.....19.95
1-5.....Each 17.95 6-11.....Each 16.15

Science Fair™ Kits Stimulate the Learning Process

Science Fair ELECTRONIC COMPUTER KIT DEVELOPS IDEAS IN DATA PROCESSING



EASY TO BUILD AND USE WITH DETAILED, COMPREHENSIVE MANUAL

14.95 Each

- Transistor Circuits Assure Reliability
- Unlimited Applications and Uses by Imaginative Minds
- Interchangeable Scales Provided for All Mathematical Operations

Let your students get in on the ever-changing world of tomorrow—today! A simple, yet accurate way to perform difficult operations in multiplication, division, square and cube roots, logs and reciprocals. Makes everyday calculations, such as figuring gas consumption, speed or distance, easier. Features two sensitivity ranges to provide the correct operating mode for all situations. Provides anyone, young or old, with an understanding of computer technology and prepares them for the vital role computers will fill in the future. The Science Fair Electronic Computer Kit is not just a toy with dials and wire—it's a sophisticated analog-type instrument with transistor circuitry powered by a 9-volt battery (not included). Students build it following our comprehensive, detailed instruction manual.

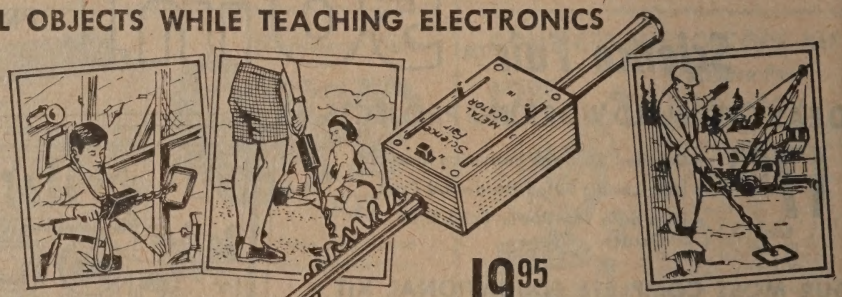
It comes complete with all you need: a full-range extra-sensitive meter, transistors, potentiometers, resistors, switches, wire, all hardware and special conversion tables. Molded plastic case. Wt. 6 lbs.

910-5480. Type 28-180. List.....19.95
1-5.....Each 14.95 6-11.....Each 13.45

Science Fair METAL LOCATOR KIT FINDS BURIED TREASURE AND VALUABLE METAL OBJECTS WHILE TEACHING ELECTRONICS

PRACTICAL AND EDUCATIONAL

- Lightweight, Portable
- Easy-to-Assemble
- Complete With All Parts



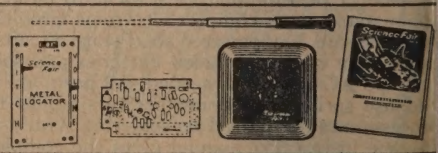
19.95 Each

Pays for itself many times over in excitement, practicality and teaching potential. Lets your students build and use top-quality metal detector. Locates both ferrous and non ferrous metals. Has adjustable volume and pitch controls; pitch increases when metal object is nearby. With comprehensive manual. Needs 9V battery. Wt. 4 lbs.

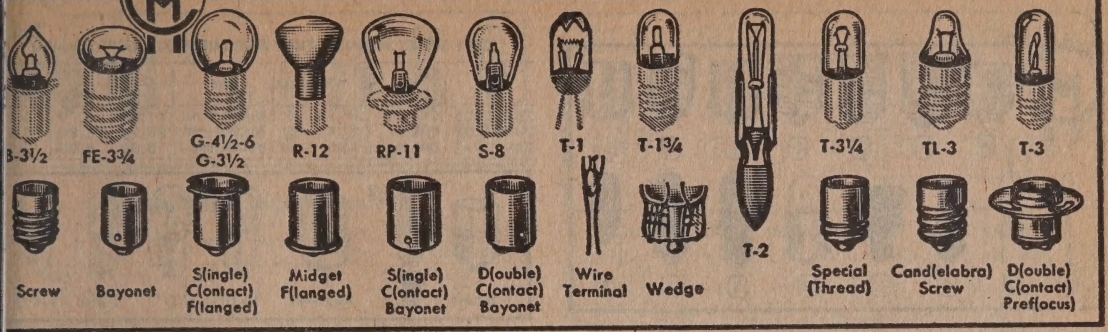
910-5481. Type 28-181. List.....29.9
1-5.....Each 19.95 6-11.....Each 17.9

Outstanding Features

Expandable shaft, PC board construction, PC board detector plate, volume and pitch slide controls, and detailed manual



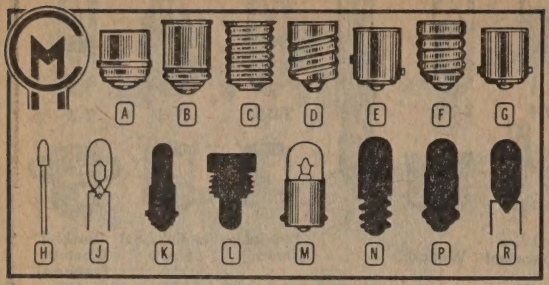
Lamps by Chicago-Miniature



ide variety of miniature and subminiature incandescent lamps such applications as aircraft, annunciators, appliances, autootive, bicycles, coin machines, flashlights, marine, medical, indiators, signs and house numbers, radio and TV, telephone, toys d novelties. Offer extra-long life, reliability, low cost, high light output for amount of current consumed, low operating cost. For illustrations of bulb and base styles referred to in table, and explanation of abbreviations, refer to Figure above. *Long life bulb. †Inside frosted. ‡Maximum rating (.59 amp minimum). §Maximum rating (.51 amp minimum).

Stock No.	Mfr's Type	Volts	Amps	Base	Bulb Style	PER PKG. of 10		
						1-9	10-49	50-Up
49-1000	PR-2	2.38	.50	S.C. F.	B-3½	1.30	1.10	.90
49-1005	PR-3	3.57	.50	S.C. F.	B-3½	1.30	1.10	.90
49-1007	PR-4	2.33	.27	S.C. F.	B-3½	1.30	1.10	.90
49-1009	PR-6	2.47	.30	S.C. F.	B-3½	1.30	1.10	.90
49-1012	PR-12	5.95	.50	S.C. F.	B-3½	1.30	1.10	.90
49-1015	PR-13	4.75	.50	S.C. F.	B-3½	1.30	1.10	.90
49-1175	12	6.3	.15	Min. 2-pin	G-3½	1.80	1.50	1.30
49-1180	13	3.7	.30	Screw	G-3½	1.10	.90	.80
49-1185	14	2.47	.30	Screw	G-3½	1.10	.90	.80
49-1190	24E	24	.035	Tel. Slide	T-2	4.40	3.60	3.10
49-1195	24X	24	.035	Tel. Slide	T-2	4.40	3.60	3.10
49-1200	40	6.3	.15	Screw	T-3¼	.90	.80	.60
49-1205	41	2.5	.50	Screw	T-3¼	1.80	1.50	1.30
49-1210	43	2.5	.50	Bayonet	T-3¼	1.90	1.50	1.30
49-1215	44	6.3	.25	Bayonet	T-3¼	.90	.80	.60
49-1220	45	3.2	.35	Bayonet	T-3¼	1.50	1.30	1.10
49-1225	46	6.3	.25	Screw	T-3¼	.90	.80	.60
49-1230	47	6.3	.15	Bayonet	T-3¼	.90	.80	.60
49-1235	48	2.0	.06	Screw	T-3¼	1.80	1.50	1.30
49-1240	48C	48	.035	Tel. Slide	T-2	4.80	3.90	3.30
49-1245	49	2.0	.06	Bayonet	T-3¼	1.50	1.30	1.10
49-1250	50	7.5	.22	Screw	G-3½	1.10	.90	.80
49-1255	51	7.5	.22	Bayonet	G-3½	1.00	.80	.70
49-1260	52	14.4	.10	Screw	G-3½	2.40	1.90	1.70
49-1265	53	14.4	.12	Bayonet	G-3½	1.10	.90	.70
49-1270	55	7.0	.41	Bayonet	G-4½	1.00	.80	.70
49-1275	55C	55	.052	Tel. Slide	T-2	4.80	3.90	3.30
49-1280	57	14	.24	Bayonet	G-4½	1.10	.90	.70
49-1285	63	7.01	.63	S.C. Bayonet	G-6	1.20	1.00	.80
49-1290	67	13.5	.59	S.C. Bayonet	G-6	1.40	1.20	1.00
49-1295	68	13.5	.59	D.C. Bayonet	G-6	2.00	1.60	1.40
49-1300	81	6.5	1.02	S.C. Bayonet	G-6	1.60	1.30	1.10
49-1305	82	6.5	1.02	D.C. Bayonet	G-6	1.60	1.30	1.10
49-1310	88	6.75	1.99	D.C. Bayonet	S-8	2.50	2.00	1.70
49-1315	88L*	6.75	1.99	D.C. Bayonet	S-8	7.20	5.90	5.00
49-1320	93	12.8	1.04	S.C. Bayonet	S-8	2.10	1.70	1.50
49-1325	112	1.2	.22	Screw	GTL-3	1.10	.90	.80
49-1340	159	6.3	.15	Wedge	T-3¼	1.80	1.50	1.30
49-1330	123	1.25	.30	Min. Screw	G-3½	1.20	1.00	.80
49-1335	130	6.3	.15	Min. Bayonet	G-3½	1.50	1.20	1.00
49-1345	219	6.3	.25	Min. Bayonet	G-3½	2.30	1.90	1.60
49-1350	222	2.25	.25	Screw	TL-3	1.10	.90	.80
49-1355	239	6.3	.36	Min. Bayonet	T-3¼	2.10	1.70	1.50
49-1360	240	6.3	.36	Bayonet	T-3¼	1.90	1.60	1.30
49-1380	307	28	.67	S.C. Bayonet	S-8	5.20	4.20	3.60
49-1385	3071F†	28.0	.67	S.C. Bayonet	S-8	6.10	4.90	4.20
49-1390	313	28	.17	Bayonet	T-3¼	2.00	1.70	1.40
49-1400	324	3	.19	Wire Term.	T-1¾	4.50	3.70	3.10
49-1405	327	28	.04	Mid. Flanged	T-1¾	4.60	3.70	3.20
49-1420	328	6	.20	Mid. Flanged	T-1¾	3.60	2.90	2.50
49-1425	330	14	.08	Mid. Flanged	T-1¾	6.10	5.00	4.20
49-1430	331	1.35	.06	Mid. Flanged	T-1¾	7.00	5.70	4.90
49-1435	334	28.0	.04	Mid. Grooved	T-1¾	6.90	5.60	4.80
49-1455	337	6	.20	Mid. Grooved	T-1¾	12.40	10.10	8.60
49-1460	338	2.7	.06	Mid. Flanged	T-1¾	6.30	5.10	4.40
749-1470	344	10	.014	Mid. Flanged	T-1¾	9.90	8.00	6.90
749-1475	345	6	.04	Mid. Flanged	T-1¾	7.90	6.40	5.50
749-1480	346	18	.04	Mid. Grooved	T-1¾	9.00	7.30	6.30
749-1490	370	18	.04	S.C. Midget	T-1¾	10.70	8.70	7.50
749-1495	375	3	.015	S.C. Mid. F.	T-1¾	17.90	14.50	12.40
749-1510	380	6.3	.04	Mid. Flanged	T-1¾	15.20	12.40	10.60
749-1515	381	6.3	.20	Mid. Flanged	T-1¾	8.10	6.60	5.60
749-1520	382	14	.08	Mid. Flanged	T-1¾	9.30	7.50	6.40
749-1530	386	14	.08	Mid. Grooved	T-1¾	10.90	8.80	7.60
749-1535	387	28	.04	Mid. Flanged	T-1¾	5.50	4.50	3.80
749-1540	388	28	.04	Mid. Grooved	T-1¾	11.00	9.00	7.70
749-1560	407	4.9	.30	Screw	G-4½	1.50	1.30	1.11
749-1565	425	5	.50	Screw	G-4½	1.50	1.20	1.00
749-1570	502	5.1	.15	Min. Screw	G-4½	1.20	1.00	.80
749-1595	680	5	.060	Wire Term.	T-1	16.20	13.10	11.20
749-1605	682	5	.060	Sub-Mid. F.	T-1	20.40	16.60	14.20
749-1615	683	5	.060	Wire Term.	T-1	16.20	13.10	11.20
749-1625	685	5	.060	Sub-Mid. F.	T-1	20.40	16.60	14.20
749-1645	715	5	.115	Wire Term.	T-1	19.70	16.00	13.70
749-1665	755	6.3	.15	Min. Bay.	T-3¼	16.20	13.10	11.20
749-1670	756	14	.08	Min. Bay.	T-3¼	3.10	2.50	2.10
749-1675	757	28	.08	Bayonet	T-3¼	3.40	2.80	2.40
749-1680	1016	12.8†	1.34‡	D.C. Index	SK8	3.70	3.00	2.60
749-1685	1034	14	1.80§	D.C. Index	S-8	3.00	2.40	2.10
749-1690	1073	12.8	1.80	S.C. Bayonet	S-8	2.10	1.70	1.40
749-1695	1129	6.4	2.80	S.C. Bayonet	S-8	2.20	1.80	1.50
749-1700	1130	6.4	2.80	D.C. Bayonet	S-8	2.80	2.30	2.00
749-1705	1133	6.2	3.91	S.C. Bayonet	RP-11	3.30	2.70	2.30
749-1710	1141	12.8	1.44	S.C. Bayonet	S-8	2.10	1.70	1.40
749-1715	1251	28.0	.23	S.C. Bayonet	G-6	3.40	2.80	2.40
749-1720	1252	24	.23	D.C. Bayonet	G-6	3.90	3.20	2.70
749-1725	1445	18	.15	Bayonet	G-3½	1.30	1.10	.90
749-1730	1447	18.0	.15	Screw	G-3½	1.40	1.20	1.00
749-1735	1458	20	.25	Bayonet	G-5	2.40	2.00	1.70
749-1715	1251	28.0	.23	S.C. Bayonet	G-6	3.40	2.80	2.40
749-1740	1480	6.5	2.75	S.C. Bayonet	T-5	7.60	6.10	5.30
749-1745	1487	14.0	.20	Screw	T-3¼	1.80	1.50	1.30
749-1750	1488	14	.15	Bayonet	T-3¼	2.00	1.60	1.40
749-1755	1490	3.2	0.16	Bayonet	T-3¼	1.50	1.20	1.00
749-1760	1493	6.5	2.75	D.C. Bayonet	S-8	9.00	7.30	6.30
749-1765	1503	5.9	6.53	S.C. Perf.	RP-11	10.80	8.80	7.50
749-1770	1630	6.5	2.75	D.C. Pref.	S-8	11.60	9.40	8.00
749-1775	1648	8.0	2.0	D.C. Bayonet	S-8	8.70	7.00	6.00
749-1795	1768	6	.20	Midget Screw	T-1¾	6.50	5.30	4.50
749-1800	1769	2.5	.20	Midget Screw	T-1¾	7.30	5.90	5.10
749-1820	1813	14.4	.12	Min. Bayonet	T-3¼	2.00	1.60	1.40
749-1825	1815	14.0	.20	Min. Bayonet	T-3¼	1.70	1.40	1.20
749-1830	1816	13	.35	Min. Bayonet	T-3¼	1.60	1.30	1.10
749-1835	1819	28	.04	Min. Bayonet	T-3¼	2.40	2.00	1.70
749-1840	1820	28	.10	Min. Bayonet	T-3¼	2.30	1.90	1.60
749-1845	1822	36	.10	Min. Bayonet	T-3¼	4.60	3.80	3.20
749-1850	1828	37.5	.05	Min. Bayonet	T-3¼	4.90	4.00	3.40
749-1855	1829	28	.075	Min. Bayonet	T-3¼	2.50	2.00	1.70
749-1860	1835	55	.05	Min. Bayonet	T-3¼	5.60	4.50	3.90
749-1865	1847	6.3	.15	Min. Bayonet	T-3¼	1.30	1.10	.90
749-1870	1850	5.0	.09	Min. Bayonet	T-3¼	2.50	2.00	1.70
749-1875	1855	6.3	.80	Min. Bayonet	T-4½	2.60	2.10	1.80
749-1880	1864	28.0	.17	Min. Bayonet	T-3¼	3.30	2.60	2.30
749-1885	1869	10	.014	Wire Term.	T-1¾	8.30	6.70	5.70
749-1890	1891	14.0	.233	Min. Bayonet	T-3¼	1.20	1.00	.80
749-1895	1892	14.4	0.12	Min. Bayonet	T-3¼	1.80	1.50	1.30
749-1900	1893	14.0	.33	Min. Bayonet	T-3¼	1.30	1.10	.90
749-1905	1895	14.0	.27	Min. Bayonet	G-4½	1.50	1.30	1.10
749-1915	2128	3	.0125	Wire Term	T-1	31.50	25.50	21.80
749-1920	2180	6.3	.04	Wire Term.	T-1¾	7.80	6.30	5.40
749-1925	2181	6.3	.20	Wire Term.	T-1¾	4.30	3.50	3.00
749-1930	2182	14	0.8	Wire Term.	T-1¾	4.70	3.80	3.30

Lamps by Chicago-Miniature



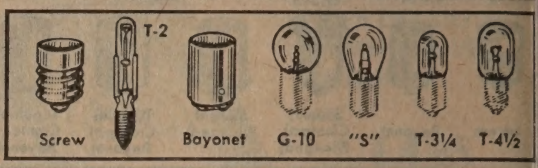
CM-8 SERIES SUBMINIATURE AND MIL SPEC LAMPS

The lamps listed in this catalog are the more popular types available from Chicago Miniature. All AS Types are aged and selected for critical electrical applications. To order Chicago Miniature Lamps, specify lamp numbers listed and quantities desired. If your application requires a lamp not shown, please contact your local Allied Electronics facility.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	PER PKG. OF 10		
						1-9	10-49	50-Up
749-1395	323	L	3.0	.19	Per Mil. 25236-323	12.10	9.90	8.40
749-1410	327AS15	M	28.0	.04	Per Mil. 25237-327	15.60	12.60	10.80
749-1435	334	P	28.0	.04	Midget Grooved	6.90	5.60	4.80
749-1440	334LSV	P	28.0	.06	Midget Grooved	13.10	10.60	9.10
749-1445	335	N	28.0	.04	Per Mil. 15612-2	11.00	9.00	7.70
749-1450	336	P	14.0	.08	Midget Grooved	10.40	8.40	7.20
749-1465	339AS25	...	6.0	.22	Midget Flanged	28.40	23.00	19.70
749-1485	367	M	10.0	.04	Midget Flanged	10.50	8.50	7.30
749-1500	378	N	6.3	.20	Midget Screw	12.40	10.10	8.60
749-1505	379	P	6.3	.20	Midget Grooved	8.60	7.00	5.90
749-1525	385	M	28.0	.04	Midget Flanged	14.20	11.50	9.90
749-1545	397	P	10.0	.04	Midget Grooved	10.50	8.50	7.30
749-1550	398	P	6.3	.20	Midget Grooved	7.50	6.10	5.20
749-1555	399	C	28.0	.04	Midget Screw	10.10	8.20	7.00
749-1575	515	J	5.0	.115	Wire Terminal	6.70	5.40	4.60
749-1580	580	J	5.0	.06	Wire Terminal	6.70	5.40	4.60
749-1585	583	J	5.0	.06	Wire Terminal	6.70	5.40	4.60
749-1590	634	J	6.0	.20	Wire Terminal	7.90	6.40	5.50
749-1595	680	...	5.0	.06	Wire Terminal	15.40	12.30	10.40
749-1600	680AS15	...	5.0	.06	Wire Terminal	17.30	13.90	11.80
749-1605	682	A	5.0	.06	Sub-Midget Flanged	19.20	15.40	13.00
749-1610	682AS15	A	5.0	.06	Sub-Midget Flanged	20.70	16.60	14.00
749-1615	683	...	5.0	.06	Wire Terminal	15.40	12.30	10.40
749-1620	683AS15	...	5.0	.06	Wire Terminal	17.30	13.90	11.80
749-1625	685	A	5.0	.06	Sub-Midget Flanged	19.20	15.40	13.00
749-1630	685AS15	A	5.0	.06	Sub-Midget Flanged	20.70	16.60	14.00
749-1645	715	...	5.0	.115	Wire Terminal	15.40	12.30	10.40
749-1650	715AS15	...	5.0	.115	Wire Terminal	15.40	12.30	10.40
749-1655	718	A	5.0	.115	Sub-Midget Flanged	19.20	15.40	13.00
749-1660	718AS15	A	5.0	.115	Sub-Midget Flanged	20.70	16.60	14.00
749-1780	1705	R	14.0	.08	Wire Terminal	4.70	3.80	3.30
749-1785	1730	R	6.0	.04	Wire Terminal	7.80	6.30	5.40
749-1790	1764	R	28.0	.04	Wire Terminal	3.90	3.20	2.70
749-1805	1775	N	6.3	.075	Midget Screw	7.90	6.40	5.50
749-1810	1784	R	6.0	.20	Wire Terminal	5.20	4.20	3.60
749-1815	1784AS10	R	6.0	.20	Wire Terminal	13.80	11.10	9.60
749-1885	1869	R	10.0	.014	Wire Terminal	8.30	6.70	5.70
749-1910	2114	J	6.0	.06	Wire Terminal	5.50	4.40	3.80
749-1935	2187	R	28.0	.04	Wire Terminal	6.70	5.40	4.60
749-1940	6833	A	5.0	.060	Wire Terminal	20.70	16.80	14.40
749-1945	6838	...	28.0	.024	Wire Terminal	21.60	17.50	15.00
749-1950	6839	A	28.0	.024	Sub-Midget Flanged	26.20	21.30	18.20
749-1960	7210	...	5.0	.03	Wire Terminal	20.40	16.60	14.20
749-1965	7323	P	6.0	.22	Per Mil. 15612-1	10.70	8.70	7.40
749-1970	7337	M	6.3	.20	Per Mil. 25237-328	15.30	12.40	10.60
749-1975	8362	...	28.0	.04	Spec. Midget Flange	9.40	7.60	6.50
749-1980	8369	N	28.0	.065	Midget Screw	9.90	8.00	6.80
749-1985	8610	...	6.3	.20	Wire Terminal	6.80	5.50	4.70
749-1990	8623	L	28.0	.04	Threaded Knurled	14.60	11.90	10.10
749-1995	8627	J	28.0	.04	Per Mil. 28135-1	9.00	7.30	6.30
749-2000	8635	...	28.0	.04	Spec. Screw	15.30	12.40	10.60
749-2005	8640	...	14.0	.08	Wire Terminal	6.50	5.20	4.50
749-2010	8661	J	6.0	.04	Wire Terminal	10.40	8.40	7.20
749-2015	8666	H	5.0	.08	Wire Terminal	20.70	16.80	14.40
749-2020	8805	J	5.0	.06	Wire Terminal	5.40	4.40	3.80
749-2025	8846	...	5.0	.008	Wire Terminal	21.80	17.70	15.10
749-0100	CM8-60	G	6.0	5.5	S.C. Bayonet	8.20	6.60	5.70
749-0101	CM8-282	...	3.8	.33	Wire Terminal	24.30	19.70	16.90
749-0102	CM8-308	G	28.0	.67	D.C. Bayonet	13.20	10.60	9.20
749-0103	CM8-363	...	28.0	.04	Wire Terminal	7.00	5.70	4.80
749-0104	CM8-373	B	2.5	.35	Midget Grooved	13.40	10.90	9.30
749-0106	CM8-428	...	5.0	.18	Midget Flanged	18.70	15.20	13.00

CM-8 SERIES SUBMINIATURE AND MIL SPEC LAMPS (Cont'd)

Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	PER PKG. OF 10		
						1-9	10-49	50-Up
749-0105	CM8-374	...	2.5	.35	Wire Terminal	11.90	9.70	8.30
749-0107	CM8-503	E	6.3	.35	Min. Bayonet	28.10	22.80	19.50
749-0112	CM8-967	E	120	.025	Min. Bayonet	8.30	6.80	5.80



MINIATURE NEON-GLOW INDICATOR LAMPS

For 105-600 V, except ‡210-600 V. Screw types have series resisto in base for 105-125 V; others require external resistor. In Base col umn of table, below, D.C. means double contact; S.C., single con tact; Mid. Flange, midget flanged; Bay., bayonet; Cand., candelabra *AC starting voltage, DC starting V 40% higher. †High brightness Av. shpg. wt. 2 oz.

Stock No.	Mfr's Type	Watts	*AC V	Bulb Style	Base	Box o 10
749-0002	A1B	1/17	65	T-2	Wire Term.	2.10
749-0003	†A1C	1/17	95	T-2	Wire Term.	2.20
749-0001	A1A (NE-2)	1/17	65	T-2	Wire Term.	1.80
749-0013	C7A (NE-2D)	1/15	65	T-2	S.C. Mid. Flange	13.40
749-0004	A9A (NE-2E)	1/10	65	T-2	Wire Term.	2.00
749-0012	†C2A (NE-2H)	1/5	....	T-2	Wire Term.	2.00
749-0014	†C9A (NE-2J)	1/5	105	T-2	S.C. Mid. Flange	13.40
749-0008	B4A (NE-7)	¼	55	T-4½	Wire Term.	11.00
749-0009	B6A (NE-21)	¼	55	T-4½	S.C. Bay. Cand.	16.50
749-0903	J5A (NE-30)	1	60	G-10	Edison	25.00
749-0906	L5A (NE-32)	1	60	G-10	D.C. Bay. Cand.	21.20
749-0010	B7A (NE-45)	¼	65	R-5½	Cand. Screw	15.30
749-0011	B9A (NE-48)	¼	65	T-4½	D.C. Bay. Cand.	12.50
749-0006	B1A (NE-51)	1/25	65	T-3¼	S.C. Bay. Min.	4.40
749-0007	†B2A (NE-51H)	1/7	....	T-3¼	S.C. Bay. Min.	4.40
749-0904	‡J9A (NE-56)	1	60	S-11	Edison	25.30
749-0900	F3A (NE-57)	¼	55	T-4¼	Cand. Screw	17.60
749-0901	‡F4A (NE-58)	½	65	T-4½	Cand. Screw	16.50
749-0905	K1A (NE-84)	¼	95	T-2	Special Tel. Slide	10.90

MINIATURE NEON-GLOW CIRCUIT CONTROL LAMPS

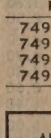
T-2 style bulbs; have wire leads. Radioactive additive reduces breakdown voltage in darkness. Tinned 1" leads for easy soldering Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	DC Start Voltage	Design Current DC mA	BOX OF 10
749-1110	5AB (NE-23)	60-90	.3	2.20
749-1115	5AG-A (NE-76)	68-76	.4	11.60
749-1120	5AH (NE-83)	60-100	10.0	4.30
749-1125	5AJ (NE-86)	55-90	1.5	4.00
749-1105	4AC (NE-97)	110-140	.5	4.00

ARGON GLOW LAMP

Long-life lamp emits pale blue-violet light, near-ultraviolet radiation. Clear glass bulb. Bulb style, T-4½; rated ¼ watt. Candelabra screw base. Average life of 1000 hours. For 110-120 volts AC. Shpg. wt. 2 oz.

749-0902. J2A (AR-3) ..... Box of 10 15.80



HIGH-OUTPUT LENS-END MINIATURE LAMPS

Focused beam, ideal for activating photoconductors in card or tape operations. 0.35 amp at 2.5 V, AC-DC. Midget grooved base except Type 2136, wire terminal. Overall diameter, .250". 1 1/16" long. Shpg. wt. 3 oz.

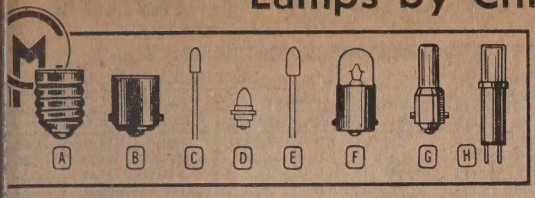
Stock No.	Mfr's Type	Style	PER PKG. OF 10		
			1-9	10-49	50-Up
749-1365	253	GTL-1¾	21.40	17.40	14.90
749-1370	253X	GTL-1¾	26.00	21.10	18.10
749-1375	261	GTL-1¾	42.00	34.10	29.10
749-1916	2136		30.10	24.40	20.90

ATTENTION BUYERS

Allied Electronics can supply the entire line of Chicago-Miniature lamps in production quantities at current OEM prices. For complete price and delivery information on quantities larger than those shown, contact the Allied Electronics facility nearest you. See page 3 or back cover for addresses.

Specify Stock No. and Full Mfr's Type No. When Ordering

Lamps by Chicago-Miniature



STANDARD VOLTAGE LAMPS

Stock No.	Mfr's Type	Fig.	Volts	Watts	Bulb Style	PER PKG. of 10		
						1-9	10-49	50-Up
49-1100	3S6/5	A	120	3	S-6	5.40	4.70	4.00
49-1130	6S6	A	115	6	S-6	2.40	2.10	1.80
49-1139	6S6	A	145	6	S-6	5.00	4.30	3.70
49-1140	6S6/DC	B	120	6	S-6	4.30	3.70	3.20
49-1145	6T4½/1	A	115-125	6	T-4½	6.90	5.90	5.10
49-1150	7C7	A	115-125	7	C-7	2.20	1.80	1.50
49-1155	10C7	A	115-125	10	C-7	3.00	2.60	2.20
49-1160	10C7DC	B	115-125	10	C-7	3.50	3.00	2.60
49-1165	10S6/10	A	230	10	S-6	5.50	4.70	4.00
49-1170	10S6/10	A	250	10	S-6	5.50	4.70	4.00

LONG LIFE LAMPS

.F., midget flanged. W.T., wire terminal. S.F., submidget nged. M., Bay., miniature bayonet. Av. wt., 6 oz.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	Bulb Style	PER PKG. of 10		
							1-9	10-49	50-Up
49-1415	327LSV	F	28.0	.06	M.F.	T-1¾	10.50	8.50	7.30
49-1635	713	E	5.0	.075	W.T.	T-1	15.40	12.30	10.40
49-1640	714	D	5.0	.075	S.F.	T-1	19.20	15.40	13.00
49-1955	7153	C	5.0	.115	W.T.	T-¾	20.70	16.80	14.40

SMALLEST 5000-HOUR 120-VOLT LAMP

igh reliability lamps. Small size, long life (5000-hr.). With bay- iet or cartridge base (see table below). Aerospace and MS re- iirements. 120 V, .025 A. Flat-top bulb. Av. wt., 3 oz.

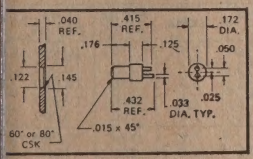
Stock No.	Mfr's Type	Fig.	Base	PER PKG. of 10		
				1-9	10-49	50-Up
749-0112	CM8-967	G	Bayonet	8.30	6.80	5.80
749-0600	CML-03026	H	Cartridge	12.70	10.40	8.90

T-1 MINIATURE ECONO-LAMPS

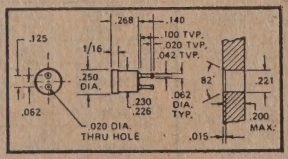
ow-cost lamps for general purpose commercial use. feet MIL-L-6363D requirements. Tinned leads for easy ldering. Wire terminals except CM7 types, bi-pin base. lso available with subminiature flanged base: write ir prices. Av. shpg. wt. 1 oz.

Stock No.	Mfr's Type	Design		Life, Hrs.	M.S. C.P.	EACH		
		V	Amps			1-99	100-499	500-Up
749-0108	CM8-880	5.0	.06	50000	.02-.05	.47	.38	.33
749-0109	CM8-883	5.0	.06	50000	.05-.09	.47	.38	.33
749-0110	CM8-885	5.0	.11	25000	.05-.15	.47	.38	.33
749-0111	CM8-885FI	5.0	.11	15000	.15-.25	.47	.38	.33
749-0015	CM7-880	5.0	.06	50000	.02-.05	1.13	.91	.78
749-0016	CM7-883	5.0	.06	50000	.05-.09	1.13	.91	.78
749-0017	CM7-885	5.0	.11	25000	.05-.15	1.13	.91	.78
749-0018	CM7-885FI	5.0	.11	15000	.15-.25	1.13	.91	.78

SERIES CM21 SOCKETS



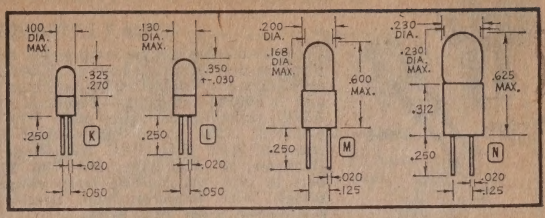
CM21-1



CM21-2

CM21-1 socket accepts T-¾ and T-1 bi-pin lamps; CM21-2 ac- epts T-1¼, T-1½ and T-1¾ bi-pin lamps. CM21-1 is .172″ dia. x 432″ long overall; mounts in .122″ dia. panel hole. CM21-2 is .250″ ia. x .408″ long; mounts in .22″ dia. hole.

Stock No.	Mfr's Type	EACH				
		1-9	10-99	100-499	500-999	1000-Up
749-0170	CM21-1	.68	.57	.47	.41	.35
749-0171	CM21-2	.92	.77	.64	.55	.48

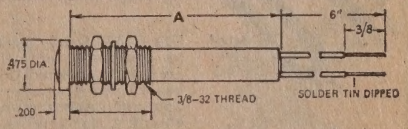


SUBMINIATURE INCANDESCENT BI-PIN LAMPS

Subminiature lamps with .020″ dia. bi-pin terminals. Size: T-¾ bulb, .100″ dia. x .270-.325″ long; T-1, .130″ dia. x .320-.380″ long; T-1¼, .200″ dia. x .600″ max.; T-1¾, .230″ dia. x .625″ max. Terminal Length: T-¾ and T-1, .190″; T-1¼ and T-1¾, .250″. *Indicates ±20%. †nominal. ‡indicates +10%, −20%.

Stock No.	Type CM7-	Fig.	V	Amps	M.S. C.P.	Bulb Size	PER PKG. of 10		
							1-9	10-49	50-Up
749-0019	7112	K	5.0	.021	....	T-¾	35.00	28.40	24.30
749-0020	7114	K	5.0	.060	.05	T-¾	26.70	21.70	18.50
749-0021	7115	K	5.0	.060	.15	T-¾	26.70	21.70	18.50
749-0022	7117	K	5.0	.080	....	T-¾	26.70	21.70	18.50
749-0023	7118	K	5.0	.115	....	T-¾	26.70	21.70	18.50
749-0024	7258	L	3.0	.008*	....	T-1	21.80	17.70	15.10
749-0025	7259	L	3.0	.0125*	....	T-1	21.80	17.70	15.10
749-0026	7262	L	5.0	.017*	....	T-1	21.80	17.70	15.10
749-0027	7263	L	5.0	.030	....	T-1	20.60	16.70	14.30
749-0053	7680	L	5.0	.060	.03	T-1	19.70	16.00	13.70
749-0054	7683	L	5.0	.060	.05	T-1	19.70	16.00	13.70
749-0028	7265	L	5.0	.060	.15	T-1	19.70	16.00	13.70
749-0055	7715	L	5.0	.115	....	T-1	19.70	16.00	13.70
749-0060	8095	L	10.0	.027	....	T-1	24.50	19.90	17.00
749-0061	8097	L	12.0	.060	....	T-1	24.50	19.90	17.00
749-0062	8098	L	14.0	.065	....	T-1	24.50	19.90	17.00
749-0063	8099	L	18.0	.026	....	T-1	24.50	19.90	17.00
749-0057	7839	L	28.0	.024	....	T-1	26.00	21.10	18.10
749-0047	7580	M	5.0	.06	.03	T-1¼	15.00	12.10	10.40
749-0048	7583	M	5.0	.06	.05	T-1¼	15.00	12.10	10.40
749-0046	7515	M	5.0	.115	....	T-1¼	15.00	12.10	10.40
749-0052	7660	M	6.0	.04	....	T-1¼	17.50	14.20	12.20
749-0029	7309	M	6.0	.06	....	T-1¼	15.00	12.10	10.40
749-0049	7628	M	6.0	.20	....	T-1¼	15.00	12.10	10.40
749-0051	7646	M	14.0	.08	....	T-1¼	15.00	12.10	10.40
749-0050	7632	M	28.0	.04	....	T-1¼	15.00	12.10	10.40
749-0056	7838	N	2.7	.06	....	T-1¾	8.80	7.20	6.10
749-0059	7945	N	6.0	.04	....	T-1¾	8.80	7.20	6.10
749-0031	7328	N	6.0	.20	....	T-1¾	6.80	5.50	4.70
749-0041	7380	N	6.3	.04	....	T-1¾	8.80	7.20	6.10
749-0040	7377	N	6.3	.075	....	T-1¾	6.50	5.20	4.50
749-0042	7381	N	6.3	.20	.40	T-1¾	7.10	5.80	5.00
749-0034	7349	N	6.3	.20	.55	T-1¾	6.50	5.20	4.50
749-0033	7344	N	10.0	.014	....	T-1¾	9.70	7.90	6.70
749-0035	7367	N	10.0	.04	....	T-1¾	10.50	8.40	7.10
749-0037	7371	N	12.0	.04	....	T-1¾	11.10	9.00	7.70
749-0043	7382	N	14.0	.08	.30	T-1¾	7.10	5.80	5.00
749-0032	7330	N	14.0	.08	.50	T-1¾	6.50	5.52	4.50
749-0038	7373	N	14.0	.10†	....	T-1¾	13.30	10.80	9.20
749-0036	7370	N	18.0	.04‡	....	T-1¾	10.70	8.70	7.40
749-0045	7459	N	22.0	.04	....	T-1¾	11.10	9.00	7.70
749-0044	7387	N	28.0	.04	.30	T-1¾	7.50	6.10	5.20
749-0030	7327	N	28.0	.04	.34	T-1¾	6.50	5.20	4.50
749-0058	7876	N	28.0	.06	....	T-1¾	11.10	9.00	7.70
749-0039	7376	N	28.0	.065	....	T-1¾	11.10	9.00	7.70

CM20 SERIES BEAM EMITTERS



Compact assemblies project narrow cones of infrared and luminous energies over distances of 7″ to 16″. An axially aligned target circle equal to half the diameter of the projected spot (see table below) will be covered. Low power consumption (782 mW). Black anodized aluminum housing, wire leads. Thermosetting resin encapsulation.

SPECIFICATIONS

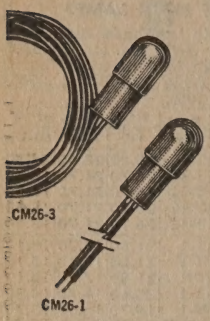
Type	Design		Aver. Life, Hrs.	Focal Distance	Projected Spot Dia.	Lgth.
	V	Amps ±10%				
CM20-8-01	2.3	.340	10000	7-9″	1¼″ to 1¾″	1.25″
CM20-9-01	2.3	.340	10000	14-16″	1″ to 1⅛″	2.00″

Stock No.	Mfr's Type	EACH				
		1-9	10-99	100-499	500-999	1000-Up
749-0157	CM20-8-01	22.09	18.41	15.25	13.15	11.36
749-0158	CM20-9-01	25.49	21.25	17.60	15.18	13.11

Lited Devices by Chicago Miniature

CM26 T-1 "PEANUT-LITE" ULTRAMINIATURE INDICATOR LIGHTS

Contains a subminiature lamp sealed in a high temperature polycarbonate housing. Wide range of voltages. Low-cost commercial substitutes for MS25446 and MS90308 indicators. Terminals: CM26-1, #30 AWG tinned solid wire with PVC insulations. CM26-2, .020" nickel pins. CM26-3, #26 AWG stranded wire with PVC insulation. Max. panel thickness, 1/8". Mtg. hole, .185"-.190" dia. Final numbers in type no. indicate lamp voltage (see lamp table). With mounting clip. Specify color—white, red, amber, green, blue. ½ oz.

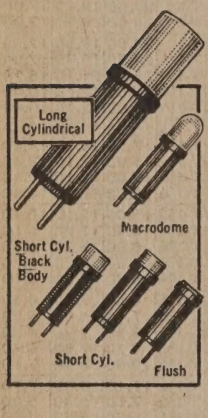


Stock No.	Type CM26-	EACH 1-9	10-99	100-499	500-999	1000-Up
749C0400	1-00-02	2.16	1.80	1.49	1.29	1.11
749C0401	1-00-05	2.16	1.80	1.49	1.29	1.11
749C0402	1-00-14	2.16	1.80	1.49	1.29	1.11
749C0403	1-00-15	2.16	1.80	1.49	1.29	1.11
749C0404	1-00-16	2.16	1.80	1.49	1.29	1.11
749C0405	1-00-17	2.16	1.80	1.49	1.29	1.11
749C0406	1-00-18	2.16	1.80	1.49	1.29	1.11
749C0407	1-00-19	1.01	.85	.70	.60	.52
749C0408	1-00-20	1.01	.85	.70	.60	.52
749C0409	1-00-21	1.01	.85	.70	.60	.52
749C0410	1-00-22	2.16	1.80	1.49	1.29	1.11
749C0411	2-00-02	2.35	1.96	1.62	1.40	1.21
749C0412	2-00-05	2.35	1.96	1.62	1.40	1.21
749C0413	2-00-14	2.35	1.96	1.62	1.40	1.21
749C0414	2-00-15	2.35	1.96	1.62	1.40	1.21
749C0415	2-00-16	2.35	1.96	1.62	1.40	1.21
749C0416	2-00-17	2.35	1.96	1.62	1.40	1.21

LAMP TABLE

Lamp No.	Design Volts	Design Amps	Lamp No.	Design Volts	Design Amps
02	3.0	.0125	16	14.0	.065
05	5.0	.03	17	18.0	.026
19	5.0	.06	21	28.0	.02
20	5.0	.11	18	28.0	.024
14	10.0	.027	22	28.0	.04
15	12.0	.06			

Stock No.	Type CM26-	EACH 1-9	10-99	100-499	500-999	1000-Up
749C0417	2-00-18	2.35	1.96	1.62	1.40	1.21
749C0418	2-00-19	1.22	1.03	.84	.72	.62
749C0419	2-00-20	1.22	1.03	.84	.72	.62
749C0420	2-00-21	1.22	1.03	.84	.72	.62
749C0421	2-00-22	2.35	1.96	1.62	1.40	1.21
749C0430	3-00-02	2.35	1.96	1.62	1.40	1.21
749C0431	3-00-05	2.35	1.96	1.62	1.40	1.21
749C0432	3-00-14	2.35	1.96	1.62	1.40	1.21
749C0433	3-00-15	2.35	1.96	1.62	1.40	1.21
749C0434	3-00-16	2.35	1.96	1.62	1.40	1.21
749C0435	3-00-17	2.35	1.96	1.62	1.40	1.21
749C0436	3-00-18	2.35	1.96	1.62	1.40	1.21
749C0437	3-00-19	1.22	1.03	.84	.72	.62
749C0438	3-00-20	1.22	1.03	.84	.72	.62
749C0439	3-00-21	1.22	1.03	.84	.72	.62
749C0440	3-00-22	2.35	1.96	1.62	1.40	1.21



CML SERIES "HIDE-A-LITE" INDICATOR LIGHTS

"Hide-A-Lites" appear white in the off position and take on color when activated. A glance is all that is necessary to quickly ascertain which indicators are "on" in a multiple-indicator panel. Ideal for use as warning lights or on systems control panels where signal and indicator speed are important. Clear anodized aluminum housing. Nylon insulation. Translucent polycarbonate caps. Meet MIL-L-3661 specifications. Stainless steel terminals, off-center to provide polarization. Series 06 (below) is for 6-volt T-1¾ incandescent lamp. Series 28 takes #28 lamp (14 V, .08 A); series 11 takes #11 lamp (28 V, .04 A). *Long cylindrical; †macrodome; §short cylindrical; ‡short cyl., blk. body, **flush. ††Activated color. ½ oz.

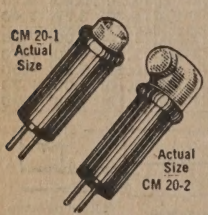
Stock No.	Type CML-	††	Stock No.	Type CML-	††
749-0673	70406*	Red	749-0641	60406§	Blue
749-0672	70406*	Grn	749-0640	60406§	Amb
749-0671	70406*	Blue	749-0647	60406‡	Red
749-0670	70406*	Amb	749-0646	60406‡	Grn
749-0703	80406†	Red	749-0645	60406‡	Blue
749-0702	80406†	Grn	749-0644	60406‡	Amb
749-0701	80406†	Blue	749-0623	50406**	Red
749-0700	80406†	Amb	749-0622	50406**	Grn
749-0643	60406§	Red	749-0621	50406**	Blue
749-0642	60406§	Grn	749-0620	50406**	Amb

1-9...Ea. 1.72 10-99...Ea. 1.43 100-499...Ea. 1.19
500-999.....Each 1.02 1000-Up.....Each .88

Stock No.	Type CML-	††	Stock No.	Type CML-	††
749-0693	70428*	Red	749-0683	70411*	Red
749-0692	70428*	Grn	749-0682	70411*	Grn
749-0691	70428*	Blue	749-0681	70411*	Blue
749-0690	70428*	Amb	749-0680	70411*	Amb
749-0723	80428†	Red	749-0713	80411†	Red
749-0722	80428†	Grn	749-0712	80411†	Grn
749-0721	80428†	Blue	749-0711	80411†	Blue
749-0720	80428†	Amb	749-0710	80411†	Amb
749-0663	60428§	Red	749-0653	60411§	Red
749-0662	60428§	Grn	749-0652	60411§	Grn
749-0661	60428§	Blue	749-0651	60411§	Blue
749-0660	60428§	Amb	749-0650	60411§	Amb
749-0667	60428‡	Red	749-0657	60411‡	Red
749-0666	60428‡	Grn	749-0656	60411‡	Grn
749-0665	60428‡	Blue	749-0655	60411‡	Blue
749-0664	60428‡	Amb	749-0654	60411‡	Amb
749-0633	50428**	Red	749-0628	50411**	Red
749-0632	50428**	Grn	749-0627	50411**	Grn
749-0631	50428**	Blue	749-0626	50411**	Blue
749-0630	50428**	Amb	749-0625	50411**	Amb

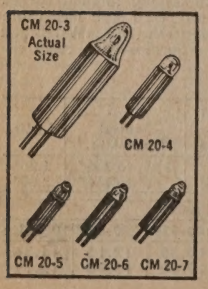
1-9. Ea. 1.84 10-99. Ea. 1.53
100-499.....Each 1.27
500-999.....Each 1.09
1000-Up.....Each .94

1-9. Ea. 1.62 10-99. Ea. 1.3
100-499.....Each 1.1
500-999.....Each .9
1000-Up.....Each .8



CM20 SERIES SUBMINIATURE LENS END-LITES

The CM20 family has finely controlled characteristics for demanding optical applications. Spots produced are axially centered. Ideally suited for close proximity use with photosensors where an intense spot of luminous and infrared energy is required. Applications are encoders, tape sensors, card readers, optical scanners. CM20-1 and -2 (right angle lens) are mounted in Bi-Pin cartridges. Clear anodized aluminum body; stainless steel terminals; nylon insulation. CM20-3 thru -7 are packaged in gold anodized aluminum sleeves with #24 AWG stranded wire leads. Type B insulation per MIL-W-16878. Semi-resilient thermosetting resin encapsulation. CM20-5 thru -7 can be mounted on .250" centers for card reader uses. ½ oz.



Stock No.	Mfr's Type	EACH 1-9	10-99	100-499	500-999	1000-Up
749-0150	CM20-1	2.65	2.21	1.83	1.58	1.36
749-0151	CM20-2	4.31	3.59	2.97	2.56	2.21
749-0152	CM20-3	3.28	2.73	2.26	1.95	1.68
749-0153	CM20-4	3.23	2.70	2.23	1.93	1.66
749-0154	CM20-5	2.56	2.14	1.77	1.53	1.32
749-0155	CM20-6	2.63	2.19	1.81	1.56	1.35
749-0156	CM20-7	2.67	2.22	1.84	1.59	1.37

SPECIFICATIONS

Mfr's Type	Lamp Type	Volts	Amps ±10%	Life (Hours)
CM20-1*	TL-1¾	2.5	.350	10,000
CM20-2†	TL-1¾	2.5	.325	10,000
CM20-3§	TL-1¾	2.5	.350	10,000
CM20-4‡	TL-1¾	2.5	.350	10,000
CM20-5**	TL-1¼	2.5	.200	1000
		2.1	.180	10,000
CM20-6**	TL-1¼	6.0	.200	1000
		5.1	.180	10,000
CM20-7**	TL-1¼	28.0	.040	1000
		24.00	.036	10,000

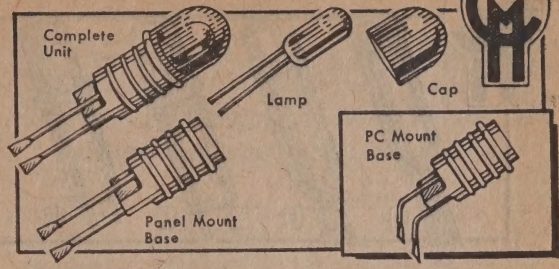
Spot Specifications: *Spot covers 1/8" dia. target when projected 3/8" from end of bulb at min. intensity of 750 foot-candles. †When projected 1" from end of bulb, spot covers 1" dia. at 350 foot-candles. §3/8" from bulb, spot covers 1/16" dia. at 750 foot-candles. Spot is narrow elliptical. ‡Same as CM20-3 except spot covers 1/8" dia. target. Spot is round elliptical. **None, however lamp is axially aligned.

Specify Stock No. and Full Mfr's Type No. When Ordering

Lited Devices by Chicago Miniature

CM-25 SERIES T-1 SUBMINIATURE INDICATOR LITES

t, pend. dimpled terminals for positive contact; internally flared d guides for easy lamp insertion. Meet MS 90308. Gold plated ryllium copper term.; polycarbonate base, cap. Press-fits in .190" le. Entire unit consists of base, cap and lamp (order separately). pecify color: Red, Yellow, Green, Blue or Clear.



Stock No.	Mfr's Type CM25-	Description	EACH 1-9	10-99	100-499	500-999	1000-Up
49C0359	1005	Panel Mount Base	.75	.63	.53	.46	.41
49C0360	1006	PC Mount Base	.75	.63	.53	.46	.41
49C0361	1007*	Round Cap	.21	.18	.17	.15	.13
49C0362	1008*	Lens Cap	.21	.18	.17	.15	.13
49C0363	1009*	Square Cap	.21	.18	.17	.15	.13
49C0358	1002*	Cylindrical Cap	.21	.18	.17	.15	.13

T-1 INDICATOR LAMPS

Stock No.	Lamp No. CM-	Design V	Amps	M.S. C.P. Appr.	Aver. Life, Hours	Each Complete Unit* 1-9	10-99	100-499	500-999	1000-Up
49C0350	680	5.0	.06	.03	100000	1.93	1.73	1.53	1.43	1.03
49C0351	680AS15					2.01	1.91	1.68	1.56	1.13
49C0352	683	5.0	.06	.05	100000	1.93	1.73	1.53	1.43	1.03
49C0353	683AS15					2.01	1.91	1.68	1.56	1.13
49C0354	713	5.0	.075	.09	25000	2.98	2.68	2.23	1.93	1.10
49C0355	713AS15					3.32	2.92	2.43	2.10	1.21
49C0356	715	5.0	.115	.15	40000	1.93	1.73	1.53	1.43	1.03
49C0357	715AS15					2.01	1.91	1.68	1.56	1.13
49C0365	6150	5.0	.060	.15	5000	1.93	1.73	1.53	1.43	1.03
49C0366	6150AS15					2.01	1.91	1.68	1.56	1.13

Price includes base and cap

T-1 INDICATOR LAMPS (Cont'd)

Stock No.	Lamp No. CM-	Design V	Amps	M.S. C.P. Appr.	Aver. Life, Hours	Each Complete unit* 1-9	10-99	100-499	500-999	1000-Up
749C0364	2128	3.0	.0125	.001	16000	4.75	4.03	3.32	2.86	1.41
749C0367	6838	28.0	.024	.15	16000	3.42	3.04	2.52	2.18	1.33
749C0368	7201	1.5	.015	.01	5000	3.30	2.95	2.45	2.12	1.41
749C0369	7207	3.0	.060	.03	100000	3.20	2.85	2.37	2.05	1.26
749C0370	7210	5.0	.030	.03	75000	3.27	2.92	2.43	2.10	1.26
749C0371	7218	10.0	.027	.10	10000	3.25	2.90	2.41	2.08	1.29
749C0372	7219	12.0	.060	.15	16000	3.25	2.90	2.41	2.08	1.29
749C0373	7220	18.0	.026	.15	16000	3.25	2.90	2.41	2.08	1.29
749C0374	8111	14.0	.065	.15	16000	3.25	2.90	2.41	2.08	1.29
749C0375	8846	3.0	.008	.001	15000	3.46	3.06	2.54	2.19	1.41

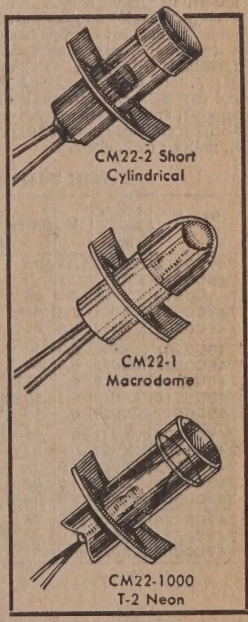
*Price includes Base and cap

CM22 T-1¾ INCANDESCENT PEANUT-LITES

ncandescent lamp indicators feature high-temperature polycarbonate shells with standard T-1¾ lamps. Permanently potted WG #24 6" insulated wire leads. Mounting hole, .309" diameter, nominal. Spring steel spring mounting clip for positive connections. Final digits in Type No. indicate lamp type (from Lamp Table below). Specify Color: clear, red, amber, green, white. Av. wt., ¼ oz.

LAMP TABLE (*indicates long-life lamps)

Lamp No.	Design Volts	Amps	Lamp No.	Design Volts	Amps	Lamp No.	Design Volts	Amps	Lamp No.	Design Volts	Amps	Lamp No.	Design Volts	Amps
15	1.35	.06	50	3.0	.03	27	6.3	.04	08	10.0	.04	54	22.0	.04
17	2.5	.20	56	5.0	.18	19	6.3	.075	28	14.0	.08*	40	28.0	.04*
51	2.5	.350	12	6.0	.04	13	6.3	.20*	09	14.0	.08	11	28.0	.04
18	2.7	.06	06	6.0	.20	20	6.3	.20	53	14.0	.088	45	28.0	.06*
43	3.0	.015	52	6.3	.20	07	10.0	.014	10	18.0	.04	55	28.0	.06



Stock No.	Mfr's Type CM22-	EACH 1-9	10-99	100-499	500-999	1000-Up
749C0308	2-00-15	.76	.63	.52	.45	.39
749C0309	2-00-17	.80	.67	.55	.48	.41
749C0319	2-00-51	1.01	.84	.70	.60	.52
749C0310	2-00-18	.76	.63	.52	.45	.39
749C0316	2-00-43	1.34	1.12	.93	.80	.69
749C0318	2-00-50	.97	.81	.67	.58	.50
749C0324	2-00-56	1.76	1.47	1.22	1.05	.91
749C0306	2-00-12	.92	.77	.64	.55	.48
749C0300	2-00-06	.76	.63	.52	.45	.39
749C0320	2-00-52	1.97	1.65	1.36	1.18	1.02
749C0313	2-00-27	.97	.81	.67	.58	.50
749C0311	2-00-19	.74	.61	.51	.44	.38
749C0307	2-00-13	.80	.67	.55	.48	.41
749C0312	2-00-20	.76	.63	.52	.45	.39
749C0301	2-00-07	1.18	.98	.81	.70	.60
749C0302	2-00-08	1.11	.93	.77	.66	.57
749C0314	2-00-28	.84	.70	.58	.50	.43
749C0303	2-00-09	.80	.67	.55	.48	.41
749C0321	2-00-53	.80	.67	.55	.48	.41
749C0304	2-00-10	.86	.72	.59	.51	.44
749C0322	2-00-54	1.11	.93	.77	.66	.57
749C0315	2-00-40	.97	.81	.67	.58	.50
749C0305	2-00-11	.76	.63	.52	.45	.39
749C0317	2-00-45	1.09	.91	.75	.65	.56
749C0323	2-00-55	.99	.82	.68	.59	.51

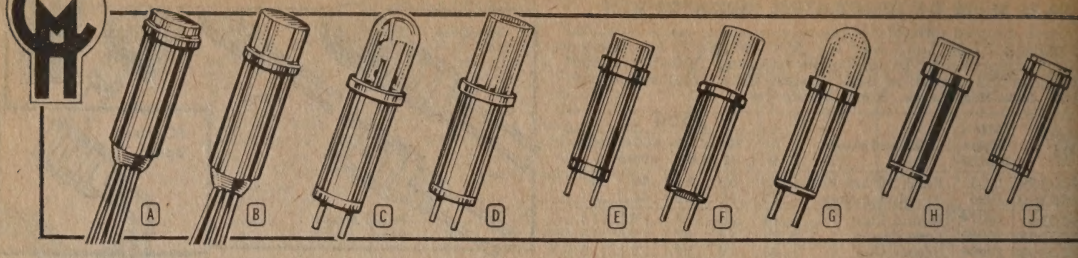
Stock No.	Mfr's Type CM22-	EACH 1-9	10-99	100-499	500-999	1000-Up
749C0208	1-00-15	.76	.63	.52	.45	.39
749C0209	1-00-17	.80	.67	.55	.48	.41
749C0219	1-00-51	1.01	.84	.70	.60	.52
749C0210	1-00-18	.76	.63	.52	.45	.39
749C0216	1-00-43	1.34	1.12	.93	.80	.69
749C0218	1-00-50	.97	.81	.67	.58	.50
749C0224	1-00-56	1.76	1.47	1.22	1.05	.91
749C0206	1-00-12	.92	.77	.64	.55	.48
749C0200	1-00-06	.76	.63	.52	.45	.39
749C0220	1-00-52	1.97	1.65	1.36	1.18	1.02
749C0213	1-00-27	.97	.81	.67	.58	.50
749C0211	1-00-19	.74	.61	.51	.44	.38
749C0207	1-00-13	.80	.77	.55	.48	.41
749C0212	1-00-20	.76	.63	.52	.45	.39
749C0201	1-00-07	1.18	.98	.81	.70	.60
749C0202	1-00-08	1.11	.93	.77	.66	.57
749C0214	1-00-28	.84	.70	.58	.50	.43
749C0203	1-00-09	.80	.67	.55	.48	.41
749C0221	1-00-53	.80	.67	.55	.48	.41
749C0204	1-00-10	.86	.72	.59	.51	.44
749C0222	1-00-54	1.11	.93	.77	.66	.57
749C0215	1-00-40	.97	.81	.67	.58	.50
749C0205	1-00-11	.76	.63	.52	.45	.39
749C0217	1-00-45	1.09	.91	.75	.65	.56
749C0223	1-00-55	.99	.82	.68	.59	.51

CM22 T-2 NEON PEANUT-LITES

Low-cost indicator assembly with T-2 neon lamp that snaps into butyrate shell. Two shoulders in shell hold lamp in place. Dumet wire leads can be soldered to lamp terminals before or after installation. Short cylindrical cap. Mtg. hole, .310" nominal. Unassembled. With mtg. clip. Choice of three lamp types (also accepts other T-2 lamps). State clear, red, amber or white. ¼ oz.

Stock No.	Mfr's Type CM22-	Lamp Type	Volts	Nominal mA	Watts	Series Ohms Required	Life, Hours	EACH 1-9	10-99	100-499	500-999	1000-Up
749C0325	1000-00-A1A	NE-2	105-125	0.3	1/25	200,000	25,000	.31	.26	.21	.18	.16
749C0326	1000-00-A9A	NE-2E	105-125	1.0	1/10	62,000	5000	.30	.25	.21	.18	.16
749C0327	1000-00-C2A	NE-2H	105-125	2.0	¼	22,000	5000	.30	.25	.21	.18	.16

Lited Devices by Chicago Miniature



CML SERIES TRI-A-LITE INDICATOR LAMPS

Appears white in "off" position, but takes on color when voltage is applied to one of the color-coded leads. Provides three colors (red, green and yellow) in a single indicator. Mounts in 1 9/64" hole, with a single mounting clip (included). 5 volts, 0.115 amp per lamp. Anodized aluminum housing with white polycarbonate cap; choice of 4 cap styles (flush, long or short cylindrical, or macrodome). AWG #24 wire leads. Shpg. wt. 1 oz.

Stock No.	Mfr's Type CML-	Fig.	Cap Style	EACH 1-9	10-99	100-499	500-999	100 Up
749-0800	9501-RGY	A	Flush	7.22	6.02	4.99	4.30	3.7
749-0801	9601-RGY	B	Short cyl.	7.22	6.02	4.99	4.30	3.7
749-0802	9701-RGY	C	Macrodome	7.22	6.02	4.99	4.30	3.7
749-0803	9801-RGY	D	Long cyl.	7.22	6.02	4.99	4.30	3.7

CML SERIES CARTRIDGE INDICATORS

Cartridge housings with incandescent or neon lamps operate at cool temperatures for long life. Mount in cartridge holder, or panel mounting with speed clip (not included; order below). Clear anodized aluminum housings; nylon insulation; transparent or translucent butyrate caps, color matched to industry standards. Meet requirements of MIL-L-3661. Stainless steel pins are located off-center for polarization. Stainless steel pin terminals, or #24 AWG wire leads. Available with hot stamped legends on special order. Caps also available in polycarbonate, resistant to color fading and high temperature. Size, .284" dia. x .634" long.

TO ORDER: Insert two interfixes in CML Type No., replacing XX shown in tables below and at right. First interfix indicates cap style and terminal configuration: 1, flush cap with wire leads; 2, short cylindrical cap with wire leads; 3, long cylindrical cap with wire leads; 4, macrodome cap with wire leads; 5, flush cap with pin terminals (Fig. J); 6, short cylindrical cap with pin terminals (Fig. H); 7, macrodome cap with pin terminals (Fig. G); 8, long cylindrical cap with pin terminals (Fig. F). Second interfix indicates cap type: 1, transparent; or 2, translucent. Also add suffix to CML No. to indicate cap color: 1, red; 2, green; 3, amber; 4, blue; 5, white; 6, yellow; or 7, clear.

WITH T-1¾ INCANDESCENT LAMPS

Stock No.	Mfr's Type CML-	V	Amps	M.S. C.P. Appr.	Aver. Life, Hours	EACH 1-9	10-99	100-499	500-999	1000-Up
749C0512	XX015	1.35	.06	.01	500	1.13	.94	.77	.66	.56
749C0514	XX017	2.5	.20	.22	500	1.15	.95	.78	.67	.569
749C0515	XX018	2.7	.06	.04	6000	1.07	.89	.73	.62	.532
749C0531	XX043	3.0	.015	.004	10000	1.91	1.58	1.29	1.11	.945
749C0509	XX012	6.0	.04	.03	10000	1.33	1.10	.90	.77	.66
749C0503	XX006	6.0	.20	.63	1000	1.15	.95	.78	.67	.569
749C0522	XX027	6.3	.04	.02	50000	1.46	1.21	.99	.84	.722
749C0516	XX019	6.3	.075	.22	500	1.15	.95	.78	.67	.569
749C0510	XX013	6.3	.20	.40	50000	1.21	1.00	.82	.70	.601
749C0517	XX020	6.3	.20	.55	3000	1.15	.95	.78	.67	.569
749C0504	XX007	10.0	.014	.002	10000	1.50	1.24	1.02	.87	.741
749C0505	XX008	10.0	.04	.08	5000	1.59	1.31	1.08	.92	.787
749C0523	XX028	14.0	.08	.30	50000	1.27	1.05	.86	.73	.627
749C0506	XX009	14.0	.08	.50	750	1.01	.84	.69	.59	.501
749C0507	XX010	18.0	.04	.15	10000	1.31	1.08	.89	.76	.648
749C0529	XX040	28.0	.04	.20	50000	1.21	1.00	.82	.70	.60
749C0524	XX029	28.0	.04	.30	25000	1.15	.95	.78	.67	.63
749C0508	XX011	28.0	.04	.34	7000	1.04	.86	.71	.60	.515

(E) WITH T-2 INCANDESCENT LAMPS (NO CAP)

Stock No.	Mfr's Type CML-	V	Amps	End Ft.-Candles	Aver. Life, Hrs.	EACH 1-9	10-99	100-499	500-999	100 U
749-0573	OX047	10	.017	100	5000	1.43	1.18	.97	.83	.7
749-0574	OX048	16	.017	150	5000	1.47	1.21	1.00	.85	.7
749-0572	OX035	28	.040	2000	5000	1.42	1.17	.96	.82	.7
749-0571	OX033	48	.053	1500	5000	1.42	1.17	.96	.82	.7
749-0570	OX026	120	.025	1500	5000	1.53	1.27	1.04	.89	.7

WITH NEON LAMPS

For 105-125 V AC. *Not available in flush cap. †Available only long cylindrical and macrodome. ‡Value of ext. resistor needed.

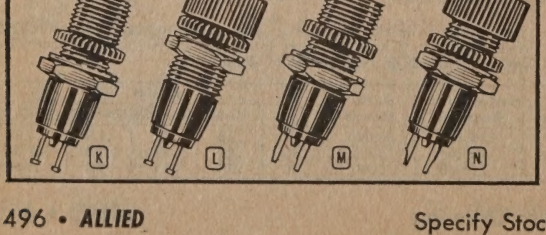
Stock No.	Mfr's Type CML-	Nominal mA	Nominal Watts	Built-in Resis.	Aver. Life, Hrs.	EACH 1-9	10-99	100-499	500-999	1000 Up
749C0500	XX001	0.3	1/25	220K‡	25000	.98	.82	.68	.58	.4
749C0501	XX004	0.8	1/10	68K‡	25000	.98	.82	.68	.58	.4
749C0502	XX005	1.2*	1/9	22K	2000	2.06	1.70	1.40	1.19	1.0
749C0511	XX014	1.7†	1/45	33K	5000	1.94	1.61	1.32	1.13	.9
749C0513	XX016	2.0†	1/4	22K	14000	1.94	1.61	1.32	1.13	.9
749C0518	XX022	1.9†	1/4	30K‡	25000	.87	.72	.59	.50	.4
749C0519	XX023	1.0†	1/10	56K	8500	1.94	1.61	1.32	1.13	.9
749C0520	XX024	0.7†	1/15	100K	25000	1.94	1.61	1.32	1.13	.9
749C0521	XX025	0.7†	1/15	100K‡	25000	.87	.72	.59	.50	.4
749C0525	XX030	0.9	1/8	47K	12000	2.06	1.70	1.40	1.19	1.0
749C0526	XX031	0.35	1/16	150K	16000	2.06	1.70	1.40	1.19	1.0
749C0527	XX032	0.3	1/25	220K	25000	2.06	1.70	1.40	1.19	1.0
749C0528	XX036	0.7†	1/15	100K‡	25000	.93	.77	.63	.54	.4
749C0530	XX042	1.0†	1/10	56K	100000	1.94	1.61	1.32	1.13	.9

MOUNTING ACCESSORIES

*Low-cost clip for non-panel mounting; phenolic body.

Stock No.	Mfr's Type	Description	EACH 1-9	10-99	100-499	500-999	100 Up
749-0605	CML-10380	Panel Mtg. Clip	.11	.09	.08	.07	.0
749-0172	CM21-3	Mounting Clip*	.32	.26	.22	.19	.1
749-0173	CM21-5	Right Angle Socket	1.03	.86	.71	.61	.5
749-0174	CM21-14	Swage Mtg. Socket	.59	.49	.40	.35	.3

CML SERIES CARTRIDGE HOLDERS



Panel mounting holders for T-1¾ or T-2 lamps. Body, collar and facing nut are black anodized aluminum. Molded phenolic insulation. Turret terminals are spring brass, gold over nickel plate; solder cup terminals are spring brass, tintilate plate. Polarized terminal pins. Types 10202-1 and 10203-1 have 9/32" knurled collar nut. Mount in round or "D" hole, .375" dia. in panels to 1 5/32" thick. *Front/rear mounting.

Stock No.	Mfr's Type CML-	Fig.	Mounting	Terminals	EACH 1-9	10-99	100-499	500-999	1000 Up
749-0601	10202-0	K	*	Turret	1.15	.96	.80	.69	.59
749-0602	10202-1	L	Front	Turret	1.25	1.04	.86	.74	.64
749-0603	10203-0	M	*	Solder	1.15	.96	.80	.69	.59
749-0604	10203-1	N	Front	Solder	1.25	1.04	.86	.74	.64

Specify Stock No. and Complete Mfr's Type No. When Ordering

Sylvania Pilot Lamps, Lenses and Sockets

EXTENDED-SERVICE PILOT LAMPS

5000-Hr. Minimum Life
Flat-Top Bulb
Flare-Stem Design

Slide Base

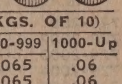
Miniature Bayonet Base

ll have T2 type bulbs, 1.075" long x ¼" dia. Slide or miniature ayonet bases. See listing at right for housings. Wt., 2 oz.

Slide Base		Bayonet Base		Volts	Av. Watts	Av. Amps	End Foot-Candles
ock No.	Type	Stock No.	Type				
37-0300	6PSB	937-0362	6MB	6	.8	.140	800
37-0306	12PSB	937-0368	12MB	12	2.0	.170	2400
37-0312	24PSB	937-0380	24MB	24	1.7	.073	2200
37-0316	28PSB	937-0384	28MB	28	1.1	.040	1900
37-0336	48PSB	937-0396	48MB	48	2.5	.053	1500
37-0348	60PSB	937-0397	60MB	60	3.0	.050	2400
37-0360	120PSB	937-0399	120MB	120	3.0	.025	1600

ACH (IN PKGS. OF 10). 10-99....Each .53 100-499....Each .46
00-999.....Each .41 1000-Up.....Each .37

END COLOR CAPS



rofax and pyrex hard glass types. Profax for use elow 1½ watts. For housings, this page. 2 oz.

Stock No.	Mfr's Type	Desc.	Color	EACH (IN PKGS. OF 10) 10-99	100-499	500-999	1000-Up
37-2000	38001-0	Profax	Red	.084	.07	.065	.06
37-2001	38002-0	Profax	Yel	.084	.07	.065	.06
37-2002	38003-0	Profax	Wht	.084	.07	.065	.06
37-2003	38004-0	Profax	Grn	.084	.07	.065	.06
37-2004	38005-0	Profax	Blue	.084	.07	.065	.06
37 2005	38071-0	Pyrex	Red	.084	.07	.065	.06
37-2006	38072-0	Pyrex	Yel	.084	.07	.065	.06
37-2007	38073-0	Pyrex	Wht	.084	.07	.065	.06
37-2008	38074-0	Pyrex	Grn	.084	.07	.065	.06
37-2009	38075-0	Pyrex	Blue	.084	.07	.065	.06

PHENOLIC UNIVERSAL HOUSINGS

All metal parts nickel-plated. Rated 75 watts, 125 volts. U.L. Component-Program Recognized. Use AMP connector 42197-2, or leads can be soldered through holes in contacts. Lgth., $1\frac{27}{32}$". Max. pnl. thickness, $\frac{13}{32}$". 2 oz.
937-1327. 1-9.... Each .65 10-99.....Each .56
100-499..Each .51 500-999..Each .49 1000-Up..Each .47

ASSEMBLED HOUSINGS AND LAMPS (Less lens)

Stock No.	Mfr's Type	Volts	Av. Watts	Av. Amps	End Foot-Candles
937-0900	6PSB/30099-0	6	.8	.140	800
937-0904	12PSB/30099-0	12	2.0	.170	2400
937-0912	24PSB/30099-0	24	1.7	.073	2200
937-0921	28PSB/30099-0	28	1.1	.040	1900
937-0927	48PSB/30099-0	48	2.5	.053	1500
937-0935	60PSB/30099-0	60	3.0	.050	2400
937-0946	120PSB/30099-0	120	3.0	.025	1600

1-9...Each 1.42 10-99.....Each 1.10 100-499.....Each 1.02
500-999.....Each .95 1000-Up.....Each .89

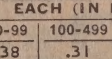
LENSES FOR PILOT LIGHT ASSEMBLIES

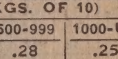
For housings on this page. Made of high-temperature thermoplastic that operates satisfactorily up to 290° F. at 66 psi without signal distortion. Av. shpg. wt., 1 oz.

Color	JEWELED LENS Stock No.	JEWELED LENS Mfr's Type	CLEAR LENS Stock No.	CLEAR LENS Mfr's Type	OPAQUE LENS Stock No.	OPAQUE LENS Mfr's Type
Red	937-1303	30100-0	937-1318	30110-0	937-1323	30130-0
Blue	937-1306	30103-0	937-1321	30113-0	.....	.....
Green	937-1305	30102-0	937-1320	30112-0	937-1325	30132-0
Amber	937-1312	30106-0	937-1319	30111-0	.....	.....
Yellow	.....	.....	937-1315	30114-0	937-1324	30131-0
Clear	.....	.....	937-1322	30116-0	.....	.....
White	.....	.....	.....	.....	937-1326	30133-0

EACH (IN PKGS. OF 10). 10-99....Each .23 100-499....Each .19
500-999.....Each .17 1000-Up.....Each .15

INDICATOR LAMPS AND SOCKETS


Slide Base


Unbased

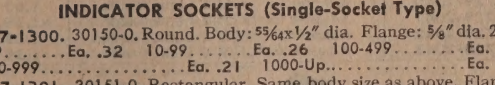
ong life, minimum 5000 hours. Electrical con- act made with AMP connector 42197-2 or by soldering leads through holes in contacts. T2 bulb. *Cherry-red glow. Shpg. wt., 2 oz.

SLIDE BASE LAMPS

Volts	Current (mA)	End Foot-Candles	Stock No.	Mfr's Type	EACH (IN PKGS. OF 10) 10-99	100-499	500-999	1000-Up
4.0	35-45	200	937-0700	4ESB	.49	.42	.36	.34
5.0	35-45	225	937-0701	5ESB	.49	.42	.36	.34
6.0	35-45	250	937-0702	6ESB	.49	.42	.36	.34
10.0	35-45	450	937-0714	10ESB	.49	.42	.36	.34
10.0	15-20	100	937-0711	10CSB	.49	.42	.36	.34
10.0	9-11	*	937-0707	10ASB	.49	.42	.36	.34
12.0	35-45	650	937-0718	12ESB	.49	.42	.36	.34
16.0	35-45	900	937-0725	16ESB	.49	.42	.36	.34
16.0	15-20	150	937-0721	16CSB	.49	.42	.36	.34
18.0	35-45	1000	937-0732	18ESB	.49	.42	.36	.34
24.0	35-45	1100	937-0741	24ESB	.49	.42	.36	.34
24.0	15-20	200	937-0736	24CSB	.49	.42	.36	.34
28.0	35-45	1285	937-0007	28ESB	.49	.42	.36	.34
48.0	35-45	2000	937-0745	48ESB	.49	.42	.36	.34

UNBASED LAMPS

Stock No.	Mfr's Type	EACH (IN PKGS. OF 10) 10-99	100-499	500-999	1000-Up
937-0500	4ES	.38	.31	.28	.25
.....	.....	.....	.....	.....	.....
937-0502	6ES	.38	.31	.28	.25
937-0509	10ES	.38	.31	.28	.25
937-0507	10CS	.38	.31	.28	.25
937-0506	10AS	.60	.46	.41	.39
937-0512	12ES	.38	.31	.28	.25
937-0520	16ES	.38	.31	.28	.25
937-0517	16CS	.38	.31	.28	.25
.....	.....	.....	.....	.....	.....
937-0528	24ES	.38	.31	.28	.25
937-0524	24CS	.38	.31	.28	.25
937-0534	28ES	.38	.31	.28	.25
937-0541	48ES	.43	.36	.31	.29



INDICATOR SOCKETS (Single-Socket Type)

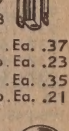
937-1300. 30150-0. Round. Body: $5\frac{5}{64}$x½" dia. Flange: ⅝" dia. 2 oz.
1-9.....Ea. .32 10-99.....Ea. .26 100-499.....Ea. .24
500-999.....Ea. .21 1000-Up.....Ea. .20

937-1301. 30151-0. Rectangular. Same body size as above. Flange: ½x¾".
1-9.....Ea. .32 10-99.....Ea. .26 100-499.....Ea. .24
500-999.....Ea. .21 1000-Up.....Ea. .20

STRIP SOCKETS (12 Sockets per Strip)

Overall depth, $5\frac{5}{64}$" (less pins). Sockets are $4\frac{7}{64}$"x½" dia. 3 oz.
937-1700. 31250-0. ½" center, alternate contacts. 1-9...Ea. 3.32
10-19.....Ea. 2.79 20-49.....Ea. 2.54
50-99.....Ea. 2.39 100-Up.....Ea. 2.24
937-1701. 31275-0. ¾" center, alternate contacts. 1-9...Ea. 3.32
10-19.....Ea. 2.79 20-49.....Ea. 2.54
50-99.....Ea. 2.39 100-Up.....Ea. 2.24
937-1704. 33250-0. ½" ctr., individual contacts. 1-9....Ea. 3.45
10-19.....Ea. 2.95 20-49.....Ea. 2.75
50-99.....Ea. 2.58 100-Up.....Ea. 2.39
937-1709. 33275-0. ¾" ctr., individual contacts. 1-9....Ea. 3.45
10-19.....Ea. 2.95 20-49.....Ea. 2.75
50-99.....Ea. 2.58 100-Up.....Ea. 2.39

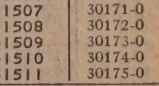
PANEL LIGHT SOCKETS



Type 30152-0 panel socket takes Series PSB slide base lamp. Black phenolic. U.L. Component-Program Recog. Lenses below. 30154-0 same, but for use without lens. 30153-0 is black nylon, takes slide base lamps above, lenses below. 2 oz.
937-1318. Type 30152-0. Panel Socket. 1-9.....Ea. .37
10-99 Ea. .30 100-499 Ea. .28 500-999 Ea. .25 1000-Up Ea. .23

937-1321. Type 30154-0. Single Socket. 1-9.....Ea. .37
10-99 Ea. .30 100-499 Ea. .28 500-999 Ea. .25 1000-Up Ea. .23
937-3319. Type 30153-0. Panel Socket. 1-9.....Ea. .35
10-99 Ea. .28 100-499 Ea. .25 500-999 Ea. .23 1000-Up Ea. .21

LENSES FOR ABOVE SOCKETS



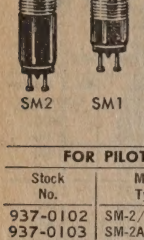
Polycarbonate lenses for Types 30152 and 30153 sockets above. Round and square types. Av. shpg. wt., 2 oz.

Color	ROUND LENS Stock No.	ROUND LENS Type	SQUARE LENS Stock No.	SQUARE LENS Type
Red	937-1500	30160-0	937-1506	30170-0
Clear	937-1501	30161-0	937-1507	30171-0
Amber	937-1502	30162-0	937-1508	30172-0
White	937-1503	30163-0	937-1509	30173-0
Green	937-1504	30164-0	937-1510	30174-0
Blue	937-1505	30165-0	937-1511	30175-0

EACH (IN PKGS. OF 10). 10-99....Each .21 100-499....Each .17
500-999.....Each .14 1000-Up.....Each .12

Lamps, Lenses and Fiber Optics

SYLVANIA LAMPS AND LENSES



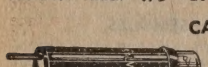
CARTRIDGE LIGHT HOUSINGS

Cartridge housings accept either standard pilot lamps or indicator lamps below. Made of black anodized aluminum per MIL-A-8625; base insulation of molded phenolic. Withstand environmental requirements of MIL-STD-202B as prescribed in MIL-L-3661A. Rated at 250 volts; maximum current, 1 amp. Breakdown voltage, 1000 V rms at 60 Hz. Easily installed from rear of panel with lockwasher and hex nut. *Solder lugs; others turret lugs. Wt., 1 oz.

FOR PILOT LAMPS			FOR INDICATOR LAMPS		
Stock No.	Mfr's Type	Size, Dia. x L.	Stock No.	Mfr's Type	Size, Dia. x L.
937-0102	SM-2/300950	½x1⅜″	937-0100	SM-1/300970	½x1 1/32″
937-0103	SM-2A/300960	½x1⅜″	937-0101	SM-1A/300980	½x1 1/32″*

1-9.....Each 1.11 10-24.....Each .90 25-99.....Each .84
100-249...Each .75 250-499...Each .67 500-Up.....Each .61

CARTRIDGE LAMPS



Black anodized metal sleeves and clear ends. Stainless steel, polarized pins. Dia., .290″. Lgth.: *1.110″ max.; †.912″ max., less pins. 1 oz.

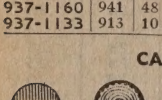
*PILOT LAMPS (For Above Housings)

Stock No.	Mfr's Type	Volts	Average Watts	Average Amps	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
937-1100	21	6	0.8	.140	1.19	.96	.88	.79	.69	.62
937-1104	31	12	2.0	.170	1.19	.96	.88	.79	.69	.62
937-1109	41	24	1.7	.073	1.19	.96	.88	.79	.69	.62
937-1115	51	28	1.1	.040	1.19	.96	.88	.79	.69	.62
937-1119	61	48	2.5	.053	1.19	.96	.88	.79	.69	.62
937-1121	71	60	3.0	.050	1.19	.96	.88	.79	.69	.62
937-1124	81	120	3.0	.025	1.19	.96	.88	.79	.69	.62

†INDICATOR LAMPS (For Above Housings)

Stock No.	Mfr's Type	V	Av. Watts	Current Amperes Min.-Max.	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
937-1127	901	4	.16	.035-.045	1.19	.96	.88	.79	.69	.62
937-1129	905	5	.20	.035-.045	1.19	.96	.88	.79	.69	.62
937-1131	909	6	.24	.035-.045	1.19	.96	.88	.79	.69	.62
937-1135	914	10	.18	.015-.020	1.19	.96	.88	.79	.69	.62
937-1136	915	10	.40	.035-.045	1.19	.96	.88	.79	.69	.62
937-1139	918	12	.36	.035-.045	1.19	.96	.88	.79	.69	.62
937-1141	925	16	.28	.015-.020	1.19	.96	.88	.79	.69	.62
937-1143	926	16	.64	.035-.045	1.19	.96	.88	.79	.69	.62
937-1147	930	18	.72	.035-.045	1.19	.96	.88	.79	.69	.62
937-1149	933	24	.42	.015-.020	1.19	.96	.88	.79	.69	.62
937-1153	934	24	.96	.035-.045	1.19	.96	.88	.79	.69	.62
937-1156	938	28	1.12	.035-.045	1.19	.96	.88	.79	.69	.62
937-1160	941	48	1.92	.035-.045	1.19	.96	.88	.79	.69	.62
937-1133	913	10	.10	.009-.011	1.33	1.09	1.01	.92	.83	.75

CARTRIDGE LENSES (For Above)

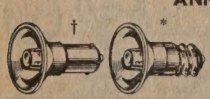


Polycarbon lenses have high working temperature, no melting, distortion. Black anodized aluminum bezels. Special inner surface provides almost total peripheral vision. Dia., .505″. Transparent or translucent types. Av. shpg. wt., 1 oz.

TRANSPARENT LENS			TRANSLUCENT LENS		
Stock No.	Type	Color	Stock No.	Type	Color
937-1600	301400	Amber	937-1605	301450	Yellow
937-1601	301410	Clear	937-1606	301460	White
937-1602	301420	Red	937-1607	301470	Red
937-1603	301430	Blue	937-1608	301480	Blue
937-1604	301440	Green	937-1609	301490	Green

1-9.....Each .32 10-24.....Each .28 25-99.....Each .26
100-249.....Each .25 250-499.....Each .24 500-Up.....Each .23

ANNUNCIATOR LAMPS

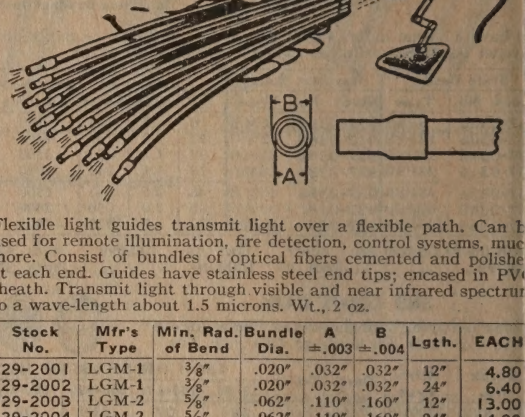


High-brightness, long life lamps for use in elevator panels call boards, etc. 5000 hour life rating. Self-contained reflector speeds assembly. *Candelabra base; †miniature bayonet base. 2 oz.

V	W	A	Candelabra Stock No.	Candelabra Mfr's Type	Bayonet Stock No.	Bayonet Mfr's Type
12	2.0	.170	937-1804	12RC 35121-0	937-1800	12RB 35221-0
60	3.0	.050	937-1809	60RC 35127-0	937-1801	60RB 35227-0
120	3.0	.025	937-1813	120RC 35128-0	937-1802	120RB 35229-0

1-9.....Each .81 10-99.....Each .69
100-499.....Each .65 500-Up.....Each .62

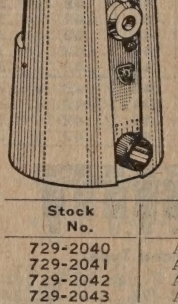
AMERICAN OPTICAL FIBER OPTICS



Flexible light guides transmit light over a flexible path. Can b used for remote illumination, fire detection, control systems, muc more. Consist of bundles of optical fibers cemented and polishe at each end. Guides have stainless steel end tips; encased in PV sheath. Transmit light through visible and near infrared spectrur to a wave-length about 1.5 microns. Wt., 2 oz.

Stock No.	Mfr's Type	Min. Rad. of Bend	Bundle Dia.	A ±.003	B ±.004	Lgth.	EACH
729-2001	LGM-1	⅜″	.020″	.032″	.032″	12″	4.80
729-2002	LGM-1	⅜″	.020″	.032″	.032″	24″	6.40
729-2003	LGM-2	⅝″	.062″	.110″	.160″	12″	13.00
729-2004	LGM-2	⅝″	.062″	.110″	.160″	24″	14.00
729-2005	LGM-2	⅝″	.062″	.110″	.160″	36″	15.00
729-2006	LGM-2	⅝″	.062″	.110″	.160″	48″	16.00
729-2007	LGM-2	⅝″	.062″	.110″	.160″	72″	18.00
729-2008	LGM-3	¾″	.125″	.169″	.250″	12″	15.00
729-2009	LGM-3	¾″	.125″	.169″	.250″	24″	18.00
729-2010	LGM-3	¾″	.125″	.169″	.250″	36″	21.00
729-2011	LGM-3	¾″	.125″	.169″	.250″	48″	24.00
729-2012	LGM-3	¾″	.125″	.169″	.250″	72″	30.00
729-2017	LGM-5	1½″	.250″	.316″	.403″	12″	21.00
729-2018	LGM-5	1½″	.250″	.316″	.403″	24″	29.50
729-2019	LGM-5	1½″	.250″	.316″	.403″	36″	38.00
729-2020	LGM-5	1½″	.250″	.316″	.403″	60″	55.00
729-2021	LGM-5	1½″	.250″	.316″	.403″	72″	63.50

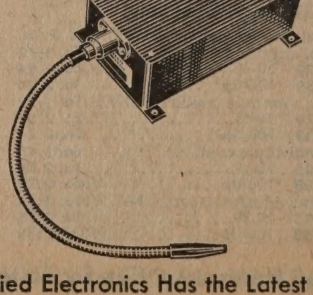
LIGHT TRANSMITTING CLAD ROD. Glass core with refraction inde of 1.62 and glass cladding having an index of 1.52. Can be bent i Bunsen flame. Should not be bent to radius of under 2.5″.
729-0400. Type CR-1-6. ⅛″ dia. x 6″. Wt., 2 oz.....2.3
729-0407. Type CR-1-12. ⅛″ dia. x 12″. Wt. 2 oz.....3.2



FIBER OPTIC ILLUMINATOR

MODEL II-80. Fiber optic illuminator de signed for use with AO Light Guides Provides an intense yet cool source o illumination for a wide variety of fiber optic applications. The quartz-iodine lamp pro vides a focused source of intense light fo the light guides listed above. The illumina tor has a four-level light switch and a efficient cooling fan. Lamp life ranges fro 50 hours at the high setting to 500 hour at the low setting. 7⅜x5⅛″. 80 watts 110-120 V, 60 Hz.
729-2030.....129.5
729-2032. EJY Replacement Bulb.....5.0

Stock No.	Description	EACH
729-2040	Adapter for LGM-1 Light Guide	1.60
729-2041	Adapter for LGM-2 Light Guide	1.35
729-2042	Adapter for LGM-3 Light Guide	1.35
729-2043	Adapter for LGM-5 Light Guide	1.35



LIGHT SWITCH FOR REMOTE SENSING

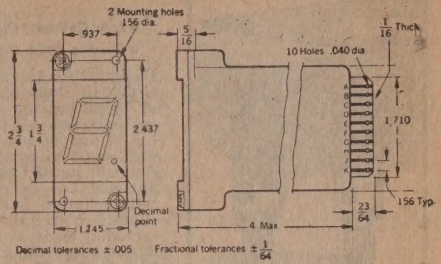
A photoelectric sensing and relay system combined with a fiber optic probe for re mote, non-contact sensing. Can be used conveniently for counting, code reading, proximity sensing, motion detection. Flexible fiber optic probe means easy in stallation into remote loca tions. Up to 10 million operations, 500 counts per minute, SPST contact. 24″ light guide in goose-neck sheathing. 110 VAC, 50/60 Hz.
729-2031.....100.00

Digital Readout-Translator and Readout Indicators

SIGMA TYPE 321 MODULE WITH 7-BAR INTEGRAL NEON DISPLAY

- Code Translation and Numerical Display in a Single Opto-Electronic Module
- Eliminates High-Voltage Switching Transistors and Isolates High-Voltage Supply
- May be Grouped for Multi-Digit Display with Single-Plane, High Visibility

Stock No.	Mfr's Type 321-	Logic Input per Line		Lamp Input	EACH
		On (VDC)	Off (VDC)	VDC @ mA	
17-1500	A0-N6†	6 @ 40 mA	0	± 6 @ 120	27.50
17-1501	A0-N12‡	12 @ 20 mA	0	±12 @ 60	27.50
17-1502	A0-P6§	6 @ 40 mA	0	±6 @ 160	29.15
17-1503	A0-P12§	12 @ 20 mA	0	±12 @ 80	29.15
17-1504	B1-N6*‡	−2 min. @ 0.3 mA	−.6 @ 50 μA	6 @ 120	32.45
17-1506	B1-N12*‡	−2 min. @ 0.3 mA	−.6 @ 50 μA	12 @ 60	32.45
17-1505	B1-P6*§	−2 min. @ 0.3 mA	−.6 @ 50 μA	6 @ 160	34.10
17-1507	B1-P12*§	−2 min. @ 0.3 mA	−.6 @ 50 μA	12 @ 80	34.10
17-1508	B2-N6†‡	−2.4 to −25 @ 5 μA	−.6 @ 0.3 mA	6 @ 120	33.00
17-1510	B2-N12†‡	−2.4 to −25 @ 5 μA	−.6 @ 0.3 mA	12 @ 60	33.00
17-1509	B2-P6†§	−2.4 to −25 @ 5 μA	−.6 @ 0.3 mA	6 @ 160	34.65
17-1511	B2-P12†§	−2.4 to −25 @ 5 μA	−.6 @ 0.3 mA	12 @ 80	34.65
17-1512	C1-N6*‡	2 @ 0.3 mA	.6 @ 50 μA	6 @ 120	32.45
17-1514	C1-N12*‡	2 @ 0.3 mA	.6 @ 50 μA	12 @ 60	32.45
17-1513	C1-P6*§	2 @ 0.3 mA	.6 @ 50 μA	6 @ 160	34.10
17-1515	C1-P12*§	2 @ 0.3 mA	.6 @ 50 μA	12 @ 80	34.10
17-1516	C2-N6†‡	2.4 to 25 @ 50 μA	.6 @ 0.3 mA	6 @ 120	33.00
17-1517	C2-N12†‡	2.4 to 25 @ 5 μA	.6 @ 0.3 mA	12 @ 60	33.00
17-1518	C2-P6†§	2.4 to 25 @ 5 μA	.6 @ 0.3 mA	6 @ 160	34.65
17-1519	C2-P12†§	2.4 to 25 @ 5 μA	.6 @ 0.3 mA	12 @ 80	34.65



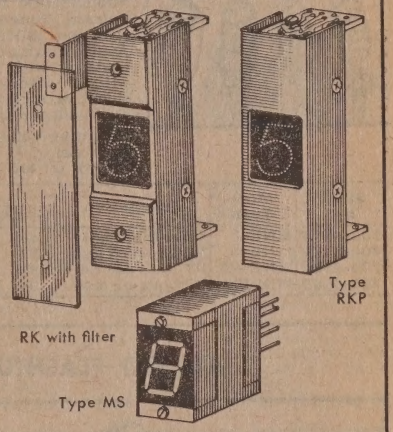
Accepts binary coded decimal input and generates corresponding decimal output, 0-9, on integral 7-bar neon display. High reliability with photoconductor matrix coupled optically to incandescent lamps controlled by input circuits. Inputs interface with IC or transistor levels of 6 and 12 V. For 115 VAC, −20° to −50° C. Characters: 1⅛x1 1/16". Size, 2¾x1¼x4". *Logic level must be supplied. †Logic level must be drained away. §With decimal point. ‡No decimal. Connections may be made directly or by Amp. #225-21031-101 sockets. 10 oz.

ALCO MINIATURE READOUT INDICATORS

RK AND RKP SERIES. In-line design provides clear, easy-to-read displays without focusing problems. Displays .55" numerals 0-9, plus decimal. Engraved non-yellowing acrylic plates form numerals through selective lighting. Precision aluminum case. 2.56x.78x.83", for installation in limited space. Uses T-1¾ bulbs. 8 oz.

MS SERIES. Displays numerals 0-9 by illuminating a combination of seven lamps through external diode matrix or encoding switch (not included). Figure size, 35/32" high. Wide (150°) viewing angle. Precision machined aluminum case, 1.73x.82x 1.69". Fits standard 10-terminal connector (order below). Shpg. wt. 8 oz.

Stock No.	Mfr's Type	Description	EACH 1-99	EACH 100-Up
700-7006	RK-6	6.3 volts; solder terminals	8.25	6.19
700-7014	RK-14	14 volts; solder terminals	8.25	6.19
700-7030	RKP-6	6.3 volts; needs PC socket (below)	8.25	6.19
700-7038	RKP-14	14 volts; needs PC socket (below)	8.25	6.19
700-7001	RK-FLV	Violet filter for RK and RKP	.40	.28
700-7003	RK-SKT	Pair of sockets for RKP	1.65	1.24
700-5040	MS-6A	6.3 volts	8.25	6.19
700-5049	MS-14A	14 volts	8.25	6.19
700C5005	MS-FLV	Violet filter for type MS	.40	.28
700C5005	MS-FLR	Red filter for type MS	.40	.28
700C5005	MS-FLG	Green filter for type MS	.40	.28
713-4809	MS-SKT	Socket for type MS	1.16	.97



RCA NUMITRON DIGITAL DISPLAYS

DR2000
0 thru 9

DR2010
0 thru 9
with
decimal
point

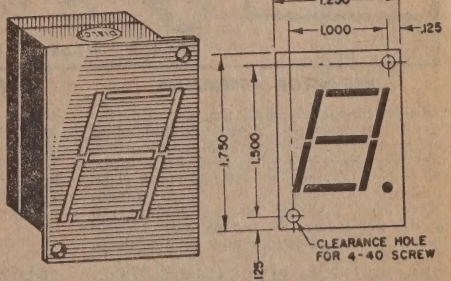
Low cost, low voltage displays offer sharp contrast and top reliability. Model DR2000 displays numbers 0-9. Model DR2010, numbers 0-9 with decimal point. Wide-spectrum light emission permits use of filters to obtain any color. Rugged, single-plane unit construction for reliable service with minimum 100,000 hours life expectancy. "Up-front" display permits wide viewing angle (140°) with display free of "clutter" and residual images. Simple voltage controls make brightness fully adjustable. Incandescent-type; free from induced or radiated interference. Mount in 9-pin miniature sockets or on PC boards. Recommended DC segment voltage: 3.5-5.0 V at 24 mA. Overall, .785" dia. x 1.875"; seated, 1.625". Wt. 2 oz.

Stock No.	Mfr's Type	EACH 1-99	EACH 100-999	EACH 1000-Up
902-0300	DR2000	5.50	4.50	2.95
902-0310	DR2010	5.75	4.75	3.05

DIALCO SERIES 710 LIGHTED NUMERIC READOUT MODULES

Provide highly legible displays of one-inch characters. Bold angular digits allow error-free reading at over 30 feet, as well as close viewing. Unlighted segments are so reduced in visibility when viewed through the proper contrast filter as to merge into the background.

Permanent mounting of either front or rear parts on a common support may be used, or the rear parts may be made movable and connected by flexible wiring. Lamp holders accept T-1¾ bulbs with midget flanged base. 8 oz.

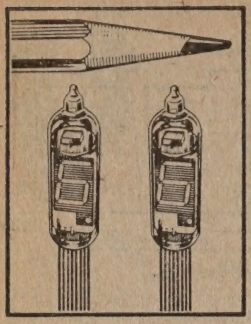


Stock No.	Mfr's Type	Description	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-Up
770-2019	710-0300-005	Basic Module	6.79	6.28	5.80	5.33
770-2020	710-0301-005	With Decimal	7.79	7.22	6.66	6.12
770-2021	710-0302-005	With Colon	7.79	7.22	6.66	6.12

ACCESSORIES

Stock No.	Mfr's Type	Description	No. of Modules	EACH 1-9	EACH 10-24	EACH 25-99	EACH 100-Up
770-2025	712-0103-001	Window	1	.53	.50	.48	.45
770-2026	712-0103-002	Window	2	.88	.83	.79	.74
770-2027	712-0103-003	Window	3	1.10	1.04	.98	.93
770-2050	713-0100-001	Mtg. bracket	1	1.33	1.26	1.19	1.12
770-2051	713-0100-002	Mtg. bracke	2	1.93	1.82	1.73	1.62
770-2052	713-0100-003	Mtg. bracket	3	2.60	2.46	2.33	2.19

ALCO Digital Readouts, Neon Lamps, Indicators



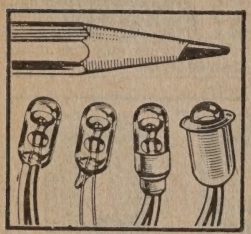
MG-19 "ELFIN" SUBMINIATURE READOUT INDICATOR

- Low Cathode Current Permits Use with Integrated Circuit Equipment
- Small Size—Only .413" Diameter
- Easy-to-Read with All Numerals on Same Plane
- Extremely Bright Appearing Numerals and Decimal

Designed for use as a numeral indicating tube in electronic desk-top calculators and various kinds of digital instruments. Cold cathode tube has nine cathode segments that form numerals 0 through 9, , - , and decimal point. Side illumination with wide-angle viewing., Red-orange color indication. Anode is in the form of mesh placed in front of the numeral. Low cathode current of 0.4 mA makes it suitable for use in calculators containing integrated circuits. Numeral height, 7/16". Tube height, 1.54" excluding leads. Base, special 11 leads. Life, 20,000-30,000 hours. Shpg. wt., 1 oz.

700-4119. 1-99 ..... Each 4.95
100-Up ..... Each 3.75

DC OPERATION	
Anode Supply Voltage	230 VD
Breakdown Voltage	180 VD
Cathode Current per Segment	500 μ
Power Consumption per Segment	0.1 wa
ABSOLUTE RATINGS—DC OPERATION	
Peak Cathode Current per Segment	4 m
Ambient Temperature	—65° C to +70°
ABSOLUTE RATINGS—PULSED OPERATION	
Peak Cathode Current per Segment	1-8 m
Average Cathode Current per Segment	.04-.6 m
Pulse Width	20-500 μse
Ambient Temperature	—66° C to +70°



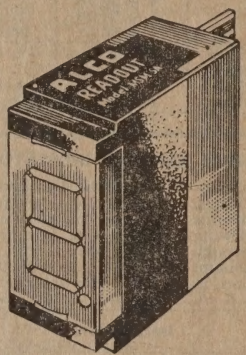
T-1¾ "BRITE-GLO" NEON LAMPS

- Unique "Crater" Electrode
- Exceptionally Bright Red Glow
- Compact Size for High Density

Subminiature neon lamps feature unusual "crater" electrode construction. Provide bright red glow. Available with choice of short bare leads, or with 10" insulated leads with or without protective metal shield or with plastic holder and speed nut for ¼" panel hole.

Operating voltage; all types without resistor, 75 VAC; requires 47K resistor for 115 VAC. ¼ oz.

Stock No.	Mfr's Type	Description	EACH			
			1-24	25-99	100-499	500-Up
700-4175	MNE-4	Short bare leads	.49	.33	.29	.24
700-4179	MNE-4L	10" insulated leads	.53	.36	.32	.27
700-4182	MNE-4SL	10" leads and shield	.59	.39	.35	.29
700-6585	PLN-100	With plastic holder	.89	.59	.54	.45



3-5 VOLT MINIATURE DIGITAL READOUT

- Displays Numerals 0-9 plus Some Alpha Indications
- Plugs Into Standard PC Socket

Versatile, compact 7 segment devic is capable of displaying numerals 0 9, some alpha indications by illu minating a combination of lamp through a matrix or decoder (no supplied). High illumination, wide angle viewing with 3-5V, high-reli ability T-1 lamps. With decima point. Current drain, 40-60 mA pe segment. Life expectancy 100,00 hrs. Plugs into standard Amphenc 64-17 printed circuit socket. 1⅛ 1⁵⁄₃₂x1¹¹⁄₃₂". *Plus, minus indicatio only. Wt., 2 oz.

Stock No.	Type	Display	1-99, EACH	100-999, EACH
700-5160	MSM-5A	Numeric	8.25	6.19
700-5165	MSM-5S	Symnol*	8.25	6.19

AMGLO FLASHTUBES AND ACCESSORIES FOR INDUSTRIAL USE

amglo

REFLECTOR ASSEMBLIES

ARA-400-SD-H-88-P4. Reflector assembly for use in stroboscopes, wheel and balancing equipment. Semi-diffused flat field surface for photographic applications. Max. input 80 joules. Operates at 350-600 volts. H-88 flashtube adjusted to 50° beam spread. Repetitive flashing: 60 per minute, 10 joules per flash; 100 per second, .1 joule per flash. Size, 4⁷⁄₃₂" diameter by 3⅞" deep. Shpg. wt. 6 oz.
729-1502. 1-9. Ea. 21.00 10-Up. Ea. 18.00

ARA-400-S-H-88-TP4. As above, with trigger coil; specular finish for applications where "hot spot" is required. Wt. 4 oz.
729-1503. 1-9. Ea. 24.00 10-Up. Ea. 21.60

ARA-400-S-H-88-P4. As above, specular finish; less trigger coil. Wt. 3 oz.
729-1504. 1-9. Ea. 21.00 10-Up. Ea. 18.00

ARA-300-SD-H-TP4. 3" diameter reflector assembly with H-88 flashtube adjusted to 50° beam spread. Trigger coil. For use in wheel balancer equipment. Max. input, 80 joules. Operates 350-600 volts. Repetitive flashing: 60 per minute, 10 joules/flash 100 per second, .1 joules/flash. 6 oz.
729-1501. 1-9. Ea. 24.00 10-Up. Ea. 21.60

IRON CORE TRANSFORMER

MT-55. Iron core trigger transformer for use with HD flashtubes. Output, 24 kV. (discharge 400 V at .5 μF); 12 kV (discharge 180 V at .2 μF). ⅞" diameter, 2" long. 4-lead output. Wt., 1½ oz.
729-1513. 1-9. Ea. 5.95 10-Up. Ea. 5.45

AIR CORE TRANSFORMER

ST-25. Air-core trigger transformer for H-88, U-35 flashtubes. Output: 7 kV (discharge 300 V at .2 μF); 4 kV (discharge 180 V at .2 μF). ½" diameter, ¾" long. ⅛ oz.
729-1514. 1-9. Ea. 2.95 10-Up. Ea. 2.65

PYREX-COVER FLASHTUBES

HD-Series Flashtubes. Ultra-high efficiency tubes in Pyrex cover. Av. wt. 6 oz.

729-1507. HD-1. Max. input, 60 joules at 450 V. 1-9. Ea. 12.00 10-Up. Ea. 10.80

729-1508. HD-2. Max. input, 120 joules at 450 V. 1-9. Ea. 15.00 10-Up. Ea. 13.50

729-1509. HD-2A. Max. input, 250 joules at 900 V. 1-9. Ea. 16.85 10-Up. Ea. 15.15

STROBOSCOPIC FLASHTUBES

U-35 Series Flashtubes. Stroboscopic tubes non-polarized connections. 300-600 VDC 20 joules/flash. Av. wt. 5 oz.

729-1516. U-35-B. With trigger band, base mount. 1-9. Ea. 9.25 10-Up. Ea. 8.3

729-1518. U-35-T. With trigger band, n base. 1-9. Ea. 8.70 10-Up. Ea. 7.8

729-1519. U-35-0. No trigger band or base 1-9. Ea. 8.15 10-Up. Ea. 7.3

729-1517. U-35-BS. Base, trigger band silver stripe to facilitate triggering. 1-9. Ea. 9.75 10-Up. Ea. 8.7

HEAVY-DUTY FLASHTUBES

H-88 Series Flashtubes. Heavy-duty signal stroboscopic, or photographic use. 8 oz

729-1511. H-88-T. With trigger band. 1-9. Ea. 10.55 10-Up. Ea. 9.5

729-1512. H-88-0. Less trigger band. 1-9. Ea. 10.00 10-Up. Ea. 9.0

729-1510. H-88-B4. 4-pin plug-in base. 1-9. Ea. 13.50 10-Up. Ea. 12.2

729-1506. CE 525-45C. 525 μF discharge capacitor. 450 V, 53 joules storage. 1-9. Ea. 14.50 10-Up. Ea. 12.45

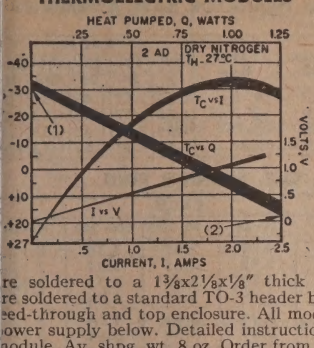
ENGINEERING MANUAL

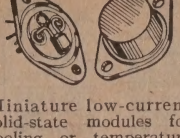
729-1500. Flashtube Engineering Manual Vol. II. Design and theory of strobe-light circuits, 20 pgs. 1½ oz. 2.00

Nuclear Systems, Inc. Thermo Devices

nsi

THERMOELECTRIC MODULES





Miniature low-current solid-state modules for cooling or temperature stabilization of infrared detectors, integrated circuits, etc. Modules either cool or heat depending on polarity of DC voltages. Basic module is supplied on bases of two different types. Type FP modules re soldered to a 1⅜x2⅛x⅛" thick copper plate. Type TO-3 re soldered to a standard TO-3 header base with a 6-pin accessory ed-through and top enclosure. All modules can be used with any ower supply below. Detailed instructions are furnished with each nodule. Av. shpg. wt. 8 oz. Order from table below.

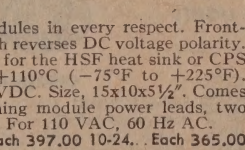
THERMOELECTRIC MODULE SPECIFICATIONS

Type No.	Amps	Volts	Max. ▲T @ Q=0	Max. Q @ ▲T=0	Module Size in Inches		
					Bottom	Top	Ht.
AB	1	1	55°C	0.7W	.19x.24	.19x.24	.18
AD	2	1	55°C	1.4W	.16x.16	.16x.16	.13
AB	5	1	55°C	3W	.35x.43	.35x.43	.18
HF	5	5	55°C	14W	.75x.75	.75x.75	.18
AB8	4	1.1	80°C	....	.35x.43	.18x.26	.35
HF2	4	3.4	80°C	....	.75x.75	.35x.43	.35
HF28	4	4	92°C	....	.75x.75	.26x.18	.54

PRICES FOR ABOVE

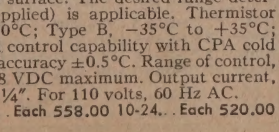
Stock No.	Mfr's Type	Description	1-9, EA.	10-24, EA.
869-6000	1AB-TO-3	TE Module	31.50	28.50
869-6001	1AB-FP	TE Module	30.00	28.00
869-6002	2AD-TO-3	TE Module	26.50	24.00
869-6003	2AD-FP	TE Module	25.00	22.50
869-6004	5AB-TO-3	TE Module	36.50	32.50
869-6005	5AB-FP	TE Module	35.00	31.50
869-6006	5AB8-TO-3	TE Module	85.00	77.00
869-6007	5AB8-FP	TE Module	82.00	74.00
869-6008	5HF-FP	TE Module	49.00	49.00
869-6009	5HF2-FP	TE Module	130.00	116.00
869-6010	5HF28-FP	TE Module	190.00	170.00

0-6 VDC MODULE POWER SUPPLY



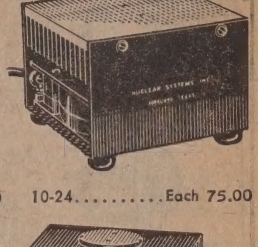
MODEL 6471. Highly stable power supply built especially for use with the above modules. Every feature of modern design has been called upon to make this a top-performing unit that will provide, under rugged conditions, a pure, well-filtered DC output compatible with the above modules in every respect. Front-panel-mounted cool-heat mode switch reverses DC voltage polarity. Has 115 VAC, 60 Hz, 20-watt outlet for the HSF heat sink or CPS cold plate. Pyrometer −60°C to +110°C (−75°F to +225°F). Output voltage is variable from 0-6 VDC. Size, 15x10x5½". Comes complete with a 7-ft. cable containing module power leads, two iron-constantan thermocouple leads. For 110 VAC, 60 Hz AC.
869U6016. Shpg. wt. 15 lbs. 1-9...Each 397.00 10-24...Each 365.00

POWER SUPPLY/TEMPERATURE CONTROLLER

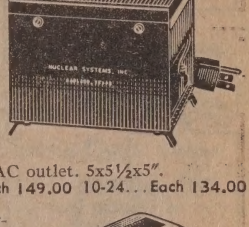


MODEL 6472. Proportional temperature controller designed especially for use with NSI thermoelectric modules. No SCR's. Adjusted by setting a precison 10-turn potentiometer dial. Sense-point temperature is determined by a thermistor mounted at or near the module control surface. A front-panel-mounted pyrometer indicates approximate control-temperature when a thermocouple (Model TC supplied) is mounted on the control surface. The desired range determines which thermistor (also supplied) is applicable. Thermistor ranges are: Type A, 0°C to +70°C; Type B, −35°C to +35°C; Type C, −60°C to 0°C. Typical control capability with CPA cold plate after calibration, set-point accuracy ±0.5°C. Range of control, 0°C to +70°C. Output voltage, 8 VDC maximum. Output current, 6 amps maximum. Size, 15x10x5¼". For 110 volts, 60 Hz AC.
869U6017. Shpg. wt. 17 lbs. 1-9...Each 558.00 10-24...Each 520.00

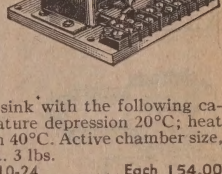
HEAT-SINK AND COLD-PLATE ASSEMBLIES



MODEL HSF. Provides room-temperature mounting surface for heat-dissipating devices such as thermoelectric modules. Two tapped holes are located on the flat surface, allowing Type FP modules to be fastened to the heat sink. Two through-holes are located in the copper plate of the Type FP modules. Can be plugged into conventional 115 VAC, 60 Hz AC outlet. Thermal resistance, 0.2°C/watt. 5x5½x4½". Shpg. wt. 5 lbs.
869-6013. 1-9.....Each 83.00 10-24.....Each 75.00



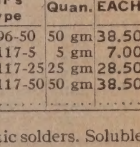
MODEL CPA. Provides adjustable cooling and heating of a 2" diameter aluminum plate. Surface temperature may be maintained at any selected value between −5°C and +80°C. Heat exchanger will maintain the module base temperature near room temperature. Unit includes a connector for convenience in making electrical connections to the thermoelectric module. Maximum input voltage, 5 volts DC at 5 amps. Can be plugged into conventional 115-VAC, 60 Hz AC outlet. 5x5½x5".
869-6012. Shpg. wt. 5 lbs. 1-9...Each 149.00 10-24...Each 134.00



MODEL TC-400. Used to cool or temperature-stabilize individual components such as transistors while eliminating convection currents. Components are mounted to a support block attached to the thermoelectric module inside the chamber. Capable of maintaining mounting plate at any selected temperature between −15°C and +80°C. Maximum input power to thermoelectric module is 5 VDC at 5 amps. May be mounted on HSF heat sink with the following capacities: heat pumped 4 watts, temperature depression 20°C; heat pumped 2 watts, temperature depression 40°C. Active chamber size, 2x1x1". Overall size, 4½x4x2". Shpg. wt. 3 lbs.
869-6011. 1-9.....Each 168.00 10-24.....Each 154.00

MODEL VH-20. (Not illus.) Round flange enclosure for housing any standard NSI thermoelectric module. Sapphire window and flange are completely removable for easy access to pin connection when mounting devices that are to be cooled. Final seal is made by soldering the flange to the base with NSI low-temperature solder (NSI-70). Eight available pin connections. Sapphire window is 1" dia. x ⅛" thick. Flange diameter, 2⅝". Overall height, 1½".
869-6040. Shpg. wt. 1 lb. 1-9...Each 280.00 10-24...Each 250.00

ACCESSORIES



NSI-BG THERMAL COMPOUND. Increases heat transfer between components and mounting surfaces. Eliminates air-gap between pressure-contacted surfaces. Thermal conductivity 4 times greater than silicon grease.
869-6023. BG-4. 4-oz. size.....4.50
869-6024. BG-12. 12-oz. size.....8.00

NSI-70, NSI-96, NSI-117 LOW-MELTING EUTECTIC SOLDERS. (Not illus.) Used where heat-sensitive components must be mechanically bonded. Bonds modules to heat exchangers or thermocouples. Melting point is indicated in degrees centrigrade in product number: 70°C, 96°C, 117°C. Shpg. wt. ½ lb.

Stock No.	Mfr's Type	Quan.	EACH	Stock No.	Mfr's Type	Quan.	EACH
869-6025	NSI-70-5	5 gm	7.00	869-6030	NSI-96-50	50 gm	38.50
869-6026	NSI-70-25	25 gm	28.50	869-6031	NSI-117-5	5 gm	7.00
869-6027	NSI-70-50	50 gm	38.50	869-6032	NSI-117-25	25 gm	28.50
869-6028	NSI-96-5	5 gm	7.00	869-6033	NSI-117-50	50 gm	38.50
869-6029	NSI-96-25	25 gm	28.50				

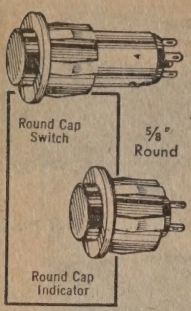
NSI-AB SOLDERING FLUX. For use with NSI eutectic solders. Soluble in water. Maximum shpg. wt. 1½ lbs.
869-6020. NSI-AB-1. 1-oz. Size.....5.70
869-6021. NSI-AB-4. 4-oz. Size.....10.00
869-6022. NSI-AB-16. 16-oz. Size.....18.00

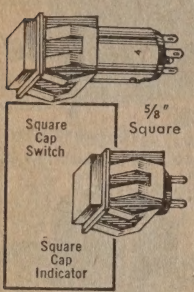
NSI-TC IRON-CONSTANTAN THERMOCOUPLE WIRE. For use with TM-100 temperature indicating meter. Length, 7 feet.
869-6034. Maximum shpg. wt. ½ lb.....7.50

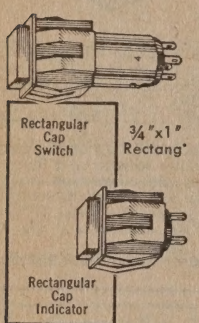
TM-100 THREE-INCH INDICATING PYROMETER. Mounted in instrument case. Temperature range, −60°C to +100°C (−75°F to +225°F).
869-6039. Shpg. wt. 1 lb.....95.00

DIALCO

Pushbutton Switches and Lights







Series 513 pushbutton switches provide low-profile snap-in mounting. Momentary action with N.C., N.O. or two-circuit (one N.C., one N.O.) types. Takes T-1-3/4 incandescent bulbs with midget flanged base, in voltages from 6-28 V. Contact rating: 3 A res. at 125 VAC or 30 VDC. Series 533 are matching indicator base assemblies. Series 300 are caps for both Series. Available in 5/8" sq. or rnd., or 3/4x1". Switch and indicator bases have black bezels. *With barrier; †without barrier. 1 oz.

SERIES 533 INDICATOR BASE ASSEMBLIES

Order cap below.

Stock No.	Type 533-	Takes Cap	EACH 1-9	10-24	25-99	100-249	25 U
770-1930	0601	5/8" Sq.	1.66	1.57	1.43	1.33	1.2
770-1940	0701	5/8" Rnd.	1.66	1.57	1.43	1.33	1.2
770-1950	0901*	3/4x1"	1.66	1.57	1.43	1.33	1.2
770-1960	1001†	3/4x1"	1.66	1.57	1.43	1.33	1.2

SERIES 513 SWITCH BASES—INCLUDES BEZEL, CLIP, SPANNER RING

Stock No.	Type 513-	Contact Arrangement	Operate Force	Bezel Accommodates:	EACH 1-9	10-24	25-99	100-249	250-U
770-1725	0106-001	SPST-NO	20 oz.	5/8" Sq. cap	7.30	3.89	3.65	3.34	3.12
770-1726	0107-001	SPST-NO	20 oz.	5/8" Rnd. Cap	7.30	3.89	3.65	3.34	3.12
770-1727	0109-001†	SPST-NO	20 oz.	3/4" x 1" Cap	7.30	3.89	3.65	3.34	3.12
770-1729	0110-001*	SPST-NO	20 oz.	3/4" x 1" Cap	7.30	3.89	3.65	3.34	3.12
770-1730	0206-001	SPST-NC	10 oz.	5/8" Sq. Cap	7.30	3.89	3.65	3.34	3.12
770-1731	0207-001	SPST-NC	10 oz.	5/8" Rnd. Cap	7.30	3.89	3.65	3.34	3.12
770-1732	0209-001†	SPST-NC	10 oz.	3/4" x 1" Cap	7.30	3.89	3.65	3.34	3.12
770-1734	0210-001*	SPST-NC	10 oz.	3/4" x 1" Cap	7.30	3.89	3.65	3.34	3.12
770-1735	0306-001	Two Circuit	15 oz.	5/8" Sq. Cap	7.95	4.22	3.96	3.63	3.39
770-1736	0307-001	Two Circuit	15 oz.	5/8" Rnd. Cap	7.95	4.22	3.96	3.63	3.39
770-1737	0309-001†	Two Circuit	15 oz.	3/4" x 1" Cap	7.95	4.22	3.96	3.63	3.39
770-1739	0310-001*	Two Circuit	15 oz.	3/4" x 1" Cap	7.95	4.22	3.96	3.63	3.39

SERIES 513 ALTERNATE ACTION SWITCHES

‡Switch Base only. Does not include bezel, clip, or spanner ring.

Stock No.	Type 513-	Contact Arrangement	Operate Force	Bezel Accommodates:	EACH 1-9	10-24	25-99	100-249	250-Up
770-1741	1406-001	SPDT	12 oz.	5/8" Sq. Cap	10.95	5.95	5.56	5.05	4.68
770-1742	1407-001	SPDT	12 oz.	5/8" Rnd. Cap	10.95	5.95	5.56	5.05	4.68
770-1743	1409-001†	SPDT	12 oz.	3/4" x 1" Cap	10.95	5.95	5.56	5.05	4.68
770-1745	1410-001*	SPDT	12 oz.	3/4" x 1" Cap	10.95	5.95	5.56	5.05	4.68
770-1746	1506-001	Two Circuit	12 oz.	5/8" Sq. Cap	10.95	5.95	5.56	5.05	4.68
770-1747	1507-001	Two Circuit	12 oz.	5/8" Rnd. Cap	10.95	5.95	5.56	5.05	4.68
770-1748	1509-001†	Two Circuit	12 oz.	3/4" x 1" Cap	10.95	5.95	5.56	5.05	4.68
770-1750	1510-001*	Two Circuit	12 oz.	3/4" x 1" Cap	10.95	5.95	5.56	5.05	4.68
770-1744	1401-604‡	SPDT	12 oz.	.....	9.75	5.29	4.94	4.49	4.16
770-1749	1501-604‡	Two Circuit	12 oz.	.....	9.75	5.29	4.94	4.49	4.16

PUSHBUTTON SWITCH CAPS FOR SERIES 513 AND 533

5/8" SQUARE

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-99	100-249	250-Up
770-1310	300-1871	Red	1.48	.86	.80	.68	.63
770-1311	300-1872	Grn	1.48	.86	.80	.68	.63
770-1312	300-1873	Amb	1.48	.86	.80	.68	.63
770-1313	300-1874	Blue	1.48	.86	.80	.68	.63
770-1314	300-1875	Wht	1.48	.86	.80	.68	.63
770-1315	300-1876	Yel	1.48	.86	.80	.68	.63

5/8" ROUND

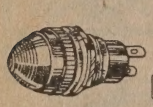
Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-99	100-249	250-Up
770-1320	301-1471	Red	1.48	.86	.80	.68	.63
770-1321	301-1472	Grn	1.48	.86	.80	.68	.63
770-1322	301-1473	Amb	1.48	.86	.80	.68	.63

5/8" ROUND (Cont'd)

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-99	100-249	250-Up
770-1323	301-1474	Blue	1.48	.86	.80	.68	.63
770-1324	301-1475	Wht	1.48	.86	.80	.68	.63
770-1325	301-1476	Yel	1.48	.86	.80	.68	.63

3/4x1" RECTANGULAR

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-99	100-249	250-Up
770-1330	303-3471	Red	1.59	.95	.88	.74	.68
770-1331	303-3472	Grn	1.59	.95	.88	.74	.68
770-1332	303-3473	Amb	1.59	.95	.88	.74	.68
770-1333	303-3474	Blue	1.59	.95	.88	.74	.68
770-1334	303-3475	Wht	1.59	.95	.88	.74	.68
770-1335	303-3476	Yel	1.59	.95	.88	.74	.68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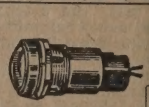
B

ONE-INCH MOUNTING CLEARANCE LIGHTS

C


D

NON-OIL-TIGHT ASSEMBLIES

A Series 32-3101. 115-volt. Black phenolic; brass. Faceted lens. Candelabra base. Less S6 lamp. Underwriter's Laboratories Component-Program Recognized.

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
770-0256	32-3101-0431-302	Red	2.64	1.51	1.39	1.26	1.13	1.03
770-0257	32-3101-0432-302	Green	2.64	1.51	1.39	1.26	1.13	1.03
770-0258	32-3101-0433-302	Amber	2.64	1.51	1.39	1.26	1.13	1.03
770-0259	32-3101-0434-302	Blue	2.64	1.51	1.39	1.26	1.13	1.03
770-0260	32-3101-0435-302	White	2.64	1.51	1.39	1.26	1.13	1.03
770-0261	32-3101-0437-302	Clear	2.64	1.51	1.39	1.26	1.13	1.03

D Series 32-2901. Enclosed lamp. Convex lens; frosted back. Solid brass. Underwriter's Laboratories Component-Program Recognized. †Translucent, unfrosted. Less S6 lamp. 6" leads. Friction-fit chromed cap.

Stock No.	Mfr's Type	Color	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
770-0250	32-2901-0111-302	Red	4.50	2.35	2.20	2.06	1.92	1.78
770-0251	32-2901-0112-302	Green	4.50	2.35	2.20	2.06	1.92	1.78
770-0252	32-2901-0113-302	Amber	4.50	2.35	2.20	2.06	1.92	1.78
770-0253	32-2901-0117-302	Clear†	4.50	2.35	2.20	2.06	1.92	1.78
770-0254	32-2901-0135-302	White	4.50	2.35	2.20	2.06	1.92	1.78

OIL-TIGHT ASSEMBLIES

B C Series 103-3101. Use S6 Candelabra screw base lamp. Glass lens gives 180° light spread. Assembly includes gasket for oil and water tight seal. 1 3/8" center-to-center spacing. †Torpedo faceted lens. ‡Frosted-back dome lens.

Lens Color	Torpedo Lens (Fig. B)† Stock No.	Mfr's Type	Dome Lens (Fig. C)‡ Stock No.	Mfr's Type
Red	770-0650	103-3101-1331-403	770-0654	103-3101-1211-403
Green	770-0651	103-3101-1332-403	770-0655	103-3101-1212-403
Amber	770-0652	103-3101-1333-403	770-0656	103-3101-1213-403
White	770-0653	103-3101-1335-403	770-0657	103-3101-1235-403

1-9 ..... Each 5.19 10-24 ... Each 2.92 25-99 .... Each 2.73
100-249 ... Each 2.37 250-499 .. Each 2.21 500-Up ... Each 2.04

B C Series 103-3502. Accepts S6 bayonet base lamp. Glass lens gives light spread of 180°. 1 3/8" center-to-center spacing. Includes gasket for water and oil tight seal.

Lens Color	Torpedo Lens (Fig. B)† Stock No.	Mfr's Type	Dome Lens (Fig. C)‡ Stock No.	Mfr's Type
Red	770-0662	103-3502-1331-403	770-0658	103-3502-1211-403
Green	770-0663	103-3502-1332-403	770-0659	103-3502-1212-403
Amber	770-0664	103-3502-1333-403	770-0660	103-3502-1213-403
White	770-0665	103-3502-1335-403	770-0661	103-3502-1235-403

1-9 ..... Each 5.70 10-24 .... Each 3.22 25-99 .... Each 3.00
100-249 ... Each 2.61 250-499 .. Each 2.43 500-Up ... Each 2.24

Lights, Switches and Accessories (Cont'd)

DIALCO

PRESS-TO-TEST INDICATOR LIGHTS

Permit pre-testing of lamps. 804-1710 and 803-1710 have 1" C. to C. spacing; mount in 5/8" diameter hole; use T-3¼ lamp. 801-1030 and 800-1030 have ¾" C. to C. spacing; mount in 15/32" hole; use T-1¾ lamp. Less lamps.

[A] SERIES 804-1710 WITH DIMMER

Stock No.	Mfr's Type	MIL No.	Lens Color
770-2180	804-1710-0337-504	MS25331-1	Clear
770-2175	804-1710-0331-504	MS25331-2	Red
770-2176	804-1710-0332-504	MS25331-3	Green
770-2177	804-1710-0333-504	MS25331-4	Amber

1-9.....Each 4.90 10-24.....Each 2.70
25-99.....Each 2.49 100-Up.....Each 2.26

[A] SERIES 803-1710 NON-DIMMER

Stock No.	Mfr's Type	MIL No.	Lens Color
770-2171	803-1710-0337-504	MS25331-5	Clear
770-2165	803-1710-0331-504	MS25331-6	Red
770-2166	803-1710-0332-504	MS25331-7	Green
770-2167	803-1710-0333-504	MS25331-8	Amber
770-2168	803-1710-0334-504	.....	Blue

1-9.....Each 4.40 10-24.....Each 2.47
25-99.....Each 2.25 100-Up.....Each 2.04

[B] SERIES 806-1710 NON-DIMMER

Stock No.	Mfr's Type	MIL No.	Lens Color
770-2189	806-1710-0437-504	.....	Clear
770-2192	806-1710-0431-504	.....	Red
770-2185	806-1710-0432-504	.....	Green
770-2186	806-1710-0433-504	.....	Amber
770-2187	806-1710-0434-504	.....	Blue

1-9.....Each 5.09 10-24.....Each 2.83
25-99.....Each 2.59 100-Up.....Each 2.35

[C] SERIES 801-1030 WITH DIMMER

770-2141	801-1030-0337-504	MS25041-1	Clear
770-2135	801-1030-0331-504	MS25041-2	Red
770-2136	801-1030-0332-504	MS25041-3	Green
770-2137	801-1030-0333-504	MS25041-4	Amber
770-2138	801-1030-0334-504	MS25041-10	Blue

1-9.....Each 4.16 10-24.....Each 2.29
25-99.....Each 2.11 100-Up.....Each 1.91

[C] SERIES 800-1030 NON-DIMMER

770-2129	800-1030-0337-504	MS25041-5	Clear
770-2125	800-1030-0331-504	MS25041-6	Red
770-2126	800-1030-0332-504	MS25041-7	Green
770-2127	800-1030-0333-504	MS25041-8	Amber
770-2128	800-1030-0334-504	MS25041-11	Blue

1-9.....Each 3.54 10-24.....Each 1.97
25-49.....Each 1.81 100-Up.....Each 1.63

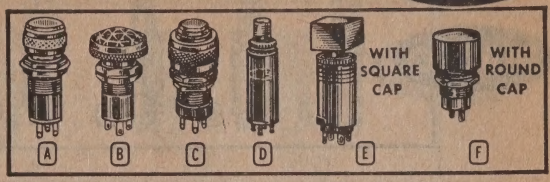
820-2701 PRESS-TO-TEST SERIES

Conform to all applicable Military specs. Press-to-test assemblies (without dimmer) mount in 1" clearance hole. Approx. 1¼x3¼". Two binding screw terminals for "normal" circuit; one for "test". Use S6 bulbs with candelabra screw base. Less lamp, order below. *Translucent unfrosted. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Lens Color	EACH
770-2210	820-2701-0111-502	Red	1-9.....11.15
770-2150	820-2701-0112-502	Green	10-24.....6.29
770-2151	820-2701-0113-502	Amber	25-99.....5.79
770-2152	820-2701-0114-502	Blue	100-249.....5.15
770-2160	820-2701-1035-502	White*	250-Up.....4.76
770-2154	820-2701-0116-502	Yellow	
770-2155	820-2701-0117-502	Clear	

LAMPS FOR ABOVE
SOLD IN BOXES OF 10

Stock No.	Mfr's Type	Volts	A	Base	Bulb	EACH LAMP
749-0013	C7A	115	.....	Mid. Flange	T-2	.70
749-0014	C9A	115	.....	S.C. Mid. Flange	T-2	.70
749-3048	327	.28	.04	Mid. Flange	T-1¾	.43
749-3091	381	6.3	.20	Mid. Flange	T-1¾	.76



PUSHBUTTON SWITCHES

[D] Incandescent Illuminated Switch. SPST—N.O., momentary contact. Gold plated contacts, 0.1 A at 125 VAC or 30 VDC, non-inductive. Uses T-1¾ lamp. Over 1 million operations. Rear mtg., 3/8" dia. hole; solder terminals. Less lamp.

Stock No.	Mfr's Type	Color	EACH
770-2352	922-1141-1631-523	Red	1-9..... 6.60
770-2353	922-1141-1632-523	Green	10-24..... 3.52
770-2354	922-1141-1633-523	Amber	25-99..... 3.27
770-2356	922-1141-1634-523	Blue	100-249.....3.03
770-2357	922-1141-1635-523	White	250-Up.....2.82
770-2358	922-1141-1637-523	Clear	

[E] [F] ½" FRICTION-FIT PUSHBUTTON/LENS CAPS

Made to fit Illuminated Pushbutton Assemblies, and matching Indicator Light Base Assemblies, described below. Solid-color translucent face and sides. Have high-strength plastic lens. Square caps are non-rotatable for secure locking.

Color	Round Rotatable		Square (Non-Rotatable)	
	Stock No.	Mfr's Type	Stock No.	Mfr's Type
Red	770-1030	183-1471	770-1045	184-1871
Green	770-1031	183-1472	770-1046	184-1872
Amber	770-1032	183-1473	770-1047	184-1873
Blue	770-1033	183-1474	770-1048	184-1874
White	770-1034	183-1475	770-1049	184-1875
Yellow	770-1035	183-1476	.....	.....
Ivory	770-1036	183-1478	.....	.....

1-9.....Each 1.01 10-24.....Each .61 25-99.....Each .56
100-249.....Each .47 250-499.....Each .43
500-999.....Each .39 1000-Up.....Each .36

[E] [F] ¾" FRICTION-FIT PUSHBUTTON/LENS CAPS

Non-rotatable pushbutton and lens cap assemblies provide secure locking of the socket terminal assembly in the mounting bushing. Designed to fit the indicator base assemblies described below. Square caps are non-rotatable for secure locking.

Color	Round (Keyed)		Square (Non-Rotatable)	
	Stock No.	Mfr's Type	Stock No.	Mfr's Type
Red	770-1120	188-1471	770-1110	187-1871
Green	770-1121	188-1472	770-1111	187-1872
Amber	770-1122	188-1473	770-1112	187-1873
Blue	770-1123	188-1474	770-1113	187-1874
White	770-1124	188-1475	770-1114	187-1875
Yellow	770-1125	188-1476	770-1115	187-1876
Ivory	770-1126	188-1478	770-1116	187-1878

1-9.....Each 1.48 10-24.....Each .86 25-49.....Each .80
100-249.....Each .68 250-499.....Each .63
500-999.....Each .58 1000-Up.....Each .53

[E] [F] ILLUMINATED PUSHBUTTON SWITCH BASE ASSEMBLY

For use with friction-fit caps above. Require ½" mtg. holes. Rear mtg. for panels to 3/16" thick. Circuits: Type 0101, single, N.O.; Type 0201, single, N.C.; Type 0301, double, one N.O., one N.C.; Type 0601, Dry-Double, one N.O., one N.C.

Stock No.	Mfr's Type	EACH				
		1-9	10-24	25-99	100-249	250-Up
770-1728	513-0101-604	6.10	3.23	3.04	2.78	2.60
770-1733	513-0201-604	6.10	3.23	3.04	2.78	2.60
770-1738	513-0301-604	6.72	3.56	3.34	3.07	2.87
770-1740	513-0601-604	7.35	3.91	3.66	3.36	3.14

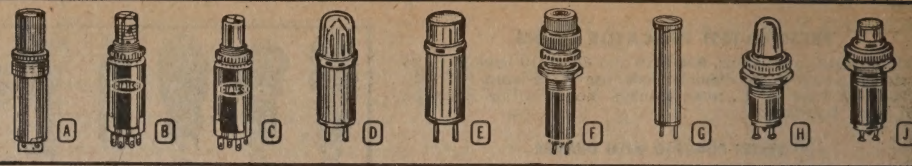
INDICATOR LIGHT BASE ASSEMBLIES

Type 183-9830-14-604 Front or Rear-Mounting Assembly. (Not illus.) For friction-fit caps, see above. Fits ½" diameter hole.
770-1038. 1-9....Ea. 1.81 10-24....Ea. 1.03 25-99....Ea. .96
100-249.....Ea. .87 250-Up.....Ea. .81

Type 183-9730-14-602 Front Mounting Assembly Only. (Not illus.) For friction-fit caps, see above. Fits 15/32" diameter hole.
770-1037. 1-9....Ea. 1.81 10-24....Ea. 1.03 25-99....Ea. .96
100-249.....Ea. .87 250-Up.....Ea. .81

Lights, Switches and Accessories

DIALCO



SERIES 928 FLASHING INDICATOR

A Unique indicator light that provides instant intermittent light flashing on connection to ordinary 110-125 VAC circuit. No thermal elements or moving contacts; uses special characteristic of neon lamp and reliable solid-state driver circuit to provide a minimum of 5000 hours operation. Rear mounts in 1/2" clearance hole in panels up to 3/16" thick. Supplied with selected 521-8018 replaceable seasoned neon lamp accommodated by shank of removable plastic lens cap.

Stock No.	Mfr's Type	Lens Color	EACH 1-9	10-24	25-99	100-249	250-Up
770-2359	928-1422-1631-638	Red	9.50	5.07	4.78	4.30	4.05
770-2360	928-1422-1633-638	Amber	9.50	5.07	4.78	4.30	4.05
770-1920	521-8018	Lamp	.91	.83	.74	.....	.....

913 SERIES ILLUMINATED PUSHBUTTON SWITCH

B C New illuminated pushbutton switch with light action and short travel. Illumination of transparent pushbutton obtained from non-replaceable high brightness C2A(NE-2H) neon lamp (110-125 VAC operation only). Integral 33k current limiting resistor. Gold plated contacts rated 0.1 amp, 125 VAC; 0.1 amp 30 VDC. Single circuit (Illus. "C" above) or two circuit (Illus. "B" above). Rear mounts in 3/8" clearance hole in panels up to 1/8" thick.

Stock No.	Mfr's Type	Lens Color	Form	EACH 1-9	10-24	25-99	100-249	250-Up
770-2340	913-1156-1631-525	Red	N.O.	5.25	2.79	2.61	2.43	2.24
770-2341	913-1156-1633-525	Amber	N.O.	5.25	2.79	2.61	2.43	2.24
770-2342	913-1156-1635-525	White	N.O.	5.25	2.79	2.61	2.43	2.24
770-2343	913-1156-1637-525	Clear	N.O.	5.25	2.79	2.61	2.43	2.24
770-2344	913-1430-1631-525	Red	N.C.	5.25	2.79	2.61	2.43	2.24
770-2345	913-1430-1633-525	Amber	N.C.	5.25	2.79	2.61	2.43	2.24
770-2346	913-1430-1635-525	White	N.C.	5.25	2.79	2.61	2.43	2.24
770-2347	913-1430-1637-525	Clear	N.C.	5.25	2.79	2.61	2.43	2.24
770-2348	913-1436-1631-525	Red	T.C.	5.65	3.00	2.80	2.61	2.41
770-2349	913-1436-1633-525	Amber	T.C.	5.65	3.00	2.80	2.61	2.41
770-2350	913-1436-1635-525	White	T.C.	5.65	3.00	2.80	2.61	2.41
770-2351	913-1436-1637-525	Clear	T.C.	5.65	3.00	2.80	2.61	2.41

6-VOLT INCANDESCENT LAMP CARTRIDGES

Series 507-3906. Unbased T-1¾ lamps in aluminum sleeves, capped with plastic lenses. Operating life: 1000 hours. Stainless steel pins, nylon insul. For 6 volts, 200 milliamperes.

D Stovepipe		E Short Cylinder		Lens Color
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1546	507-3906-0971-600	770-1545	507-3906-1471-600	Red
770-1547	507-3906-0972-600	770-1548	507-3906-1472-600	Green
.....	.....	770-1549	507-3906-1473-600	Amber
.....	.....	770-1550	507-3906-1474-600	Blue
.....	.....	770-1551	507-3906-1475-600	White

1-9.....Ea. 2.04 10-24.....Ea. 1.17
25-99.....Ea. 1.07 100-249.....Ea. .95 250-Up.....Ea. .87

6.3 VOLT LONG-LIFE LAMP CARTRIDGES

E Series 507-3907. Same as 507-3906 Series, but for 6.3-volt, .04 ampere operation. 50,000 hour life. Short-cylinder type.

Stock No.	Mfr's Type	Lens Color	EACH
770-1552	507-3907-1471-600	Red	1-9.....2.76
770-1553	507-3907-1472-600	Green	10-24.....1.58
770-1554	507-3907-1473-600	Amber	25-99.....1.45
770-1555	507-3907-1474-600	Blue	100-249.....1.29
770-1556	507-3907-1475-600	White	250-Up.....1.18

6.3-VOLT LAMP CARTRIDGES

E Series 507-3909. Same as 507-3906 Series, but for 6.3-volt, 200-mA operation. 50,000 hour life. All are short-cylinder type.

Stock No.	Mfr's Type	Lens Color	EACH
770-1557	507-3909-1471-600	Red	1-9.....2.16
770-1558	507-3909-1472-600	Green	10-24.....1.23
770-1559	507-3909-1473-600	Amber	25-99.....1.12
770-1560	507-3909-1474-600	Blue	100-149.....99
770-1561	507-3909-1475-600	White	250-Up.....92

14-VOLT LAMP CARTRIDGES

E Series 507-3914. For 14-volt, 80-mA operation. Short-cylinder type. Mount in 3/8" clearance hole. 50,000 hr. life.

Stock No.	Mfr's Type	Lens Color	EACH
770-1562	507-3914-1471-600	Red	1-9.....2.27
770-1563	507-3914-1472-600	Green	10-24.....1.30
770-1564	507-3914-1473-600	Amber	25-99.....1.19
770-1565	507-3914-1474-600	Blue	100-249.....1.06
770-1566	507-3914-1475-600	White	250-Up.....97

28-VOLT LAMP CARTRIDGES

Series 507-3917. As above, but 28-V, 40-mA. Life: 1000 hours.

D Stovepipe		E Short Cylinder		Lens Color
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1520	507-3917-0971-600	770-1567	507-3917-1471-600	Red
770-1521	507-3917-0972-600	770-1568	507-3917-1472-600	Green
770-1522	507-3917-0973-600	770-1569	507-3917-1473-600	Amber
.....	.....	770-1570	507-3917-1474-600	Blue
770-1523	507-3917-0975-600	770-1571	507-3917-1475-600	White
.....	.....	770-1572	507-3917-1476-600	Yellow

1-9.....Ea. 1.92 10-24.....Ea. 1.12
25-99.....Ea. 1.02 100-Up.....Ea. 1.91

Series 507-3918. As above, but 25,000 hour operating life.

Stovepipe		Flat Lens		Lens Color
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1577	507-3918-1471-600	770-1573	507-3918-0371-600	Red
770-1578	507-3918-1472-600	770-1574	507-3918-0372-600	Green
770-1579	507-3918-1473-600	770-1575	507-3918-0373-600	Amber
770-1580	507-3918-1475-600	770-1576	507-3918-0375-600	White

1-9.....Ea. 2.29 10-24.....Ea. 1.32
25-99.....Ea. 1.21 100-Up.....Ea. 1.07

115-125 VOLT ASSEMBLY

F Series 250-8758. Indicator light for 115-125 volts, 60 Hz. Uses cartridge below. Rear-mount holder for 3/8" clearance.

Stock No.	Mfr's Type	Lens Color	EACH
770-1260	250-8758-3331-504	Red	1-9.....3.00
770-1261	250-8758-3332-504	Green	10-24.....1.70
770-1262	250-8758-3333-504	Amber	25-99.....1.57
770-1263	250-8758-3335-504	White	100-Up.....1.41

G Lamp Cartridge 507-5824-0747-600. For the 250-8758 Series listed above.

770-1593 1-9.....Ea. 2.50 10-24.....Ea. 1.40
25-99.....Ea. 1.29 100-Up.....Ea. 1.17

REPLACEABLE NEON CARTRIDGES

Series 507-3835. Built-in NE-2E lamps. For 105-125 volts. Use external 56k resistor for bright light, 100k for medium light.

D Stovepipe		E Long Cylinder		Color Lens
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1530	507-3835-0931-600	770-1533	507-3835-1531-600	Red
770-1531	507-3835-0933-600	770-1534	507-3835-1533-600	Amber
.....	.....	770-1536	507-3835-1535-600	White
770-1532	507-3835-0937-600	770-1535	507-3835-1537-600	Clear

1-9.....Ea. 1.48 10-24.....Ea. .89
25-99.....Ea. .81 100-Up.....Ea. .69

Series 507-3836. Above, with NE-2H high-brightness lamp. Needs external 33k resistor for 110-125 V, long life; 22k for bright light.

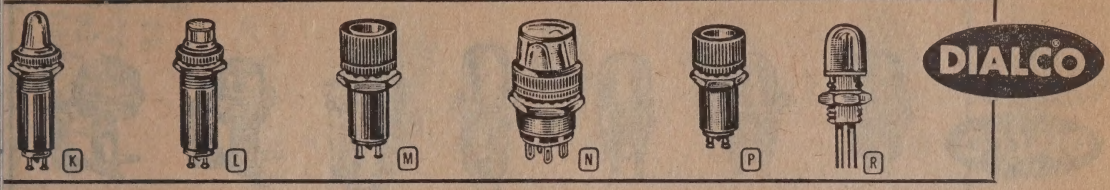
770-1537	507-3836-0931-600	770-1544	507-3836-1531-600	Red
770-1538	507-3836-0933-600	770-1541	507-3836-1533-600	Amber
770-1539	507-3836-0935-600	770-1542	507-3836-1535-600	White
770-1540	507-3836-0937-600	770-1543	507-3836-1537-600	Clear

1-9.....Ea. 1.48 10-24.....Ea. .89
25-99.....Ea. .81 100-Up.....Ea. .69

LAMPS FOR ABOVE
(SOLD IN BOXES OF 10)

Stock No.	Type	Volts	Amp	Base	Bulb	EACH LAMP
749-0013	C7A	115	.....	Mid. Flange	T-2	.70
749-0013	C9A	115	.....	S.C. Mid. Fl'ge	T-2	.70
749-3048	327	28	.04	Mid. Flange	T-1¾	.43
749-3091	381	6.3	.20	Mid. Flange	T-1¾	.76

For Additional Lamps See Other Pages



REPLACEABLE NEON CARTRIDGES (Cont'd)

eries 507-4537. Built-in A1B lamp for 105-125 volt AC/DC. uilt-in 56k resistor for bright light. Approximate operating life, 000 hours. *Illustration on facing page.*

[D] Stovepipe		[E] Long Cylinder		Lens Color
Stock No.	Mfr's Type	Stock No.	Mfr's Type	
770-1581	507-4537-0931-640	770-1584	507-4537-1531-640	Red
770-1582	507-4537-0933-640	770-1585	507-4537-1533-640	Amber
770-1583	507-4537-0937-640	770-1586	507-4537-1537-640	Clear

-9.....Each 2.11 10-24.....Each 1.20
5-99.....Each 1.11 100-Up.....Each .99

eries 507-4538. As above, but with A1C high-brightness lamp, nd 22k built-in resistor for bright light. For 105-125 volts, AC. pproximate life, 3000 hours.

770-1587	507-4538-0931-610	770-1590	507-4538-1531-610	Red
770-1588	507-4538-0933-610	770-1591	507-4538-1533-610	Amber
770-1589	507-4538-0937-610	770-1592	507-4538-1537-610	Clear

-9.....Each 2.11 10-24.....Each 1.20
5-99.....Each 1.11 100-Up.....Each .99

PERMANENT DATALITES

[H] Series 249-7840 Stovepipe. Non-replaceable A9A(NE-2E) lamps, less resistor. Fit 3/8" hole. 65 VAC or 90 VDC starting V. *Illustration on facing page.*

Stock No.	Mfr's Type	Lens Color	EACH
770-1220	249-7840-0931-504	Red	1-9.....2.22
770-1221	249-7840-0933-504	Amber	10-24.....1.30
770-1222	249-7840-0935-504	White	25-99.....1.22
770-1223	249-7840-0936-504	Yellow	100-Up.....1.03
770-1224	249-7840-0937-504	Clear	

[J] Series 249-7840. Same as Series 249-7840 above, but has cylindrical lens. *Illustration on facing page.*

770-1230	249-7840-1431-504	Red	1-9.....2.22
770-1231	249-7840-1433-504	Amber	10-24.....1.30
770-1232	249-7840-1435-504	White	25-99.....1.22
770-1233	249-7840-1436-504	Yellow	100-Up.....1.03
770-1234	249-7840-1437-504	Clear	

[K] Series 249-7841 Stovepipe. Same circuit as 249-7841 below, with 100k resistor for 105-125 V AC-DC.

770-1240	249-7841-0931-574	Red	1-9.....3.02
770-1241	249-7841-0933-574	Amber	10-24.....1.60
770-1242	249-7841-0935-574	White	25-99.....1.50
770-1243	249-7841-0936-574	Yellow	100-Up.....1.40
770-1244	249-7841-0937-574	Clear	

[L] Series 249-7841. Same circuit as 249-7841 above, but has cylindrical lens. With 100k resistor.

770-1250	249-7841-1431-574	Red	1-9.....3.02
770-1251	249-7841-1433-574	Amber	10-24.....1.60
770-1252	249-7841-1435-574	White	25-99.....1.50
770-1253	249-7841-1436-574	Yellow	100-Up.....1.40
770-1254	249-7841-1437-574	Clear	

CARTRIDGE ASSEMBLY AND HOLDERS

[P] Type 508-7538-504. Compact holder for 1 cartridge. Mounts in 3/8" clearance hole. Solder cup. Polar-terms. Less cartridge.
770-1609. 1-9.....Ea. 2.08 10-24.....Ea. 1.23
25-99.....Ea. 1.12 100-Up.....Ea. .99

LAMPS FOR ABOVE
SOLD IN BOXES OF 10

Stock No.	Type	Volts	Amp	Base	Bulb	EACH LAMP
749-0013	C7A	115	....	Mid. Flange	T-2	.07
749-0014	C9A	115	....	S.C. Mid. Flange	T-2	.07
749-3048	327	28	.04	Mid. Flange	T-1¾	.43
749-3091	381	6.3	.20	Mid. Flange	T-1¾	.76

CARTRIDGE ASSEMBLY AND HOLDERS (Cont'd)

[P] Type 508-7545-504. Same as 508-7538 below, left, but uses 4537 and 4538 cartridges.
770-1610.1-9.....Ea. 2.08 10-24.....Ea. 1.23
25-99.....Ea. 1.12 100-Up.....Ea. .99

[M] Type 508-8745-504. Same as type 508-7545 above, but with turret terminals.
770-1612. 1-9.....Ea. 2.08 10-24.....Ea. 1.23
25-99.....Ea. 1.12 100-Up.....Ea. .99

[N] Type 253-6939-1437-504. Assembly for 2 cartridges. Mount in ¾" diameter hole. Clear plastic lens, less cartridges.
770-1275. 1-9.....Ea. 6.24 10-24.....Ea. 3.41
25-99.....Ea. 3.17 100-Up.....Ea. 2.85

[M] Type 508-8738-504. Same as type 508-7538 below, left, but with turret terminals.
770-1611. 1-9.....Ea. 2.08 10-24.....Ea. 1.23
25-99.....Ea. 1.12 100-Up.....Ea. .99

CARTRIDGE CONNECTORS

[S] Series 515-0012. Molded phenolic insulation; solder cup terminals.
770-1830. 1-9.....Each .94
10-24.....Each .61
25-99.....Each .53
100-Up.....Each .46

[T] Series 515-0050. Molded phenolic with cadmium-plated copper solder lug terminals.
770-1837. 1-9.....Ea. .40 10-24.....Ea. .20
25-99.....Ea. .19 100-Up.....Ea. .18

[W] Series 515-0051. Speed Clip. Fastening device for direct mounting all Dialco plug-in cartridges.
770-1838 1-9.....Ea. .16 10-24.....Ea. .10
25-99.....Ea. .09 100-Up.....Ea. .08

INCANDESCENT INDICATOR LIGHTS (.193" Mtg.Clearance)

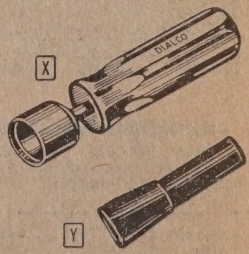
[R] Series 252. Subminiature incandescent assemblies with non-replaceable lamp enclosed in high-impact plastic housing. Entire unit less than 5/8" long, less leads. Needs only .193" panel mtg. hole for clearance. Diameter of stovepipe lens cap is 7/32"; length, 9/32". Anti-rotation construction; 6" flexible wire leads. Lamp ratings: 5.0 volts @ .06 ampere for 60,000 hours; 6.3 V @ .07 ampere for 6000 hours. †Suffix of MIL No. MS25446-.

Stock No.	Type 252--9951-	†	Lens Color	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
770-1270	0974	2	Blue	5.30	2.77	2.58	2.41	2.27	2.15
770-1268	0972	3	Green	5.30	2.77	2.58	2.41	2.27	2.15
770-1267	0971	4	Red	5.30	2.77	2.58	2.41	2.27	2.15
770-1271	0975	5	White	5.30	2.77	2.58	2.41	2.27	2.15
770-1269	0973	6	Amber	5.30	2.77	2.58	2.41	2.27	2.15
770-1266	0937	7	Clear	5.30	2.77	2.58	2.41	2.27	2.15

DIALCO WRENCHES AND PILOT BULB REMOVERS

[X] 506-0375 Wrench. For installation of series 913 switches. For 64 D.P. ST. Knurl, Class III.
770-1472.....5.28

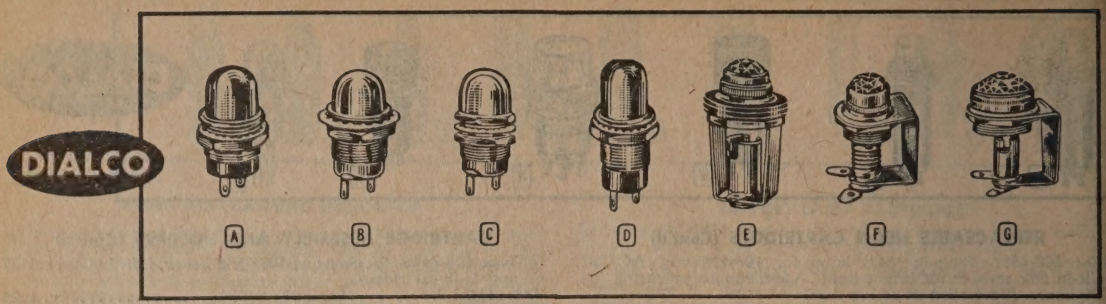
[X] 506-0500 Wrench. Mounting wrench for series 928 indicator lights and series 513 switches.
770-1473.....5.28



[Y] 506-0045 Remover. For convenient installation and removal of T-3 1/4 and S6 lamps. Made of high-grade rubber for solid grip.
770-1470.....35

[Y] 506-0073 Remover. Has two hollow ends that engage lamps tightly. One end for T-3¼ bulbs, the other for T-4½ bulbs. High-grade rubber.
770-1471.....35

Lights, Switches and Accessories (Cont'd)



15/32" MOUNTING CLEARANCE LIGHTS (Cont'd)

TWO-TERMINAL PLASTIC INCANDESCENT INDICATOR LIGHTS WITH OMNIDIRECTIONAL LENSES

[A] Series 162-8430. Front Mount. Use 327 and 328 lamps (not supplied). 180° visibility. †Suffix of MIL No. MS25256-.

TRANSPARENT LENS TYPE

Stock No.	Type 162-8430-	†	Lens Color	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
770-0910	0931-502	6	Red	2.18	1.22	1.11	1.00	.93	.86
770-0911	0932-502	4	Green	2.18	1.22	1.11	1.00	.93	.86
770-0912	0933-502	2	Amber	2.18	1.22	1.11	1.00	.93	.86
770-0914	0937-502	8	Clear	2.18	1.22	1.11	1.00	.93	.86
770-0919	0975-502	10	White	2.18	1.22	1.11	1.00	.93	.86
770-0913	0934-502	12	Blue	2.18	1.22	1.11	1.00	.93	.86

TRANSLUCENT LENS TYPE

770-0915	0971-502	...	Red	2.18	1.22	1.11	1.00	.93	.86
770-0916	0972-502	...	Green	2.18	1.22	1.11	1.00	.93	.86
770-0917	0973-502	...	Amber	2.18	1.22	1.11	1.00	.93	.86
770-0918	0974-502	...	Blue	2.18	1.22	1.11	1.00	.93	.86

[B] (E) Series 101-5030 Front Mount, 101-3830 Front or Back Mount. Front mount units need 17/32" mtg. hole; back mount, 15/32". Use T-1¾ lamp (not incl.). Has two terminals for solder connections and anti-rotation construction. With hardware. §White.

TRANSPARENT LENS

Stock No. (Front Mt.)	Mfr's Type	Stock No. (See Above)	Mfr's Type	Lens Color
770-0637	101-5030-0931-201	770-0629	101-3830-0931-201	Red
770-0638	101-5030-0932-201	770-0630	101-3830-0932-201	Green
770-0639	101-5030-0933-201	770-0631	101-3830-0933-201	Amber
770-0640	101-5030-0937-201	770-0632	101-3830-0937-201§	Clear

1-9.....Each 2.22 10-24.....Each 1.27 25-99.....Each 1.14
100-249..Each 1.03 250-499...Each .95 500-Up.....Each .87

TRANSLUCENT LENS

Stock No. (Front Mt)	Mfr's Type	Stock No. (See Above)	Mfr's Type	Lens Color
770-0633	101-5030-0971-201	770-0625	101-3830-0971-201	Red
770-0634	101-5030-0972-201	770-0626	101-3830-0972-201	Green
770-0635	101-5030-0973-201	770-0627	101-3830-0973-201	Amber
770-0636	101-5030-0975-201	770-0628	101-3830-0975-201§	Clear

1-9.....Each 2.22 10-24.....Each 1.27 25-99.....Each 1.14
100-249...Each 1.03 250-499...Each .95 500-Up....Each .87

PLASTIC NEON INDICATORS WITH OMNIDIRECTIONAL LENSES

[D] Series 137-8836. Front Mount. Full 180° visibility. Use C7A (NE-2D) neon lamp; built-in 62k resistor for 105-125 volts. Less lamp. Fits 15/32" diameter hole. †Suffix of MIL No. MS25257-.

Stock No.	Mfr's Type 137-8836-	†	Lens Color	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
770-0820	-0931-552	4	Red	3.58	2.03	1.84	1.66	1.53	1.40
770-0821	-0933-552	2	Amber	3.58	2.03	1.84	1.66	1.53	1.40
770-0822	-0937-552	6	Clear	3.58	2.03	1.84	1.66	1.53	1.40

[D] Series 137-8864.* At left below, but with 22k resistor. Uses C9A (NE-2J) neon lamp. *Use Series No. as Prefix.

Stock No.	Mfr's Type*	Lens Color	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
770-0823	-0931-512	Red	3.58	2.03	1.84	1.66	1.53	1.40
770-0824	-0933-512	Amber	3.58	2.03	1.84	1.66	1.53	1.40
770-0825	-0935-512	White	3.58	2.03	1.84	1.66	1.53	1.40
770-0826	-0937-512	Clear	3.58	2.03	1.84	1.66	1.53	1.40

[D] Series 137-8864.* As above, but with 33k resistor for 25,000 hr. life. Use with C9A (NE-2J) lamp. Less lamp.

770-0827	-0931-532	Red	3.58	2.03	1.84	1.66	1.53	1.40
770-0828	-0933-532	Amber	3.58	2.03	1.84	1.66	1.53	1.40
770-0829	-0935-532	White	3.58	2.03	1.84	1.66	1.53	1.40
770-0830	-0937-532	Clear	3.58	2.03	1.84	1.66	1.53	1.40

MINIATURE BAYONET INCANDESCENTS (1 1/16" Mounting)

[E] Series 502-8140. For use between 2 and 55 volts. Faceted ½" lens. 1 1/16" mtg. hole. Less T-3¼ lamp.

Stock No.	Mfr's Type	Lens Color
770-1451	502-8140-2131-100	Red
770-1452	502-8140-2132-100	Green
770-1453	502-8140-2133-100	Amber

1-9.....Each 1.71 10-24.....Each .89 25-99.....Each .84
100-249...Each .77 250-499.....Each .73 500-Up.....Each .68

OPEN FACETED INCANDESCENTS

[F] Series 502-8137, 8136. ½" lens. Use T-3¼ lamp. 1 1/16" mtg. hole. For use between 2 and 48 volts. Bayonet not illus.

Lens Color	Screw 8137 Stock No.	Mfr's Type	Bayonet 8136 Stock No.	Mfr's Type
Red	770-1443	502-8137-2131-102	770-1444	502-8136-2131-102
Green	770-1445	502-8137-2132-102	770-1446	502-8136-2132-102
Amber	770-1447	502-8137-2133-102	770-1448	502-8136-2133-102
Blue	.....	.....	770-1449	502-8136-2134-102
White	.....	.....	770-1450	502-8136-2135-102

1-9.....Each 1.26 10-24.....Each .66 25-99.....Each .62
100-249...Each .58 250-499.....Each .54 500-Up.....Each .51

[G] Series 502-3241, 502-3214. 1" jewel; 1" mtg. hole. Bayonet type takes T-3¼ lamp. Candelabra type uses S6 lamp; not illustrated. For use between 6 and 145 volts.

Lens Color	Bayonet 3241 Stock No.	Mfr's Type	Candel. 3214 Stock No.	Mfr's Type
Red	770-1440	502-3241-0431-302	770-1430	502-3214-0431-302
Green	770-1441	502-3241-0432-302	770-1431	502-3214-0432-302
Amber	770-1442	502-3241-0433-302	770-1432	502-3214-0433-302

1-9.....Each 2.27 10-24.....Each 1.19 25-99.....Each 1.11
100-249...Each 1.03 250-499...Each .97 500-Up...Each .89

LAMPS FOR ABOVE
SOLD IN BOXES OF 10

Stock No.	Type	Volts	Amp	Base	Bulb	EA. Lamp
749-0013	C7A	115	.....	Mid. Flange	T-2	.70
749-0014	C9A	115	.....	S.C. Mid. Flange	T-2	.70
749-3048	327	28	.04	Mid. Flange	T-1¾	.43
749-2050	44	6-8	.25	Bayonet	T-3¼	.09
749-3091	381	6.3	.20	Mid. Flange	T-1¾	.76

Cut costs by making "one order" purchases from Allied Electronics. You lower handling expense by reducing paperwork in purchasing and receiving. You also get the fastest shipment in the industry.

For Additional Lamps See Other Pages In This Section

UTILITY BOX
to build
something
small in it
6x4x3; heavy
gauge steel, holes
in front 1" dia. 1lb.
#Box K-27 $1.50

Lights, Switches and Accessories (Cont'd)

1 1/16" MOUNTING CLEARANCE LIGHTS

INCANDESCENT ASSEMBLIES

Series 81-0410*. Meets MIL-L-3661B. Enclosed, aviation-type socket shell. Convex, smooth-faced lens; frosted back. ½" black ckel-brass holder. Takes T-3¼ miniature bayonet lamp. 2¼" g. 1 1/16" clearance hole. Fits panel to ⅜". Type 0135-201 is un- sted. U.L. Component Program-Recognized. Less lamp. *Use ries Number as Prefix when ordering.

Stock No.	Mfr's Type*	Lens Color	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
0-0420	-0111-201	Red	2.41	1.28	1.21	1.13	1.03	.97
0-0421	-0112-201	Green	2.41	1.28	1.21	1.13	1.03	.97
0-0422	-0113-201	Amber	2.41	1.28	1.21	1.13	1.03	.97
0-0419	-0117-201	Clear	2.41	1.28	1.21	1.13	1.03	.97
0-0423	-0135-201	White	2.41	1.28	1.21	1.13	1.03	.97

LOW-VOLTAGE ENCLOSED SIGNAL ASSEMBLIES

Series 81-9110*. Convex lens; smooth face; frosted back. Use T-3¼ bayonet lamps. 2¼" long. 1 1/16" mtg. hole. Panels to ⅜". ss lamp. *Use Series No. as Prefix to order.

0-0438	-0111-102	Red	1.76	.96	.92	.80	.75	.70
0-0439	-0112-102	Green	1.76	.96	.92	.80	.75	.70
0-0440	-0113-102	Amber	1.76	.96	.92	.80	.75	.70
0-0441	-0114-102	Blue	1.76	.96	.92	.80	.75	.70

Series 95-9110*. For use with miniature bayonet lamps. Solder terminals. Less T-3¼ lamp. *Use Series No. as Prefix to order.

0-0549	-0931-102	Red	1.57	.86	.82	.71	.67	.63
0-0550	-0932-102	Green	1.57	.86	.82	.71	.67	.63
0-0551	-0933-102	Amber	1.57	.86	.82	.71	.67	.63
0-0552	-0935-102	White	1.57	.86	.82	.71	.67	.63

OILTIGHT SERIES ASSEMBLIES

Series 125-0408, 125-0463 Fluted Lens. Solder term. B1A (NE-51) lamp with 56k resistor; B2A (NE-51H) with 22k.

ens olor	Type B1A NE-51 Stock No.	Mfr's Type	Type B2A NE-51H Stock No.	Mfr's Type
ed	770-0723	125-0408-1191-443	770-0729	125-0463-1191-413
nber	770-0724	125-0408-1193-443	770-0730	125-0463-1193-413
ear	770-0725	125-0408-1197-443	770-0731	125-0463-1197-413

9.....Ea. 4.12 10-24.....Ea. 2.10 25-99.....Ea. 1.99
0-249....Ea. 1.85 250-499....Ea. 1.76 500-Up....Ea. 1.61

Series 95-0410, 95-1310 Incandescent. Use with miniature bayonet T-3¼ lamp. Less lamp. *Use Series No. as Prefix to order.

SERIES 95-0410 SOLDER LUGS

Stock No.	Mfr's Type*	Lens Color	EACH 1-9	10-24	25-99	100-249	250-499	500-Up
70-0529	-0931-201	Red	2.06	1.09	1.02	.93	.88	.83
70-0530	-0932-201	Green	2.06	1.09	1.02	.93	.88	.83
70-0531	-0933-201	Amber	2.06	1.09	1.02	.93	.88	.83

SERIES 95-1310 SCREW TERMINAL

70-0542	-0931-201	Red	2.22	1.18	1.10	1.00	.95	.90
70-0543	-0932-201	Green	2.22	1.18	1.10	1.00	.95	.90
70-0544	-0933-201	Amber	2.22	1.18	1.10	1.00	.95	.90

NEON INDICATORS WITH BUILT-IN RESISTORS

Series 52-0408, 52-0463. Fluted stovepipe lens. MIL-L-3661. Solder terminals. 52-0408 has 56k resistor for B1A (NE-51) lamp; 52-463 has 22k for B2A (NE-51H) high-brightness lamp.

ens olor	Type NE-51 Stock No.	Mfr's Type	Type NE-51H Stock No.	Mfr's Type
ed	770-0322	52-0408-0991-241	770-0332	52-0463-0991-211
mber	770-0323	52-0408-0993-241	770-0333	52-0463-0993-211
hite	770-0324	52-0408-0995-241	770-0334	52-0463-0995-211
lear	770-0331	52-0408-0997-241	770-0335	52-0463-0997-211

9.....Ea. 2.45 10-24.....Ea. 1.29 25-99.....Ea. 1.21
00-249....Ea. 1.11 250-499....Ea. 1.05 500-Up....Ea. .98

Series 52-1308, 52-1363. Same as left below, but screw terminals

Lens Color	Type NE-51 Stock No.	Mfr's Type	Type NE-51H Stock No.	Mfr's Type
Red	770-0343	52-1308-0991-241	770-0347	52-1363-0991-211
Amber	770-0344	52-1308-0993-241	770-0348	52-1363-0993-211
White	770-0345	52-1308-0995-241	770-0349	52-1363-0995-211
Clear	770-0346	52-1308-0997-241	770-0350	52-1363-0997-211

1-9.....Ea. 2.57 10-24.....Ea. 1.37 25-99.....Ea. 1.27
100-249....Ea. 1.16 250-499.....Ea. 1.10 500-Up....Ea. 1.04

LAMPS FOR ASSEMBLIES
SOLD IN BOXES OF 10

Stock No.	Type	Volts	Amp	Base	Bulb	Each Lamp
749-0013	C7A	115	.....	Mid. Flange	T-2	.70
749-0014	C9A	115	.....	S.C. Mid. Flange	T-2	70
749-2050	44	6-8	.25	Bayonet	T-3¼	.09
749-3048	327	28	.04	Mid. Flange	T-1¾	.43
749-3091	381	6.3	.20	Mid. Flange	T-1¾	.76

B Series 95-0408, 95-0463. For T-3¼ neon lamp. Meet MIL specs. Stovepipe lens. 110-125 V AC-DC. 2 1/16" long. U.L. Component Program-Recognized. C.S.A. Listed. Solder terminals.

Lens Color	Type B1A (NE-51) Stock No.	Mfr's Type	Type B2A (NE-51H) Stock No.	Mfr's Type
Red	770-0525	95-0408-0931-241	770-0532	95-0463-0931-211
Amber	770-0526	95-0408-0933-241	770-0533	95-0463-0933-211
White	770-0527	95-0408-0935-241	770-0534	95-0463-0935-211
Clear	770-0528	95-0408-0937-241	770-0535	95-0463-0937-211

1-9.....Ea. 2.45 10-24.....Ea. 1.29 25-99.....Ea. 1.21
100-249....Ea. 1.11 250-499....Ea. 1.05 500-Up....Ea. .98

B Series 95-9108, 95-9163. Same as above, but plastic head, phenolic body. U.L. Component Program-Recognized.

Red	770-0545	95-9108-0931-142	770-0553	95-9163-0931-112
Amber	770-0546	95-9108-0933-142	770-0554	95-9163-0933-112
White	770-0547	95-9108-0935-142	770-0555	95-9163-0935-112
Clear	770-0548	95-9108-0937-142	770-0556	95-9163-0937-112

1-9.....Ea. 1.83 10-24.....Ea. 1.02 25-99.....Ea. .95
100-249.....Ea. .83 250-499.....Ea. .78 500-Up.....Ea. .74

INCANDESCENT INDICATOR LIGHT ASSEMBLIES

Each series consists of indicator light assembly and lens. 81-1059 has convex back-frosted lens or faceted unfrosted lens. Stovepipe unit consists of assembly with 95-3171 translucent lens or 52-3191 internally fluted lens. Both series take T-2 bulb (voltage range 6-120 volts); mount in 1 1/16" hole. Less lamp.

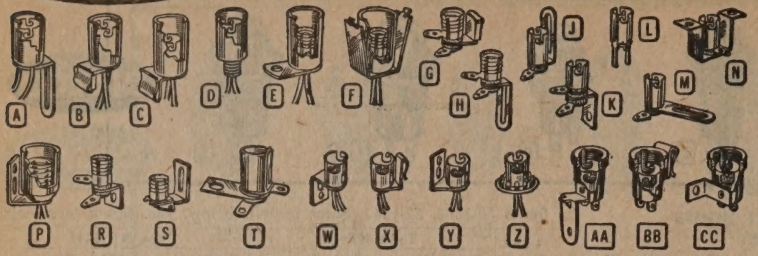
Lens Color	Stock No.	(E) Stovepipe Lens Translucent	Stock No.	(F) Stovepipe Lens Intern. Fluted
Red	770-0536	95-1059-3171-102	770-0336	52-1059-3191-102
Green	770-0537	95-1059-3172-102	770-0337	52-1059-3192-102
Amber	770-0538	95-1059-3173-102	770-0338	52-1059-3193-102
Blue	770-0539	95-1059-3174-102	770-0339	52-1059-3194-102
White	770-0540	95-1059-3175-102	770-0340	52-1059-3195-102
Yellow	770-0541	95-1059-3176-102	770-0341	52-1059-3196-102
Clear	.....	.....	770-0342	52-1059-3197-102

1-9.....Ea. 1.85 10-24.....Ea. .96 25-99.....Ea. .90
100-249.....Ea. .85 250-499.....Ea. .85 500-Up.....Ea. .74

Lens Color	Stock No.	Convex Lens Back Frosted	Stock No.	Faceted Lens Unfrosted
Red	770-0424	81-1059-0111-102	770-0431	81-1059-0431-102
Green	770-0425	81-1059-0112-102	770-0432	81-1059-0432-102
Amber	770-0426	81-1059-0113-102	770-0433	81-1059-0433-102
Blue	770-0427	81-1059-0114-102	770-0434	81-1059-0434-102
White	770-0430	81-1059-0135-102	770-0435	81-1059-0435-102
Yellow	770-0428	81-1059-0116-102	770-0436	81-1059-0436-102
Clear	770-0429	81-1059-0117-102	770-0437	81-1059-0437-102

1-9.....Ea. 1.94 10-24.....Ea. 1.02 25-99.....Ea. .97
100-249.....Ea. .90 250-499.....Ea. .83 500-Up.....Ea. .77

LEECRAFT Lampholders and Pilot Light Sockets



SERIES 200 MINIATURE BAYONET

Miniature bayonet sockets with insulating sleeves. Have .025 to .032" steel brackets; zinc-plated for corrosion resistance. Built-in 6" long #22 (7x30) wire leads *U.L. rated at 80° C., PVC insulated. Use T-3¼, G-3½ or G-4½ bulb. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Skt. Fig.	Bkt. Fig.	EACH 1-24	25-99	100-Up
844-1400	2-01	A	X	.62	.33	.28
844-1401	2-04	B	B	.62	.33	.28
844-1402	2-06	A	A	.62	.33	.28
844-1403	2-13	A	M	.62	.33	.28
844-1404	2-15	A	F	.62	.33	.28

SERIES 300 MINIATURE BAYONET

Miniature bayonet sockets in molded bakelite with wire leads. Type 3-30N complete with nut *U.L. and C.S.A. Listed. Use T-3¼, G-3½, G-4½ or NE-51 lamps. Av. shpg. wt., 1 oz.

844-2100	3-01	C	X	.67	.41	.33
844-2101	3-02	C	C	.67	.41	.33
844-2102	3-05	C	J	.67	.41	.33
844-2103	3-06	C	A	.67	.41	.33
844-2104	3-20	C	K	.67	.41	.33
844-2105	3-30N	D	D	.84	.57	.46

SERIES 400 CANDELABRA SCREW

Candelabra screw sockets in molded bakelite. #18 black and white wire leads 6" long with ends stripped ½". Type 4-40 snaps into 15/16" hole. Type 4-30N with nut. For both incandescent and neon-glow lamps. Use NE-45, S6 or 10C7 lamps. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Skt. Fig.	Bkt. Fig.	EACH 1-24	25-99	100-Up
844-2300	4-01	F	X	.67	.41	.33
844-2301	4-05	F	J	.67	.41	.33
844-2302	4-06	F	A	.67	.41	.33
844-2303	4-08	F	R	.67	.41	.33
844-2304	4-40	F	Z	.67	.41	.33
844-2305	4-30N	F	D	.84	.57	.46

SERIES 500 MINIATURE SCREW

Miniature screw sockets with solder terminals tinned for easy connection. Useful for low-voltage incandescent lamp applications. Heavily zinc-plated steel brackets resist corrosion. Use T-3¼, TL-3, or G-3½ lamps. *No bracket. Shpg. wt., 1 oz.

844-2700	5-01	G	X	.50	.29	.22
844-2701	5-04	G	B	.50	.29	.22
844-2702	5-05	G	J	.50	.29	.22
844-2703	5-06	G	A	.50	.29	.22
844-2704	5-07	G	*	.50	.29	.22
844-2705	5-08	G	R	.50	.29	.22
844-2706	5-13	G	M	.50	.29	.22

SERIES 600 CANDELABRA SCREW

Candelabra sockets with tinned solder terminals. Have .025 to .032" steel brackets; zinc-plated to fight corrosion. Use G6 or S6 lamps. *No bracket. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Skt. Fig.	Bkt. Fig.	EACH 1-24	25-99	100-Up
844-2500	6-01	H	X	.54	.29	.22
844-2501	6-04	H	B	.54	.29	.22
844-2502	6-05	H	J	.54	.29	.22
844-2503	6-06	H	H	.54	.29	.22
844-2504	6-07	H	*	.54	.29	.22
844-2505	6-08	H	R	.54	.29	.22
844-2506	6-11	H	N	.54	.29	.22
844-2507	6-13	H	M	.54	.29	.22

SERIES 700 MINIATURE BAYONET

Miniature bayonet sockets with insulated mounting brackets. Terminals are tinned for easy soldering. For low-voltage incandescent lamps as T-3¼, G-3½, and G-4½. *No bracket. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Skt. Fig.	Bkt. Fig.	EACH 1-24	25-99	100-Up
844-3100	7-01	K	X	.55	.29	.20
844-3102	7-04	K	B	.55	.29	.20
844-3103	7-05	J	J	.55	.29	.20
844-3104	7-06	K	A	.55	.29	.20
844-3105	7-07	K	*	.55	.29	.20
844-3106	7-08	K	R	.55	29	.20
844-3107	7-11	N	N	.55	.29	.20
844-3108	7-13	M	M	.55	.29	.20
844-3109	7-15	K	F	.55	.29	.20
844-3110	7-20	K	K	.55	.29	.20
844-3111	7-35	L	L	.79	.52	.40

SERIES 11-200 CANDELABRA BAYONET

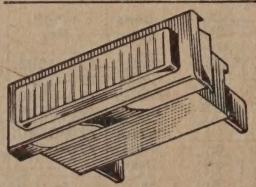
Single-contact candelabra bayonet socket. Has one 6" #18 (16x30) wire lead, with a 1/32" wall of PVC insulation *U.L. and C.S.A. rated at 80°C. Has .035 to .042" thick steel brackets, cadmium-plated to fight corrosion. For T-4½ bulb. Wt., 1 oz.

844-3300	11-271	Y	Y	.62	.41	.33
844-3301	11-272	Y	Y	.62	.41	.33

SERIES 12-200 CANDELABRA BAYONET

Double-contact candelabra bayonet sockets with wire leads. Contacts are mounted in an insulating bakelite disc and separated by small coils. Disc is spring-loaded to assure positive contact. #18-gauge (16x30) leads rated at 80° C. Rated 75 watts, 125 volts. Type 12-230BN with nut. Type 12-240 snaps into 15/16" hole. For incandescent and neon glow lamps as G6, S6, 10C7 and NE-48. *U.L. and C.S.A. Listed. Wt., 1 oz.

844-3500	12-201	X	X	.72	.47	.40
844-3501	12-212	X	E	.72	.47	.40
844-3502	12-240	Z	Z	.72	.47	.40
844-3503	12-271	Y	Y	.72	.47	.40
844-3504	12-272	Y	W	.72	.47	.40
844-3505	12-230BN	Z	D	.90	.64	.51



SERIES 31 AND 31T NEON INDICATOR LIGHTS

Rectangular shape for maximum message display in compact areas. Have white nylon housings and chrome plated bezels. Equipped with high-brightness neon lamp and plastic lens which is available in four different colors. Includes proper dropping resistor for neon lamp. Series 31 includes 18-gauge insulated plastic leads, 6" long, stripped ½". Series 31T has .250" male brass tabs. *U.L., C.S.A. Listed. 1 25/64 x 1 1/64 x 2 1/32" deep. Shpg. wt., 2 oz.

SERIES 31 NEON INDICATOR LIGHTS (6-Inch Wire Leads)

Stock No.	Mfr's Type	Lens Color	Volts	EACH 1-24	25-99	100-249	250-499
844-0200	31-2111-6	Red	110-125	1.14	.83	.51	.45
844-0201	31-2113-6	Amber	110-125	1.14	.83	.51	.45
844-0202	31-2117-6	Clear	110-125	1.14	.83	.51	.45
844-0203	31-2115-6	White	110-125	1.14	.83	.51	.45

SERIES 31T NEON INDICATOR LIGHTS (.250" Tabs)

844-0100	31-2111T	Red	110-125	1.14	.83	.51	.45
844-0101	31-2113T	Amber	110-125	1.14	.83	.51	.45
844-0102	31-2117T	Clear	110-125	1.14	.83	.51	.45
844-0103	31-2115T	White	110-125	1.14	.83	.51	.45

SERIES 1400 INTERMEDIATE SCREW

Intermediate screw sockets with wire leads For incandescent and ozone lamps, as S- or S-11 intermediate lamps. *U.L. and C.S.A. Listed. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Skt. Fig.	Bkt. Fig.	EACH 1-24	25-99	100-Up
844-3700	14-71	P	P	.72	.47	.40
844-3701	14-72	P	W	.72	.47	.40

SERIES 1600 MIDGET SCREW

Midget screw sockets with solder terminals tinned for easy connections. For P-2½ o T-1¾ lamps. Shpg. wt., 1 oz.

844-3900	16-08	R	R	.67	.37	.30

SERIES 1800 CANDELABRA SCREW

Candelabra screw base socket. For incandescent and neon-glow lamps, as S6 and NE-45. Rated 75 watts, 125 volts. Insulating sleeve for use over screw sleeve is supplied to meet *U.L. and C.S.A. requirements. *Bracket turned down. 1 oz

844-4100	18-76	S	S*	.62	.34	.28
844-4200	18-79	S	S	.62	.34	.28

SERIES 25-00 MIDGET GROOVED

Subminiature midget-grooved sockets for midget-grooved base incandescent lamps as TL-1¾ and T-1¾ lens-end amps. Have two solder terminals. Provision for rapid lamp insertion; built-in ejection feature Shpg. wt., 1 oz.

844-4300	25-08	T	R	.79	.52	.46
844-4301	25-12	T	T	.79	.52	.46
844-4302	25-05	T	J	.79	.52	.46
844-4303	25-06	T	A	.79	.52	.46

SERIES 25-200 MIDGET GROOVED

Subminiature midget-grooved sockets Same as Series 25-00 above, but have two insulated wire leads. For TL-1¾ and T-1¾ lamps. Shpg. wt., 1 oz.

844-4500	25-208	T	R	.84	.57	.51
844-4501	25-212	T	T	.84	.57	.51
844-4502	25-277R	T	N	.84	.57	.51

SERIES 25-200-1 MIDGET-GROOVED

Subminiature midget-grooved sockets Same as Series 25-00 above, but grounded types with single wire lead. Type 25-230N-1 with nut. Type 25-240-1 snaps into 15/16" hole. For TL-1¾ and T-1¾. 1 oz

844-4700	25-230N-1	D	D	1.03	.75	.63
844-4701	25-240-1	T	Z	.84	.57	.51

SERIES 57-00 CANDELABRA BAYONET

Double-contact candelabra bayonet with tabs. Rated 75 watts at 125 V. Zinc-plated steel brackets, .035-.042". For NE-48 o S6. Shpg. wt., 1 oz.

844-4900	57-24	CC	CC	.67	.41	.33
844-4901	57-41	AA	AA	.67	.41	.33
844-4902	57-45	BB	BB	.67	.41	.33

*Recognized Under the Component Program of Underwriter's Laboratories, Inc

Indicator and Pilot Lights

LEECRAFT

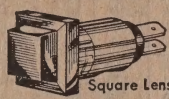
SNAPLITE NEON PILOT LIGHTS

Cylindrical Lens

Dome Lens

Available with 6" Wire Leads or 0.187" Tab Terminals

Flush Lens


Square Lens

Indicator lights with high-brightness neon lamps. Snap into ½" panel hole, no additional hardware required. Choice of four lens-cap styles. Built-in resistor, lamp replacement unnecessary during life of equipment. Insulated wire leads or 0.187" tab terminals (indicated by "T" in Type No.) ⅓-watt. Series 32 is for 110-125 volts. Series 35 (indicated by *) for 210-250 volts. U.L. Component Program-Recognized, and C.S.A. Listed. Shpg. wt., 1½ oz.

NEON LAMPS—CYLINDRICAL, DOME, FLUSH CAPS

Lens Color	Cylindrical Lens		Dome-Shape Lens		Flush Lens	
	Stock No.	Type 32-	Stock No.	Type 32-	Stock No.	Type 32-
Red	844-0300	2111	844-0308	2211	844-0316	2311
Amber	844-0301	2113	844-0309	2213	844-0317	2313
White	844-0302	2115	844-0310	2215	844-0318	2315
Clear	844-0303	2117	844-0311	2217	844-0319	2317
Red	844-0304	2111T	844-0312	2211T	844-0320	2311T
Amber	844-0305	2113T	844-0313	2213T	844-0323	2313T
White	844-0306	2115T	844-0314	2215T	844-0322	2315T
Clear	844-0307	2117T	844-0315	2217T	844-0321	2317T
Red	844-0800	2111*	844-0802	2211*	844-0804	2311*
Amber	844-0801	2113*	844-0803	2213*	844-0805	2313*

1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
.86	.69	.45	.41	.37

ABOVE TYPES WITH CHROME BEZEL

Red	844-0500	R2111	844-0504	R2211	844-0508	R2311
Amber	844-0502	R2113	844-0505	R2213	844-0509	R2313
Red	844-0501	R2111T	844-0506	R2211T	844-0510	R2311T
Amber	844-0503	R2113T	844-0507	R2213T	844-0511	R2313T

1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
.92	.75	.48	.44	.41

SQUARE LENS WITH CHROME BEZEL—110 VOLTS

Lens Color	6" Wire Leads		Tab Terminals	
	Stock No.	Mfr's Type	Stock No.	Mfr's Type
Red	844-0600	32R2911	844-0604	32R2911T
Amber	844-0601	32R2913	844-0605	32R2913T
White	844-0602	32R2915	844-0606	32R2915T
Clear	844-0603	32R2917	844-0607	32R2917T

1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
.92	.75	.48	.44	.41

INCANDESCENT PILOT LAMPS WITH CHROME BEZEL

Like Type 32R, but with incandescent lamp. 6" wire leads. 1½ oz.

Lens Cap	Lens Color	6 Volts (200 mA)		14 Volts (80 mA)		28 Volts (40 mA)	
		Stock No.	Type 32R-	Stock No.	Type 32R-	Stock No.	Type 32R-
Cyl	Red	844-0700	G1-2111	844-0724	G3-2111	844-0748	G5-2111
Cyl	Grn	844-0701	G1-2112	844-0725	G3-2112	844-0749	G5-2112
Cyl	Amb	844-0702	G1-2113	844-0726	G3-2113	844-0750	G5-2113
Cyl	Blue	844-0703	G1-2114	844-0727	G3-2114	844-0751	G5-2114
Cyl	Wht	844-0704	G1-2115	844-0728	G3-2115	844-0752	G5-2115
Cyl	Clr	844-0705	G1-2117	844-0729	G3-2117	844-0753	G5-2117
Dome	Red	844-0706	G1-2211	844-0730	G3-2211	844-0754	G5-2211
Dome	Grn	844-0707	G1-2212	844-0731	G3-2212	844-0755	G5-2212
Dome	Amb	844-0708	G1-2213	844-0732	G3-2213	844-0756	G5-2213
Dome	Blue	844-0709	G1-2214	844-0733	G3-2214	844-0757	G5-2214
Dome	Wht	844-0710	G1-2215	844-0734	G3-2215	844-0758	G5-2215
Dome	Clr	844-0711	G1-2217	844-0735	G3-2217	844-0759	G5-2217
Flush	Red	844-0712	G1-2311	844-0736	G3-2311	844-0760	G5-2311
Flush	Grn	844-0713	G1-2312	844-0737	G3-2312	844-0761	G5-2312
Flush	Amb	844-0714	G1-2313	844-0738	G3-2313	844-0762	G5-2313
Flush	Blue	844-0715	G1-2314	844-0739	G3-2314	844-0763	G5-2314
Flush	Wht	844-0716	G1-2315	844-0740	G3-2315	844-0764	G5-2315
Flush	Clr	844-0717	G1-2317	844-0741	G3-2317	844-0765	G5-2317
Sq	Red	844-0718	G1-2911	844-0742	G3-2911	844-0766	G5-2911
Sq	Grn	844-0719	G1-2912	844-0743	G3-2912	844-0767	G5-2912
Sq	Amb	844-0720	G1-2913	844-0744	G3-2913	844-0768	G5-2913
Sq	Blue	844-0721	G1-2914	844-0745	G3-2914	844-0769	G5-2914
Sq	Wht	844-0722	G1-2915	844-0746	G3-2915	844-0770	G5-2915
Sq	Clr	844-0723	G1-2917	844-0747	G3-2917	844-0771	G5-2917

Series	1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
G1	1.52	1.07	.648	.624	.603
G-3	1.46	1.11	.67	.655	.609
G-5	1.46	1.07	.643	.629	.601

"TINEON" MINIATURE NEON INDICATOR LIGHTS

Flush-Mount

Hi-Hat

High-brightness neon indicator lamps in white nylon housing. Built-in resistor to suit applied voltage. Press-fit into 5/16" hole. Choice of flush-mounting or hi-hat lens; red, amber, white or clear lens. Plastic insulated 6" leads, 18-ga., stripped ½". Speed nut for maximum security. ⅓-watt at 125 V. U.L. Component Program-Recognized, and C.S.A. Listed. Av. shpg. wt., 1 oz.

STANDARD FLUSH MOUNT

Stock No.	Mfr's Type	Color	EACH				
			1-24	25-99	100-249	250-499	500-Up
844-0400	36N2311	Red	1.01	.73	.47	.43	.39
844-0401	36N2313	Amber	1.01	.73	.47	.43	.39
844-0402	36N2315	White	1.01	.73	.47	.43	.39
844-0403	36N2317	Clear	1.01	.73	.47	.43	.39

HI-HAT WITH ALUMINUM BEZEL

844-0900	36EN2111	Red	1.19	.88	.58	.51	.43
844-0901	36EN2113	Amber	1.19	.88	.58	.51	.43
844-0902	36EN2115	White	1.19	.88	.58	.51	.43
844-0903	36EN2117	Clear	1.19	.88	.58	.51	.43

FLUSH MOUNT WITH ALUMINUM BEZEL

844-0904	36EN2311	Red	1.19	.88	.58	.51	.43
844-0905	36EN2313	Amber	1.19	.88	.58	.51	.43
844-0906	36EN2315	White	1.19	.88	.58	.51	.43
844-0907	36EN2317	Clear	1.19	.88	.58	.51	.43

"TINEON" MINIATURE INCANDESCENT INDICATOR LIGHTS WITH ALUMINUM BEZEL

Meet low-voltage characteristics in white nylon housing. Press-fit into 5/16" hole. Choice of 6, 14 or 28 V.; flush-mounting or hi-hat lens; red, green, amber, blue, white, or clear lens. Aluminum bezels. 6" insulated leads. With speed nut. Ratings: 6 V. types, 200 mA; 14 V., 80 mA; 28 V., 40 mA. U.L. Component Program-Recognized, and C.S.A. Listed. Av. shpg. wt., 1 oz.

INDICATOR LIGHTS WITH HI-HAT LENS (Prices Below)

Lens Color	6 Volts (200 mA)		14 Volts (80 mA)		28 Volts (40 mA)	
	Stock No.	Type 41EN-	Stock No.	Type 41EN-	Stock No.	Type 41EN-
Red	844-1100	G1-2111	844-1105	G3-2111	844-1111	G5-2111
Green	844-1101	G1-2112	844-1106	G3-2112	844-1112	G5-2112
Amber	844-1102	G1-2113	844-1107	G3-2113	844-1134	G5-2113
Blue	844-1136	G1-2114	844-1108	G3-2114	844-1113	G5-2114
White	844-1103	G1-2115	844-1109	G3-2115	844-1114	G5-2115
Clear	844-1104	G1-2117	844-1110	G3-2117	844-1115	G5-2117

INDICATOR LIGHTS WITH FLUSH-MOUNT LENS (Prices Below)

Red	844-1116	G1-2311	844-1122	G3-2311	844-1128	G5-2311
Green	844-1117	G1-2312	844-1123	G3-2312	844-1129	G5-2312
Amber	844-1118	G1-2313	844-1124	G3-2313	844-1130	G5-2313
Blue	844-1119	G1-2314	844-1125	G3-2314	844-1131	G5-2314
White	844-1120	G1-2315	844-1126	G3-2315	844-1132	G5-2315
Clear	844-1121	G1-2317	844-1127	G3-2317	844-1133	G5-2317

PRICES FOR INCANDESCENT INDICATOR LIGHTS ABOVE

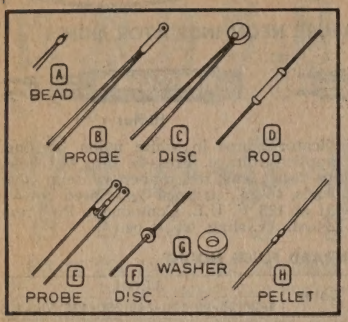
Series	1-24, EA.	25-99, EA.	100-249, EA.	250-499, EA.	500-Up, EA.
G1	1.57	1.01	.665	.629	.616
G3	1.52	1.07	.687	.659	.638
G5	1.46	1.01	.662	.635	.614

"SLIDELITE" PILOT INDICATOR/SLIDE SWITCH

Slide switch and pilot indicator light in a single white nylon housing. Saves space and cost. For panels up to .090". Snaps into 1.281x.395" hole. Neon types rated ⅓-watt. SPST switch rated 3 amps AC or 0.5 amps DC at 125 V. U.L. Component Program-Recognized, and C.S.A. Listed. Chromed bezel. 6" wire leads. *Neon. Specify red, amber or white lens; †incandescent, specify red, green, amber, blue or white lens. Shpg. wt., 6 oz.

Stock No.	Mfr's Type	Light	Volts	Amps	EACH		
					1-24	25-99	100-Up
844C1700	51	*Neon	125	.....	1.67	1.05	.90
844C1701	51G1	†Incand.	6	.20	1.78	1.15	1.05
844C1702	51G3	†Incand.	12-14	.08	1.78	1.15	1.02
844C1703	51G5	†Incand.	28	.04	1.78	1.15	.99

Fenwal Electronics Thermistors

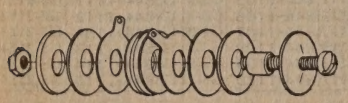


High-reliability precision thermal resistors with high negative coefficient of resistance. As temperature increases, resistance goes down. Use glass coated beads for compact size, fast response, and where temperatures go to 600°. Medium-small glass probes similar to beads, but are more rugged, mount more easily and are useful in liquid media. *Iso-Curve interchangeable glass probe thermistors are curved-matched to close resistance tolerances over large temperature spans. Discs are useful for medium power and time response applications. Rods and washers are used where high power dissipation is required. Discs, washers and rods operate at temperatures to +150° C. See Thermistor Engineering Package, below. Av. shpg. wt., 2 oz.

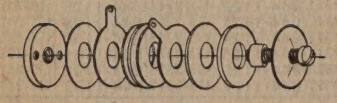
THERMISTOR ENGINEERING PACKAGE

Includes a 5x8" resistance-temperature calculator and a thermistor manual that gives the specifications of over 500 thermistors. Serves as a step-by-step primer and handy guide. Shpg. wt., 4 oz.
791-0450. . . . . 1.00

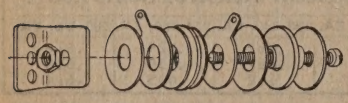
WASHER MOUNTING HARDWARE KITS



ASSEMBLY H101



ASSEMBLY H102



ASSEMBLY H103

Include bakelite, steel and lead washers plus terminals, sleeves, screws and nuts for thermistor mounting. H101 uses 10-32 screw and hex nut. H102 uses 10-32 screw and tapped aluminum mounting base with two 8-32 mtg. holes. H103 uses 10-32 screw and steel mounting bracket with 10-32 hex nut.
791-0501. Kit H101. Wt., 3 oz. 1-9 Ea. 1.25 10-24. . . . . Each 1.00 25-Up. . . . . Each .82
791-0502. Kit H102. Wt., 3 oz. 1-9 Ea. 1.25 10-24. . . . . Each 1.00 25-Up. . . . . Each .82
791-0503. Kit H103. Wt., 3 oz. 1-9 Ea. 1.25 10-24. . . . . Each 1.00 25-Up. . . . . Each .82
KIT H100. One of H101, 2 and 3 above.
791-0500. 1-9. . . . . Each 2.50
10-24. . . . . Each 2.00 25-Up. . . . . Each 1.63

GLASS COATED BEADS

Stock No.	Mfr's Type	Fig.	Ohms @ 25°C	Tol. ± %	Resis. Ratio 0°C: 50°C	Diss. Const. mW °C	Time Const. (secs)	Dia. In.	EACH 1-9	10-24	25-Up
791-0445	GD25J1	A	500	20	5.1:1	.7	2	.043	3.24	2.60	2.11
791-0424	GB31J1	A	1000	20	7.3:1	.7	2	.043	2.70	2.16	1.76
791-0427	GB32J2	A	2000	20	7.3:1	.7	2	.043	1.96	1.57	1.28
791-0435	GB35J1	A	5000	20	7.3:1	.7	2	.043	3.24	2.60	2.11
791-0436	GB41J1	A	10k	20	7.5:1	.7	2	.043	3.24	2.60	2.11
791-0401	GA42J16	A	15k	20	9.1:1	.7	2	.043	3.24	2.60	2.11
791-0403	GA45J1	A	50k	20	9.1:1	.7	2	.043	2.67	2.14	1.74
791-0408	GA51J1	A	100k	15	10.3:1	.7	2	.043	1.96	1.57	1.28
791-0414	GA52J16	A	150k	20	10.3:1	.7	2	.043	2.70	2.16	1.76
791-0412	GA52J2	A	200k	20	10.9:1	.7	2	.043	2.70	2.16	1.76
791-0418	GA55J1	A	500k	20	11.8:1	.7	2	.043	3.24	2.60	2.11
791-0421	GA61J1	A	1000k	20	14.0:1	.7	2	.043	3.78	3.03	2.46

GLASS PROBES

791-0425	GB31P2	B	1000	20	7.3:1	1	25	.1	2.00	1.60	1.30
791-0431	GB32P2	B	2000	20	7.3:1	1	25	.1	2.00	1.60	1.30
791-0432	GB32P8	B	2000	20	7.3:1	1	25	.1	2.35	1.88	1.53
791-0433	GB34P2	B	4000	20	7.3:1	1	25	.1	2.00	1.60	1.30
791-0434	GB34P92	E*	4000	2	7.04:1	1.9	25	.180	40.00	32.00	26.00
791-0437	GB41P2	B	10k	20	7.5:1	1	25	.1	2.40	1.92	1.56
791-0441	GB42P2	B	20k	20	7.5:1	1	25	.1	2.40	1.92	1.56
791-0400	GA41P8	B	10k	20	9.1:1	1	25	.1	3.24	2.60	2.11
791-0402	GA42P18	B	15k	20	9.1:1	1	25	.1	3.29	2.64	2.14
791-0404	GA45P2	B	50k	20	9.1:1	1	25	.1	2.20	1.76	1.43
791-0405	GA45P48	B	50k	20	9.1:1	1	25	.1	2.59	2.08	1.69
791-0410	GA51P8	B	100k	15	10.3:1	1	25	.1	2.35	1.88	1.53
791-0417	GA52P48	B	150k	20	10.3:1	1	25	.1	2.60	2.08	1.69
791-0415	GA52P2	B	200k	20	10.9:1	1	25	.1	2.00	1.60	1.30
791-0419	GA55P2	B	500k	20	11.8:1	1	25	.1	2.40	1.92	1.56
791-0420	GA55P8	B	500k	20	11.8:1	1	25	.1	2.82	2.26	1.84
791-0422	GA61P2	B	1000k	20	14.0:1	1	25	.1	2.80	2.24	1.82
791-0423	GA61P8	B	1000k	20	14.1:1	1	25	.1	3.29	2.64	2.14

GLASS DIODE CLOSURES (PELLETS)

791-1103	PB32D1	H	2k	10	6.9:1	2	8	.07	1.80	1.44	1.17
791-1104	PB35D1	H	5k	10	6.9:1	2	8	.07	1.80	1.44	1.17
791-1100	PB41D1	H	10k	10	6.9:1	2	8	.07	1.80	1.44	1.17
791-1101	PA45D1	H	50k	10	9.1:1	2	8	.07	1.80	1.44	1.17
791-1102	PA51D1	H	100k	10	9.1:1	2	8	.07	1.80	1.44	1.17
791-1105	PP55D1	H	500k	10	11.6:1	2	8	.07	1.80	1.44	1.17
791-1106	PP61D1	H	1 meg	10	11.6:1	2	8	.07	1.80	1.44	1.17

DISCS

791-0302	FB31J1	C	1k	10	6.9:1	2	3	.05	1.45	1.16	.95
791-0303	FB32J1	C	2k	10	6.9:1	2	4	.05	1.45	1.16	.95
791-0300	FA41J1	C	10k	10	9.1:1	2	3.5	.05	1.45	1.16	.95
791-0301	FA42J1	C	20k	10	9.1:1	2	4.5	.05	1.45	1.16	.95
791-0304	FP52J1	C	200k	10	11.6:1	2	4.5	.05	1.45	1.16	.95
791-0606	JD12J4	C	15	10	4.8:1	3	10	.1	1.00	.80	.65
791-0607	JD21J1	C	100	10	4.8:1	4	10	.1	1.00	.80	.65
791-0604	JB25J1	C	500	10	6.9:1	3	10	.1	1.00	.80	.65
791-0605	JB31J1	C	1000	10	6.9:1	4	10	.1	1.00	.80	.65
791-0600	JA33J1	C	3000	10	9.1:1	3	10	.1	1.00	.80	.65
791-0601	JA35J1	C	5000	10	9.1:1	4	10	.1	1.00	.80	.65
791-0602	JA38J1	C	8000	10	9.1:1	4	10	.1	1.00	.80	.65
791-0603	JA41J1	C	10k	10	9.1:1	4	10	.1	1.00	.80	.65
791-0608	JP43J2	C	25k	10	11.6:1	3	10	.1	1.00	.80	.65
791-0609	JP45J2	C	50k	10	11.6:1	4	8	.1	1.00	.80	.65
791-0610	JP51J1	C	100k	10	11.6:1	4	15	.1	1.00	.80	.65
791-0707	KD05J1	C	5	10	4.8:1	4	16	.2	.85	.68	.56
791-0708	KD11J1	C	10	10	4.8:1	4	16	.2	.85	.68	.56
791-0709	KD13J3	C	30	10	4.8:1	8	28	.2	.85	.68	.56
791-0710	KD14J1	C	40	10	4.8:1	6	50	.2	.85	.68	.56
791-0703	KB21J1	C	100	10	6.9:1	4	16	.2	.85	.68	.56
791-0704	KB22J1	C	200	10	6.9:1	5	18	.2	.85	.68	.56
791-0705	KB23J1	C	300	10	6.9:1	6	20	.2	.85	.68	.56
791-0706	KB25J1	C	500	10	6.9:1	6	25	.2	.85	.68	.56
791-0700	KA31L1	F	1000	10	9.1:1	6	20	.2	.85	.68	.56
791-0701	KA33J1	C	3000	10	9.1:1	6	22	.2	.85	.68	.56
791-0702	KA35J3	C	5000	10	9.1:1	7	35	.2	.85	.68	.56
791-0712	KP41J2	C	10k	10	11.6:1	4	20	.2	.85	.68	.56
791-0713	KP45J1	C	50k	10	11.6:1	6	50	.2	.85	.68	.56
791-0102	CB13J2	C	30	10	6.9:1	8	28	.3	.85	.68	.56
791-0103	CB21J1	C	100	10	6.9:1	8.5	42	.3	.85	.68	.56
791-0104	CB23J1	C	300	10	6.9:1	9	70	.3	.85	.68	.56
791-0100	CA31J1	C	1000	10	9.1:1	8	48	.3	.85	.68	.56
791-0101	CA33J1	C	3000	10	9.1:1	9	85	.3	.85	.68	.56
791-0808	LD01J1	C	1	10	4.8:1	8	40	.4	.85	.68	.56
791-0809	LD03J5	C	2.5	10	4.8:1	14	25	.4	.85	.68	.56
791-0810	LD11J1	C	10	10	4.8:1	10	150	.4	.85	.68	.56
791-0803	LB12J2	C	18.6	10	6.9:1	6	26	.4	.97	.78	.64
791-0804	LB15J1	C	50	10	6.9:1	7	40	.4	.85	.68	.56
791-0805	LB21J1	C	100	10	6.9:1	8	65	.4	.85	.68	.56
791-0806	LB22J5	C	200	10	6.9:1	11	110	.4	.85	.68	.56

Fenwal Electronics Thermistors

DISCS (Cont'd)

Stock No.	Mfr's Type	Fig.	Ohms at 25°C	Tol. ±%	Resis. Ratio 0°C to 50°C	Diss. Const. mW °C	Time Const. (secs)	Dia. In.	EACH 1-9	EACH 10-24	EACH 25-Up
791-0800	LA23J2	C	250	10	9.1:1	6	40	.4	.85	.68	.56
791-0801	LA25L2	C	500	10	9.1:1	8	60	.4	.85	.68	.56
791-0802	LA31J1	C	1000	10	9.1:1	10	70	.4	.85	.68	.56
791-0811	LP32J2	C	2000	10	11.6:1	8	40	.4	.85	.68	.56
791-0812	LP33J1	C	2500	10	11.6:1	14	35	.4	.85	.68	.56
791-0813	LP42J2	C	15k	10	11.6:1	10	150	.4	.85	.68	.56
791-0204	DD05J1	C	5	10	4.8:1	15.5	70	.5	.85	.68	.56
791-0205	DB11J1	C	10	10	6.9:1	17.5	120	.5	.85	.68	.56
791-0201	DB15J1	C	50	10	6.9:1	15.5	70	.5	.85	.68	.56
791-0202	DB21J1	C	100	10	6.9:1	17.5	120	.5	.85	.68	.56
791-0200	DA25J3	C	500	10	9.1:1	16.5	90	.5	.85	.68	.56
791-0206	DP35J1	C	5k	10	11.6:1	16.5	90	.5	.85	.68	.56
791-0901	MB13J1	C	25	10	6.9:1	25	85	.6	.85	.68	.56
791-0203	ND01J1	C	1	10	4.8:1	15	50	.77	.85	.68	.56
791-1002	NB11J1	C	10	10	6.9:1	20	90	.77	.85	.68	.56
791-1000	NA21J1	C	100	10	9.1:1	16	100	.77	.85	.68	.56
791-1001	NA22J1	C	250	10	9.1:1	30	140	.77	.85	.68	.56
791-1004	NP31J2	C	1000	10	11.6:1	15	180	.77	.85	.68	.56
791-1005	NP34J1	C	4000	10	11.6:1	20	300	.77	.85	.68	.56
791-1701	ZB11J1	C	10	10	6.9:1	30	140	1.0	1.25	1.00	.82
791-1700	ZA22J3	C	250	10	9.1:1	37	260	1.0	1.25	1.00	.82

RODS

Stock No.	Mfr's Type	Fig.	Ohms at 25°C	Tol. ±%	Resis. Ratio 0°C to 50°C	Diss. Const. mW °C	Time Const. (secs)	Dia. In.	EACH 1-9	EACH 10-24	EACH 25-Up
791-1201	QB41J1	D	10k	10	7.1:1	2.5	20	.053	1.25	1.00	.82
791-1200	QA51J1	D	100k	10	9.1:1	2.5	20	.053	1.25	1.00	.82
791-1305	RB34J1	D	4300	10	6.9:1	6	50	.11	1.20	.96	.78
791-1306	RB41J1	D	10k	5	7.1:1	8	90	.11	1.20	.96	.78
791-1307	RA41L1	D	10k	10	9.1:1	6	90	.112	1.20	.96	.78
791-1301	RA43L1	D	31.5k	10	9.1:1	4	70	.11	1.20	.96	.78
791-1302	RA51J1	D	100k	10	9.1:1	10	70	.11	1.20	.96	.78
791-1403	TB35J1	D	5k	10	6.9:1	15	120	.173	1.35	1.08	.88
791-1300	RA42J1	D	20k	10	9.1:1	13	80	.173	1.20	.96	.78
791-1400	TA45J1	D	50k	10	9.1:1	18	120	.173	1.60	1.28	1.04

WASHERS

791-1603	WB11W1	G	10	10	6.9:1	860	12	.77	1.25	1.00	.82
791-1604	WB13W1	....	31.5	10	6.9:1	500	16	.77	1.25	1.00	.82
791-1605	WB14W3	....	36.5	10	6.9:1	500	16	.77	1.25	1.00	.82
791-1600	WA21W1	....	100	10	6.9:1	800	13	.77	1.25	1.00	.82
791-1601	WB23W1	G	315	10	9.1:1	350	18	.77	1.25	1.00	.82
791-1602	WA24W1	....	415	10	9.1:1	300	18	.77	1.25	1.00	.82

ISO-CURVE GLASS COATED INTERCHANGEABLE THERMISTORS

Iso-Curve interchangeable glass coated thermistors are curved-matched to close resistance tolerance over large temperature spans. Resistance tolerance over temperature range, ±2 percent. See table, below, for specific temperature ranges. Bead style, .1 inch diameter with ⅜ inch leads. Miniprobe style, .12" x ½ inch with 1⅜ inch leads. Standard Probe style, .18" x ½ inch with 2-inch leads. Average shpg. wt., 3 oz.

Stock No.	Mfr's Type	Style	Ohms at 25°C	Temp. Range °F	Diss. Const. mW/°C	Time Const. (secs)	EACH 1-9	EACH 10-24	EACH 25-Up
791-0442	GD24JM1	Bead	370	−50 to +150	0.8	2	30.00	24.00	19.50
791-0426	GB32JM1	Bead	2000	0 to +250	0.8	2	30.00	24.00	19.50
791-0438	GB42JM1	Bead	15k	+50 to +450	0.8	2	30.00	24.00	19.50
791-0406	GA51JM1	Bead	100k	+150 to +600	0.8	2	30.00	24.00	19.50
791-0443	GD24MM2	Miniprobe	370	−50 to +150	1.4	16	30.00	24.00	19.50
791-0428	GB32MM2	Miniprobe	2000	0 to +250	1.4	16	30.00	24.00	19.50
791-0439	GB42MM2	Miniprobe	15k	+50 to +450	1.4	16	30.00	24.00	19.50
791-0407	GA51MM2	Miniprobe	100k	+150 to +600	1.4	16	30.00	24.00	19.50
791-0444	GD24PM2	Std. Probe	370	−50 to +150	1.9	25	30.00	24.00	19.50
791-0430	GB32PM2	Std. Probe	2000	0 to +250	1.9	25	30.00	24.00	19.50
791-0440	GB42PM2	Std. Probe	15k	+50 to +450	1.9	25	30.00	24.00	19.50
791-0409	GA51PM2	Std. Probe	100k	+150 to +600	1.9	25	30.00	24.00	19.50

UNI-CURVE RT CURVE-MATCHED INTERCHANGEABLE THERMISTORS

Uni-curve thermistors completely interchangeable electrically. For temperature control and compensation. Resistance tolerance over temperature range, ±2%. 2 oz.

Stock No.	Mfr's	Ohms at 25°C	Temp. Range °F	Diss. Const. mW/°C	Time Const. (secs)	Lead Lgth. In.	Dia. Dia. In.	EACH 1-9	EACH 10-24	EACH 25-Up
791-1500	UUA33J1	3k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1501	UUA35J1	5k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1502	UUA41J1	10k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1503	UUT43J1	30k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1504	UUT45J1	50k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09
791-1505	UUT51J1	100k	0°C to 70°C	2	10	3	.095	4.50	3.80	3.09

THERMISTOR ASSEMBLIES

Matched thermistor assemblies designed for use in gas chromatographic equipment and other thermal conductivity gas analysis instruments. Each bead is mounted in a special hermetically-sealed stem. For maximum sensitivity, the higher resistance units should be used at higher ambient temperatures. 8 oz.

TYPE G126. Ro at 25°C, 2000 ohms ±25%; Ro at 0° C (approx.), 4900 ohms; Ro at 50°C (approx.), 890 ohms; ratio of Ro 0°/50°C, 4.95-6.95; Ro at max. op. temp., 88 ohms; pair matched Ro at 25°C, 5%. Beta nom. at 25°C, 3000°K. Temp. coef. at 25°C, −3.4%/°C. TC, still air, 1 s. DC, still air, 0.16 mW/°C; DC helium, 0.5 mW/°C. Pwr. rating, air, 15 mW; pwr. rating, helium, 60 mW.

TYPE G112. Ro at 25°C, 8000 ohms ±20%. Ro at 0°C (approx.), 23,200 ohms; Ro at 50°C (approx.), 3,200 ohms; ratio of Ro 0°/50°C, 6.56-7.99; Ro at max. op. temp., 25 ohms; pair matched Ro at 25°C, 2%. Beta nom. at 25°C, 3495°K. Temp. coef. at 25°C, −3.9%/°C. TC, still air, 1 s. DC, still air, 0.16 mW/°C; DC, helium, 0.5 mW/°C. Pwr. rating air, 45 mW; pwr. rating, helium, 140 mw.

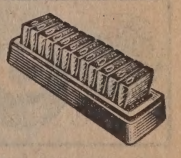
TYPE G128. Ro at 25°C, 100,000 ohms ±20%; Ro at 0°C (approx.), 355,000 ohms; Ro at 50°C (approx.), 34,000 ohms; ratio of Ro 0°/50°C, 9.45-11.20; Ro at max. op. temp., 110 ohms; pair matched Ro at 25°C, 5%. Beta nom. at 25°C, 4115°K. Temp. coef. at 25°C, −4.6%/°C. TC, still air, 1 s. DC, still air, 0.16 mW/°C; DC, helium, 0.5 mW/°C. Pwr. rating, air, 45 mW; pwr. rating, helium, 140 mW.

Stock No.	Mfr's Type	Description	EACH 1-9	EACH 10-Up
791-0447	G126	2-GC32L3	14.42	11.54
791-0446	G112	2-GC38L1	26.00	20.80
791-0448	G128	2-GA51L2	33.00	26.40

EXPERIMENTER'S THERMISTOR PROBE

Thermistor mounted on card, with instructions and schematic for use as a remote temperature indicator, liquid level-control, or time-delay relay. Rated 135k at 25°C; 1 mW/°C diss. constant, 25 s; still-air time constant 0.3s in rapidly stirred water.
791-0714. Shpg. wt., 2 oz. 1.00

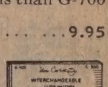
EXPERIMENTER'S THERMISTOR KITS



MODEL G-200 STANDARD KIT. 12 different thermistors (2 glass probes, 3 beads, 2 discs, 3 rods, 2 washers). Each thermistor is packed with specification sheets showing characteristics.
791-0449. Shpg. wt., 1 lb. 19.95

MODEL G-700 LOW-COST KIT. Includes four glass beads and probes, manual, and computer for a variety of applications. Shpg. wt. 1 lb.
791-0452. ..... 4.95

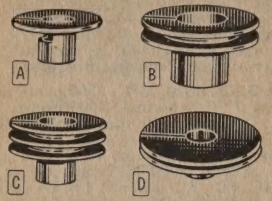
MODEL G-701 ECONOMY KIT. 10 glass beads and probes, manual, and computer for a wider range of applications than G-700 kit above. Shpg. wt., 1 lb.
791-0453. ..... 9.95



MODEL G-500 UNI-CURVE KIT. Contains 6 standard RT curve-matched interchangeable thermistors (3k, 5k, 10k, 30k, 50k, 100k). Includes complete data sheets with full specifications and DC, TC listings. Shpg. wt., 1 lb.
791-0451. ..... 19.95

Thermalloy Circuit Board Coolers

- Raised Cooling Fins Take Up No Additional Board Space
- Easy Press-On Installation

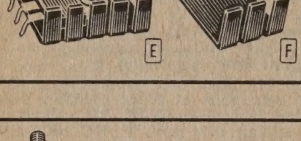


SERIES 2224 LOW-COST PRESS-ON HEAT SINKS

Easily installed heat sinks that don't waste precious space on printed circuit boards; cir cular convection-cooling flanges extend from top of heat sink. Economical and versatil enough for almost all PC applications. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	Fits Case Style	TR °C/w	Size in Inches			EACH		
					L	W	H	1-99	100-499	500-Up
957-2090	2224B	A	TO-18	75	.50	.50	.235	.24	.17	.14
957-2100	2224C	A	TO-18	75	.50	.50	.235	.21	.15	.12
957-2110	2225B	B	TO-5	52	.75	.75	.40	.25	.18	.15
957-2120	2225C	B	TO-5	52	.75	.75	.40	.23	.16	.13
957-2130	2226B	A	TO-5	58	.75	.75	.22	.24	.17	.14
957-2140	2226C	A	TO-5	58	.75	.75	.22	.21	.15	.12
957-2150	2227B	D	TO-5	27	1.125	1.125	.40	.31	.23	.20
957-2160	2227C	D	TO-5	27	1.125	1.125	.40	.29	.21	.18
957-2170	2228B	C	TO-5	34	.875	.875	.53	.31	.23	.20
957-2180	2228C	C	TO-5	34	.875	.875	.53	.29	.21	.18

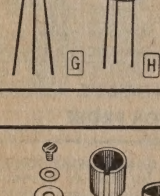
- Ideal For Flat Power Devices
- Dissipate Up to 8 Watts



SERIES 6106 AND 6107 COOLERS FOR FLAT POWER DEVICES

For flat plastic power transistors, silicon-controlled rectifiers, Triacs and Quadracs. Blank except ‡2-hole and †1-hole. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	TR °C/w	Size in Inches			EACH			
				L	W	H	1-49	50-99	100-249	250-Up
957-2730	6106B	E	20	1.18	1.00	.50	.23	.21	.16	.15
957-2740	6106C	E	20	1.18	1.00	.50	.19	.17	.12	.11
957-2750	6106C-13	E‡	20	1.18	1.00	.50	.19	.17	.12	.11
957-2760	6107B	F	26	.71	1.00	.50	.19	.17	.13	.12
957-2280	6107C	F	26	.71	1.00	.50	.16	.12	.10	.09
957-2770	6107B-14	F†	26	.71	1.00	.50	.19	.17	.14	.13
957-2790	6107C-14	F†	26	.71	1.00	.50	.16	.12	.10	.09

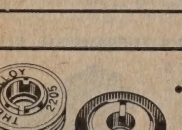


- High Efficiency Conduction Heat Sinks
- A Convenient Mounting Holder

SERIES 1101 AND 1103 CONDUCTION COOLERS

Heat is removed by being transferred to external surfaces. Fit case style TO-5. 1101 has 10-32 stud; 1103 tapped for 4-40 screw. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	TR °C/w	Size in Inches			EACH			
				L	W	H	1-11	12-99	100-499	500-Up
957-1700	1101A	G	10	.50	.50	.88	1.05	.85	.65	.55
957-1710	1101B	G	10	.50	.50	.88	.95	.75	.55	.50
957-1720	1103A	H	10	.50	.50	.50	1.00	.80	.60	.50
957-1730	1103B	H	10	.50	.50	.50	.90	.70	.50	.40

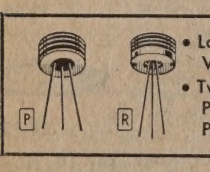


- Tapped For Circuit Board Mounting

SERIES 1115 COMBINATION RETAINERS/HEAT SINKS

1116 is tapped for a 4-40 screw. 1117 consists of a 1116 retainer with pan head steel screw nylon shoulder washer and B & O insulating washer. All fit case TO-5. Average wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	TR °C/w	Size in Inches			EACH			
				L	W	H	1-11	12-99	100-499	500-Up
957-1740	1115B	K	68	.38	.38	.40	.23	.13	.11	.10
957-1750	1116A	L	22	.38	.38	.38	.63	.50	.45	.40
957-1760	1116B	L	22	.38	.38	.38	.50	.40	.35	.30
957-1770	1117B	J	22	.46	.38	.46	1.33	1.08	.86	.76



- Highly Effective Cooling Action
- Positive Lead Insulation

SERIES 2205 HIGH-PERFORMANCE CONVECTION COOLERS

Two-piece heat sinks with screw-in teflon inserts hold transistor weld flange tightly t provide maximum conduction path. Average shpg. wt. 1 oz.

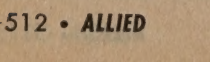
Stock No.	Mfr's Type*	Fig.	Fits Case Style	TR °C/w	Size in Inches			EACH			
					L	W	H	1-11	12-99	100-499	500-Up
957-2000	2205B	M	TO-5	25	.81	.81	.34	1.25	1.00	.80	.70
957-2010	2207/PR11	M	TO-5	20	.81	.81	.34	1.55	1.25	1.05	.95
957-2020	2207/PR11A	M	TO-5	20	.81	.81	.34	1.60	1.30	1.10	1.00
957-2050	2212B	M	TO-8	17	1.06	1.06	.38	1.95	1.55	1.25	1.05
957-2060	2212B-5	N	TO-5	17	1.06	1.06	.38	1.85	1.45	1.15	.95

- Low Cost, High Versatility
- Two-Hole Mount Provides Shock Protection

SERIES 2211 CONVECTION COOLERS

Highly versatile circuit board heat sinks with single thru hole and two mounting hole tapped for 2-56 screws. Fit case TO-5. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	TR °C/w	Size in Inches			EACH			
				L	W	H	1-11	12-99	100-499	500-Up
957-2040	2211B	P	38	.63	.63	.31	.35	.28	.26	.23
957-2030	2211C	P	38	.63	.63	.31	.25	.20	.18	.16
957-2070	2215A	R	25	.75	.75	.38	1.25	1.00	.85	.70
957-2008	2215B	R	25	.75	.75	.38	1.20	.95	.75	.60



- Unique screw boss for mounting ease
- Anodized finish provides electrical insulation

SERIES 2230-5 AND 3005 HEAT SINKS

2230-5 is an aluminum, press-on heat sink. 3005 and 3018 are duosinks to maintain equa case temperatures with electrical insulation. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type*	Fig.	Fits Case Style	TR °C/w	Size in Inches			EACH			
					L	W	H	1-11	12-99	100-499	500-Up
957-2190	2230B-5	S	TO-5	55	.75	.75	.25	.27	.17	.15	.13
957-2200	2230C-5	S	TO-5	55	.75	.75	.25	.22	.12	.10	.08
957-2210	3005A	T	TO-5	30	1.25	.50	.38	2.00	1.60	1.30	1.10
957-2220	3018A	T	TO-18	45	1.00	.50	.31	1.95	1.55	1.25	1.05

*NOTE: Finish denoted by suffix letter: A, hard anodize per MIL-F-14072, 400 volts insula tion; B, black anodize per MIL-A-8625 Type II; C, gold chromate finish per MIL-C-5541

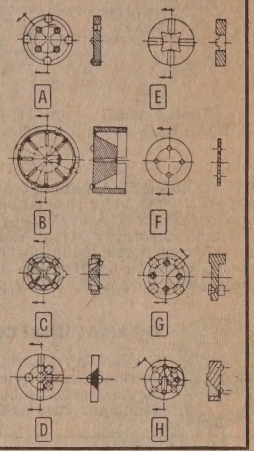
Thermalloy Semiconductor Mounting Pads and Coolers

MOUNTING PADS, LEAD CONVERSION PADS AND IC PADS

'op-quality nylon mounting pads and conversion ads perform a multitude of functions necessary or the best operation and easiest repair of printed circuit boards. Aid in cooling; prevent short-circuiting due to leads or solder. Made of nylon per MIL-M-20593A.

Stock No.	Mfr's Type	Fig.	Case Style	Converts From	Converts To	No. of Leads	Size in Inches O.D. x T	In Lots of 100 1-4	5-9	10-Up
357-3640	7717-46	A	TO-18	.....	.....	3 or 4	.200x.060	5.00	4.00	3.00
357-3660	7717-89	A	TO-18	.....	.....	3 or 4	.250x.080	5.00	4.00	3.00
357-3610	7717-22	A	TO-5	.....	.....	3	.344x.075	5.00	4.00	3.00
357-3650	7717-79	A	TO-5	.....	.....	3	.355x.038	5.00	4.00	3.00
357-3520	7717-4	A	TO-5	.....	.....	3 or 4	.375x.075	5.00	4.00	3.00
357-3550	7717-8	A	I/C	.....	.....	.200 8-Pin Circ.	.375x.075	6.00	5.00	4.00
357-3540	7717-7	A	I/C	TO-18	TO-5	3 or 4	.250x.125	5.00	4.00	3.00
357-3690	7717-107	B	I/C	.200 c.	.350 c.	8	.430x.130	12.00	10.00	9.00
357-3590	7717-19	B	I/C	.200 c.	.400 c.	8	.500x.275	12.00	10.00	9.00
357-3600	7717-21	B	I/C	.158 c.	.368 c.	10	.500x.275	12.00	10.00	9.00
357-3710	7717-133	C	TO-18	TO-18	.150 c.	4	.225x.087	5.00	4.00	3.00
357-3700	7717-121	C	TO-18	TO-18	TO-5	3	.300x.100	5.00	4.00	3.00
357-3670	7717-93	C	TO-18	TO-18	.150 c.	3 or 4	.228x.055	5.00	4.00	3.00
357-3630	7717-44	C	TO-18	TO-18	TO-5	3 or 4	.305x.125	5.00	4.00	3.00
357-3620	7717-26	D	TO-18	TO-18	TO-5	3	.343x.120	5.00	4.00	3.00
357-3510	7717-3	E	TO-5	.....	.....	3 or 4	.344x.075	5.00	4.00	3.00
357-3680	7717-94	E	TO-5	.....	.....	3 or 4	.350x.038	5.00	4.00	3.00
357-3570	7717-16	F	TO-18	.....	.....	3 or 4	.200x.020	5.00	4.00	3.00
357-3560	7717-15	F	TO-5	.....	.....	3 or 4	.350x.020	5.00	4.00	3.00
357-3580	7717-18	G	TO-18	.....	.....	3 or 4	.200x.100	5.00	4.00	3.00
357-3530	7717-5	G	TO-5	.....	.....	3 or 4	.350x.125	5.00	4.00	3.00
357-3500	7717-2	H	Epoxy SC	Inline	TO-5	3	.305x.125	5.00	4.00	3.00

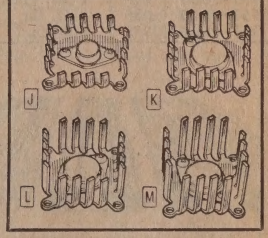
- Prevent Overheating During Soldering
- Provide Free Air Space For Cooling
- Assure Uniform Product Height and Spacing
- Provide Working Room For Easy Repairs
- Prevent Trapped Dirt and Contaminants
- Prevent Solder Bridges



SERIES 6001 HIGH PERFORMANCE PC BOARD COOLERS

ll-directional slanted vanes cool more effective- than any other type per unit volume occupied. TR figures are for operation at 10 watts with natural convection. Av. shpg. wt. 1 oz.

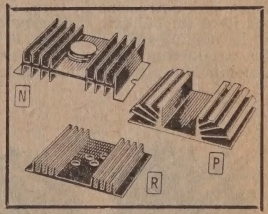
Stock No.	Mfr's Type‡	Fig.	Fits Case Style	TR °C/w	Size in Inches L	W	H	EACH 1-24	25-99	100-249	250-Up
957-2600	6001B-2	J	TO-3	7.9	1.81	1.81	.50	.94	.75	.71	.70
957-2620	6002B-2	K	TO-3	7.2	1.81	1.81	.75	.98	.78	.74	.71
957-2640	6003B-2	L	TO-3	6.5	1.81	1.81	1.00	1.08	.86	.83	.79
957-2650	6004B-2	M	TO-3	6.0	1.81	1.81	1.25	1.12	.90	.86	.83
957-2610	6001B-11	J	TO-66	7.2	1.81	1.81	.50	.94	.75	.71	.70
957-2630	6002B-11	K	TO-66	7.0	1.81	1.81	.75	.98	.78	.74	.71



SERIES 6141, 6500 AND 6601 LOW-PROFILE COOLERS

ow-profile heat sinks for compact designs where ptimum performance in a small space is a must. he combination of low cost, small size, and effective design make these coolers ideal for most PC applications. Fit case style TO-3 except *blank. Average shpg. wt. 1 oz.

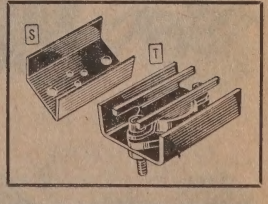
Stock No.	Mfr's Type‡	Fig.	TR °C/w	Size in Inches L	W	H	Minimum Device Mtg. Width	EACH 1-24	25-49	50-99	100-Up
957-2840	6141B*	R	3.7	3.00	3.75	.50	1.312	1.60	1.05	.80	.75
957-2850	6141B-2	R	3.7	3.00	3.75	.50	1.312	1.80	1.20	.90	.85
957-2890	6169B*	P	3.5	3.00	4.12	1.00	1.30	1.95	1.55	1.20	1.00
957-3070	6500B*	N	2.5	3.00	4.50	1.03	1.38	1.30	1.05	.85	.80
957-3080	6500B-2	N	2.5	3.00	4.50	1.03	1.38	1.50	1.20	.95	.90
957-3120	6601B*	P	5.0	1.50	2.00	.56	.812	1.06	.85	.75	.65



SERIES 6103 AND 6166 TWO-PIECE PC HEAT SINKS

ighly popular two-piece heat sinks for printed rcuit board mounting. Have maximum heat ansfer mounting configuration; heat is transferred from both top and bottom of semiconductor device. Average shpg. wt. 1 oz.

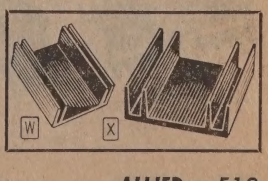
Stock No.	Mfr's Type‡	Fig.	Fits Case Style	TR °C/w	Size in Inches L	W	H	EACH 1-24	25-49	50-99	100-Up
957-2700	6103B	T	TO-3	7	1.58	1.25	.50	.56	.45	.45	.41
957-2720	6103C	T	TO-3	7	1.58	1.25	.50	.50	.40	.40	.35
957-2860	6166B	T	TO-66	11	1.32	.87	.63	.51	.41	.41	.38
957-2710	6103B base	S	TO-3	7	1.58	1.25	.50	.30	.25	.25	.22
957-2870	6166B base	S	TO-66	11	1.32	.87	.63	.29	.23	.23	.21



SERIES 6111 AND 6176 CIRCUIT BOARD COOLERS

eatures small extrusion for printed circuit oards; low profile permits close board spacing r tight designs. Ideal for stud-mounted semiconductors and TO-3, TO-66 devices. Blank except *fits case style TO-66 and †fits case style TO-3. Average shpg. wt. 1 oz.

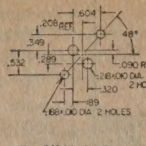
Stock No.	Mfr's Type‡	Fig.	TR °C/w	Size in Inches L	W	H	Minimum Device Mtg. Width	EACH 1-24	25-49	50-99	100-Up
957-2810	6111B	W	10	1.50	1.50	.62	.88	.69	.55	.55	.50
957-2820	6111B-66*	W	10	1.50	1.50	.62	.88	.81	.65	.65	.60
957-2910	6176B	X	4	3.00	1.94	.94	1.30	1.00	.93	.85	.75
957-2920	6176B-2†	X	4	3.00	1.94	.94	1.30	1.15	1.05	.96	.83



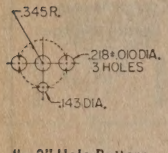
NOTE: Finish denoted by suffix letter: A, hard anodize per MIL-F-14072, 400 volts insulation; B, black nodize per MIL-A-8625 Type II; C, gold chromate finish per MIL-C-5541.

Thermalloy Heat Sinks and Accessories

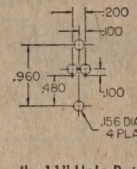
Hole Mounting Patterns and Key To Suffixes Apply to All Thermalloy Semiconductor Coolers on Pages 512-514



"—2" Hole Pattern TO-3 Case



"—3" Hole Pattern TO-36 Case



"—11" Hole Pattern TO-66 Case

A

B

C

D

KEY TO SUFFIXES: A, hard anodize per MIL-F-14072, 400 volts insulation; B, black anodize per MIL-A-8625 Type II; C, gold chromate finish per MIL-C-5541. Numerical suffixes indicate mounting hole patterns, above. Example: 6500B-2 has a black anodized finish with a TO-3 hole pattern.

THERMAL JOINT COMPOUND

Grease-like material with high thermal conductivity. Removes air gap insulation between semiconductor case and heat sink.

Stock No.	Type No.	Description	EACH
957-1600	249	1-oz. Tube	1.10
957-1610	250	2-oz. Jar	1.95
957-1620	251	1-lb. Can	8.45

BERYLLIUM OXIDE HEAT SINKS AND INSULATORS

High-purity beryllium oxide heat sinks conduct heat better than aluminum yet insulate better than porcelain and have low capacitance.

Stock No.	Mfr's Type	Fig.	For Case Style	Rated Volts	Size in Inches L	W	H	EACH 1-11	12-99	100-499	500-Up
957-2320	4018	A	TO-18	700	.22	.22	.03	.70	.56	.39	.35
957-2310	4005	A	TO-5	700	.36	.36	.03	.75	.60	.42	.40
957-2300	4003	D	TO-3	800	1.56	1.05	.06	1.56	1.25	.98	.92
957-2340	4066	D	TO-66	800	1.25	.70	.06	1.19	.95	.70	.65
957-2330	4036	C	TO-36	800	1.06	1.06	.06	1.40	1.12	.85	.81
957-1100	B-470-235-40	B	10-32 Stud	700	.47	.47	.04	.74	.59	.42	.38
957-1110	B-800-260-62	B	5/16" Stud	800	.80	.80	.06	.96	.77	.58	.55
957-1120	B-800-320-62	B	1/4" Stud	800	.80	.80	.06	.96	.77	58	.55

THERMAFILM SEMICONDUCTOR INSULATORS

Replaces mica washers. Homogenous film will not chip, fracture, peel or break. Dielectric strength, 7000 volts/mil; temp. range, −260° to +400° C.

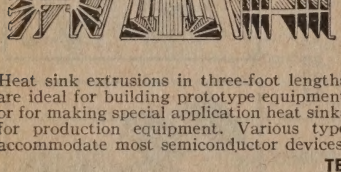
Stock No.	Mfr's Type	Fig.	For Case Style	Size in Inches L	W	H	In Lots of 100 1-4	5-9	10-Up
957-1550	43-18-1	A	TO-18	.25	.25	.002	4.00	3.00	2.00
957-1540	43-5-1	A	TO-5	.39	.39	.002	4.00	3.00	2.00
957-1530	43-03-3	D	TO-3	1.65	1.06	.002	3.50	2.50	1.50
957-1570	43-66-1	D	TO-66	1.31	.76	.002	3.50	2.50	1.50
957-1560	43-36-1	C	TO-36	1.06	1.06	.002	3.50	2.50	1.50
957-1500	43-02-10	B	10-32 Stud	.562	.562	.002	3.50	2.50	1.50
957-1510	43-02-25	B	1/4" Stud	.812	.812	.002	3.50	2.50	1.50
957-1520	43-02-50	B	1/2" Stud	1.38	1.38	.002	4.00	3.00	2.00

HARD-ANODIZED SEMICONDUCTOR INSULATORS

Made of 6061-T4 aluminum anodized per MIL-A-8625 Type III. Thermal resistance is 0.116° C/watt per square inch of area. Average shpg. wt. 1 oz.

Stock No.	Mfr's Type	Fig.	For Case Style	Size in Inches L	W	H	EACH 1-11	12-99	100-249	250-Up
957-2440	4766A	D	TO-66	1.32	.71	.02	.40	.32	.21	.11
957-2400	4703A	D	TO-3	1.80	1.06	.02	.43	.35	.23	.12
957-2410	4710A	B	#10 Stud	.56	.56	.02	.40	.32	.21	.11
957-2420	4725A	B	1/4" Stud	.81	.81	.02	.40	.32	.21	.11
957-2430	4736A	C	TO-36	1.09	1.09	.02	.43	.35	.23	.12
957-2450	4778A	....	Plastic Power	.75	.50	.02	.42	.33	.22	.11

SPECIAL PURPOSE HEAT SINK EXTRUSIONS



Heat sink extrusions in three-foot lengths are ideal for building prototype equipment or for making special application heat sinks for production equipment. Various type accommodate most semiconductor devices.

Stock No.	Mfr's Type	Size in Inches H	W	Minimum Device Mtg. Width	Shpg. Wt.	EACH 1-4	5-9	10-Up
957-2800	6111	.62	1.50	88	2 lbs.	4.50	3.30	2.75
957-2830	6141	.50	3.75	1.312	3 lbs.	6.10	5.10	4.55
957-2880	6169	1.00	4.12	1.30	4 lbs.	6.75	5.40	4.65
957-2900	6176	.935	1.94	1.30	3 lbs.	5.40	4.05	3.30
957-2930	6401	1.25	4.75	1.30	3 lbs.	7.50	6.30	5.55
957-2960	6421	2.63	4.75	1.32	8 lbs.	12.15	11.55	10.40
957-3030	6450	4.00	4.00	1.25	13 lbs.	25.50	21.60	19.80
957-3060	6500	1.03	4.50	1.38	4 lbs.	6.90	5.70	4.95
957-3130	6660	6.25	6.25	1.812	29 lbs.	53.10	43.50	39.60
957-3090	6560	5.00	5.00	1.312	18 lbs.	31.50	27.75	24.00
957-3010	6441	5.50	4.75	1.312	13 lbs.	19.35	18.00	17.25

TEXAS-SIZE COOLERS FOR HIGH POWER DEVICES

Extra-large size coolers for high power diodes and rectifiers minimize overheating and deterioration at high current levels. Blank mounting accepts stud mount hex from 1/2" to 1 3/4" for maximum versatility. Average shpg. wt. 8 oz.

E

F

Stock No.	Mfr's Type	Fig.	TR °C/W	Size in Inches L	W	H	Minimum Device Mtg. Width	EACH 1-24	25-49	50-99	100-Up
957-3020	6441B	E	.54	4.50	4.75	5.50	1.312	4.85	4.25	3.60	3.1
957-3040	6450B	F	.60	5.00	4.00	4.00	1.250	4.45	4.05	3.69	3.4
957-3050	6470B	F	.45	7.50	4.00	4.00	1.250	5.35	4.85	4.43	4.1
957-3100	6560B	F	.45	6.00	5.00	5.00	1.312	6.90	6.20	5.65	5.2
957-3110	6590B	F	.30	9.00	5.00	5.00	1.312	8.85	7.96	7.25	6.7
957-3140	6660B	F	.36	6.00	6.25	6.25	1.812	9.70	8.65	7.86	7.3
957-3150	6690B	F	.28	9.00	6.25	6.25	1.812	14.00	12.62	11.50	10.7

SERIES 6401, 6403, 6421 AND 6423 POWER DEVICE COOLERS

Highly popular heat sinks for use with common power transistors, diodes, and silicon controlled rectifiers, Large surface area gives low thermal resistance and more effective cooling action. Blank mounting except *fits TO-3 case. Average shpg. wt. 4 oz.

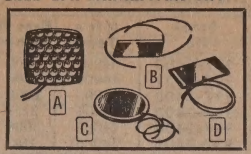
G

H

Stock No.	Mfr's Type	Fig.	TR °C/W	Size in Inches L	W	H	Minimum Device Mtg. Width	EACH 1-24	25-49	50-99	100-Up
957-2940	6401B	G	2.3	1.50	4.75	1.25	1.30	1.30	1.05	.95	.85
957-2950	6403B	G	1.5	3.00	4.75	1.25	1.30	1.55	1.24	1.10	1.00
957-2970	6421B	H	1.0	3.00	4.75	2.63	1.32	2.28	1.82	1.65	1.50
957-2990	6423B	H	.9	6.00	4.75	2.63	1.32	3.30	2.75	2.50	2.30
957-2980	6421B-2*	H	1.0	3.00	4.75	2.63	1.32	2.50	2.03	1.75	1.60
957-3000	6423B-2*	H	.9	6.00	4.75	2.63	1.32	3.40	2.95	2.60	2.40

Photocells, Coolers, SCR Circuits, "Sonalert"

IR SOLAR CELL AND PHOTOCELL EXPERIMENTER KIT



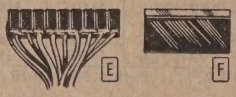
YPE K-421. For engineers and hobyists. May be used for powering ransistor radios, building light ieters, operating small motors from unlight, etc. Contains 7 different elenium, silicon, and cadmiumulfide photocells similar to Figs. A, ,C and D. Instruction manual with ircuit diagrams and experiments, plus "Experimenter Handbook." 17-9020. Shpg. wt., 1 lb. ..... Each 5.95

IR PHOTOCELLS

elenium cells (B2M, B3M) have a spectral response similar to hat of the human eye. Silicon cells (S1M, S3M, S5M) are used as olar batteries to convert sunlight to electrical energy for use in adios, light meters, etc. B2M is ½x¾"; others, 1⅛x1⅛x3/16". ncludes 24-page project handbook. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Output		EACH	
		Volts	mA	1-99	100-Up
817-9004	B2M	.2-.4	.077	1.50	1.35
817-9005	B3M	.2-.4	.077	1.75	1.55
817-9035	S1M	.3-.45	10-16	2.25	2.00
817-9036	S3M	.6-.85	10-16	3.95	3.51
817-9038	S5M	.6-.85	18-25	4.95	4.40

IR SILICON READOUT AND SOLAR CELLS



teadout cells (E) are designed or perforated tape and punched ard data reading systems, etc. ach readout array is a matrix f silicon cells. Typical current enerated is 350 mA for 0.01 quare inch of active area at 000 footcandles illumination. Have 20 μS response, or better. olar cells (F) can be used to power transistor radios, operate elays or small motors from sunlight, etc. Maximum response is 20 S. Peak sensitivity at 0.95 microns. Unmounted. 6-in. colorded leads. Av. shpg. wt., 2 oz.

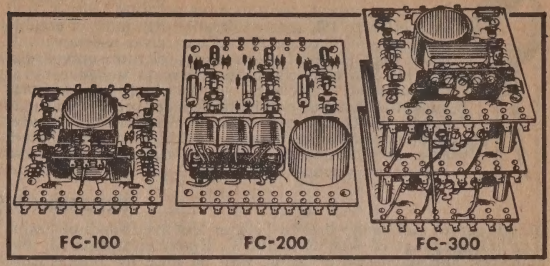
(E) READOUT CELLS

Stock No.	Mfr's Type	Cells	EACH 1-99
817-9057	SPR-4-10PL	4	7.50
817-9058	SPR-5-10PL	5	8.00
817-9060	SPR-6-10PL	6	9.50
817-9061	SPR-7-10PL	7	11.00
817-9062	SPR-8-10PL	8	12.50
817-9063	SPR-9-10PL	9	14.00
817-9064	SPR-10-10PL	10	15.00

(F) SOLAR CELLS

Stock No.	Mfr's Type	Output mA	Output mW	Size	EACH 1-99
817-9133	S2900E5M	60	24	1.312" dia.	8.00
817-9135	S2900E7M	90	36	1.312" dia.	8.65
817-9136	S2900E9.5M	120	48	1.312" dia.	9.50
817-9138	S2900E11M	150	60	1.312" dia.	15.00
817-9129	S1020E4PL	18	7.2	.8x.4"	1.95
817-9130	S1020E6PL	28	10.8	.8x.4"	2.50
817-9131	S1020E8PL	36	14.4	.8x.4"	3.45
817-9128	S1010E6PL	13.5	5.4	.4x.4"	2.10
817-9127	S1005E5PL	5	2	.4x.2"	1.95
817-9126	S0520E6PL	12	4.8	.8x.2"	2.00
817-9125	S0510E5PL	5	2	.4x.2"	1.85
817-9124	S0505E5PL	2.5	1	.2x.2"	1.55
817-9144	49-1950	1.3	0.52	.2x.1"	1.00
817-9134	S2900E5PL	68	28.5	1.125" dia.	6.75

IR SCR FIRING CIRCUITS



SERIES FC. Standardized SCR firing circuits provide hard-firing gate triggering pulse. Eliminate SCR failure due to di/dt, false firing and interaction. Negative gate bias of 0.7 volt permits full utilization of SCR dv/dt. Magnetic amplifier isolated gate signals permit use in full-wave DC or anti-parallel AC circuit applications. Dual wound transformers allow selection of input voltage. Can be used for firing all JEDEC SCR's rated 10 amps or more. Typical applications include: speed controls, servo controls, generator and inverter regulators, constant-voltage or constant-current power supplies, temperature controls, winding equipment, battery chargers, Control Values: Type FC-100, 5 to 95% of average DC voltage, 9 to 99% of rms voltage; FC-200, 4 to 96% of average DC voltage, 9 to 97.5% of rms voltage (8.2-93.4% AC); FC-300, 4-90% of average DC voltage, 9-92% of rms (8-90% AC).

Stock No.	Mfr's Type	Input (50/60 Hz) Phase	V(+10%)	V A	Size, In.	Wt., Lbs.	EACH 1-9	EACH 10-Up
817-9010	FC-100	1	120/240	7	5x6x2½	1½	60.00	51.00
817-9011	FC-200	2	240/480	18	6x8½x2	1½	130.00	110.00
817-9012	FC-300	3	240/480	21	5x6x7½	1½	215.00	183.00

MALLORY SONALERT SOLID-STATE AUDIBLE WARNING DEVICE

Ideal Safety Device

Solid state miniature audible-signal warning device, emits a discernible signal at minimum current. Eliminates arcing and RF noise. Use with communications control systems; appliances; automotive functions etc. *Type SC628P emits pulsing sound output. Av. shpg. wt., 8 oz.

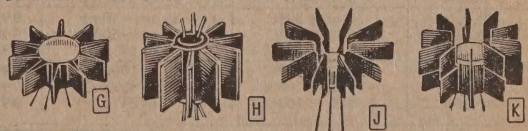
SPECIFICATIONS

Mfr's Type	Freq.	Volts	mA	dB	Temp. F°
SC628	2.5 kHz	6-28DC	3-14	68-80	−40, +120
SC628P*	2.5 kHz	6-28DC	3-14	68-80	−40, +120
SC628H	4.5 kHz	6-28DC	3-14	68-80	−40, +120
SC628A	2.5 kHz	6-28AC/DC	3-14	68-80	−40, +120
SC110	2.5 kHz	110AC/86DC	14	80	−40, +120

ORDERING INFORMATION

Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-249	250-499	500-Up
854-4210	SC628	5.50	5.40	5.15	4.65	4.15	3.85
854-4225	SC628P*	9.95	9.75	9.30	8.40	7.45	6.85
854-4220	SC628H	6.35	6.25	5.95	5.40	4.80	4.40
854-4212	SC628A	8.75	8.60	8.20	7.40	6.60	6.10
854-4200	SC110	8.75	8.60	8.20	7.40	6.60	6.10

WAKEFIELD SERIES 200 FEATHERWEIGHT COOLERS FOR MILLIWATT TRANSISTORS



Stock No.	Mfr's Type	Fig.	Inches Dia.	Inches Lgth.	Fits Case Dia.	EACH 1-99	EACH In Multiples of 100 100-400	500-900	1000-Up
82-1300	NF201	G	.64	.19	.161/.24	.27	.21	.16	.11
82-1302	NF203	K	.64	.38	.161/.24	.29	.22	.17	.12
82-1303	NF204	G	.55	.20	.275/.335	.25	.20	.15	.10
82-1304	NF205	G	.72	.19	.275/.370	.27	.21	.16	.11
82-1306	NF207	K	.72	.38	.275/.370	.29	.22	.17	.12
82-1308	NF209	J	1.28	.44	.275/.370	.34	.29	.23	.18
82-1310	NF211	G	.83	.19	.440/.544	.27	.21	.15	.10
82-1311	NF213	K	.83	.38	.440/.544	.29	.22	.17	.12
82-1313	NF215	J	1.40	.44	.440/.544	.34	.29	.23	.18
82-1319	NF222	H	.64	.38	.161/.240	.38	.30	.24	.19
82-1321	NF224	H	.72	.44	.275/.371	.38	.20	.24	.19
82-2045	160 Installation tool for Models 201, 3, 5, 7, 9 ..... 1.50								
82-2046	161 Installation tool for Models 211, 13, 15 ..... 1.50								

Fin design permits horizontal or vertical orientation with natural convection in either position. In forced convection applications, the axis of the semiconductor may be oriented either perpendicular or parallel to the direction of air flow. Series 200 coolers are made from a beryllium copper alloy. Black ebonal finish. Meet MIL-C-81021. 1 oz.

RISE (0°) FOR 1 WATT

Type	Nat. Conv.	250 Ft./Min.	Fits Jedec Case Styles
201	66	27	TO, 18, 24, 28
203	56	19	(222 accepts
222	56	19	2 cases)
205	61	24	TO 5, 9, 11, 12, 16
207	49	17	29, 33, 39, 42, 43
209	34	10	(224 accepts
224	49	17	2 cases)
211	56	20	
213	44	13	TO 8
215	31	8	

Yellow Springs Instrument Thermistors

LOW-PRICED 1% THERMISTORS

Match standard resistance-temperature curves and each other to 1% or less tolerance over most of useable range of −80°C to +150°C. Chart gives resistance values at each degree of temperature; tolerance curves; dissipation and time constants. Serve as transducers for measurement and control circuits; high precision permits interchanging and multiple monitoring from single circuit, direct dialing of set points. Used as temperature-compensating units for meters, etc. Epoxy encapsulated. Size: .095″ diameter; 3-inch #32 tinned-copper leads. Resistance tolerance: 1% at 25°C. Av. shpg. wt., ¼ oz.

Stock No.	Mfr's Type	Base Res. Ohms	Stock No.	Mfr's Type	Base Re Ohms
997-2400	44001	100	997-2406	44007	5000
997-2401	44002	300	997-2407	44008	30k
997-2402	44003	1000	997-2410	44011	100k
997-2403	44004	2252	997-2414	44014	300k
997-2404	44005	3000	997-2415	44015	1 meg
997-2405	44006	10k			

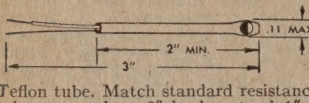
1-9.....Each 4.90 10-29.....Each 4.15 30-Up.....Each 3.9

PRECISION ½% THERMISTORS

Match curves and each other to ½% or less over much of usable temperature range of −50°C to 100°C. Epoxy encapsulated, .09″ diameter, and have two 3″ leads. Can be used for temperature measurement, temperature control, differential thermometers and meter compensation. Time constant: in a well stirred oil bath, 1 sec. maximum, or 10 sec. maximum in still air. Dissipation constant: in a well stirred oil bath, 8 mW/°C, or 1 mW/°C in still air minimum. Values may be assorted at quantity prices. Wt., ¼ oz.

Stock No.	Mfr's Type	Base Resistance Ohms at 25° C	EACH 1-9	10-29	30-U
997-2440	44030	3000	9.90	8.90	7.7
997-2441	44031	10k	9.90	8.90	7.7
997-2442	44032	30k	9.90	8.90	7.7
997-2443	44033	2252	9.90	8.90	7.7
997-2444	44034	5000	9.90	8.90	7.7

TEFLON® 1% THERMISTOR PROBES

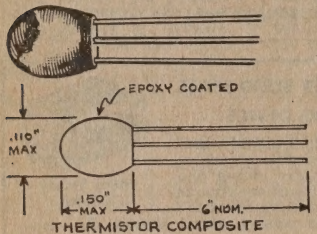


Accurate probes have same interchangeable thermistors listed above, but encased in 2″ long chemically impervious Teflon tube. Match standard resistance-temperature curves to 1% tolerance or less. 3″ leads extend 1″ beyond probe; insulated by smaller Teflon tube around one lead. Dia.: 11″ max. *Resistance tolerance 1% at 25°C. May be assorted for quantity prices. 2 oz.

Stock No.	Mfr's Type	Base Res. Ohms*	Stock No.	Mfr's Type	Base Re Ohms
997-2700	44101	100	997-2707	44107	5000
997-2701	44102	300	997-2710	44108	30k
997-2702	44103	1000	997-2714	44111	100k
997-2704	44104	2252	997-2717	44114	300k
997-2705	44105	3000	997-2718	44115	1 meg
997-2706	44106	10k			

1-9.....Each 9.90 10-29.....Each 8.90 30-Up.....Each 7.

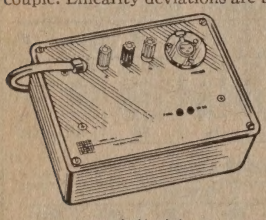
LINEAR OUTPUT THERMISTOR NETWORKS



Thermilinear Thermistor Networks. Precision devices provide linear voltage or resistance outputs with change of temperature. Many have sensitivities of 20 mv/°C or more, 400 times that of an IC thermocouple. Linearity deviations are as little as 2 parts in 1000 from 0 to 100°C. Useful for direct digital temperature indication with DV or linear recorder. Linear temperature compensation with thermistor sensitivity. Time constant: 1 second in oil. *Additional composite for replacement or multiple work. Av. wt., 1 oz.

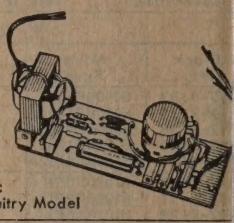
Stock No.	Mfr's Type	Range	Linearity	EACH 1-9	10-29	30-
997-3000	44201	0° to +100°C	±.2°C	10.50	9.80	9.
997-3001	44202	−5° to +45°C	±.1°C	10.50	9.80	9.
997-3002	44203	−30° to +50°C	±.2°C	10.50	9.80	9.
997-3003	44204	30° to +100°F	±.055°F	10.50	9.80	9.
997-2417	44018*	−30° to +100°C	.....	7.50	6.90	6.
997-3010	44211	−55° to +85°C	±1.1°C	10.50	9.80	9.
997-2418	44019*	−55° to +85°C	.....	7.50	6.90	6.

THERMIVOLT® THERMILINEAR THERMOMETER



Bench Model

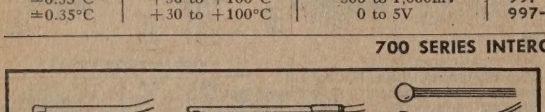
Circuitry necessary to convert Thermilinear Component Type 44018 or 700 Series Thermistor Probe resistance into a DC analog voltage with direct numeric correspondence to temperature (except for 5V units). When applied to the proper digital voltmeter or recorder the result is a direct reading thermometer. Available as bench models, or circuitry components for incorporating temperature measurement function in OEM equipment. Bench model: 2¼x6¾x5¼″, 2¼ lbs. Circuitry model: 2x6x2½″, 1¼ lbs. For 115 VAC ±5%, 50-60 Hz, 5 watts max.



Basic Circuitry Model

Accuracy	Range	Output	Stock No.	Bench Model	EACH	Stock No.	Basic Model	EACH
±0.4°C	0 to 100°C	0 to 100mV	997-0300	741-1	100.00	997-0700	751-1	75.0
±0.4°C	0 to 100°C	0 to 1V	997-0310	741-10	100.00	997-0710	751-10	75.0
±0.4°C	0 to 100°C	0 to 5V	997-0305	741-5V	150.00	997-0705	751-5V	125.0
±0.25°C	−5 to 45°C	−5 to +45mV	997-0400	742-1	100.00	997-0800	752-2	75.0
±0.25°C	−5 to 45°C	−50 to +450mV	997-0410	742-10	100.00	997-0810	752-10	75.0
±0.25°C	−5 to 45°C	0 to 5V	997-0405	742-5V	150.00	997-0805	752-5V	125.0
±0.35°C	−30 to +50°C	−30 to +50mV	997-0500	743-1	100.00	997-0900	753-1	75.0
±0.35°C	−30 to +50°C	−300 to +500mV	997-0510	743-10	100.00	997-0910	753-10	75.0
±0.35°C	−30 to +50°C	0 to 5V	997-0505	743-5V	150.00	997-0905	753-5V	125.0
±0.35°C	+30 to +100°C	30 to 100mV	997-0600	744-1	100.00	997-1000	754-1	75.0
±0.35°C	+30 to +100°C	300 to 1,000mV	997-0610	744-10	100.00	997-1010	754-10	75.0
±0.35°C	+30 to +100°C	0 to 5V	997-0605	744-5V	150.00	997-1005	754-5V	125.0

700 SERIES INTERCHANGEABLE PROBES



Three types of probes available: General Purpose, Tubular, Tape-on Surface Temperature. All have 10 ft. leads. All have maximum temperature of 100°C. General-purpose Type 701 for esophageal or rectal temperature in humans and larger lab animals; used with long leads for deep water temperature; most rugged, least expens probe. Tubular Type 703 for rugged duty in liquid immersion u fast response oral or rectal probe. Immersible only to cap, 4½ Tape-on Surface Temperature Type 709, easy to tape on skin flat surface for reading. Average shpg. wt., 2 oz.

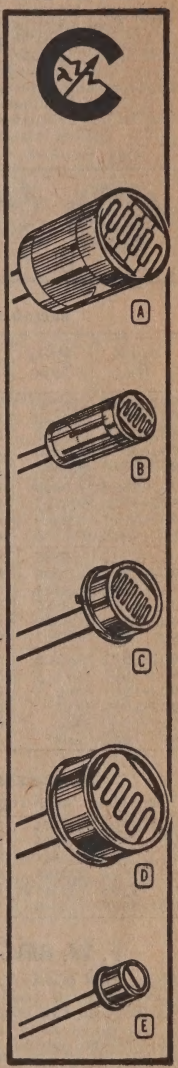
Stock No.	Mfr's Type	Fig.	Material	Time Const.	EACH
997-0100	701	A	Vinyl tip	7 sec.	20.0
997-0102	703	B	Stainless steel	3.4 sec.	29.0
997-0111	709	C	Stain. steel cup, epoxy backed	1.7 sec.	29.0

Clairex Photocells

CdS AND CdSe PHOTOCELLS

Res. @ 2 fc ±33⅓%. †Res. ratio from 2 fc to dark within 5 seconds. ‡at 25°C. (mW). §With/without heat sink. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Description	Dia. x L	*Resist. @ 2 fc	†Max. Res. Ratio	Max. Volt.	‡Power Dissip.	EACH 1-99	EACH 100-Up
51-1300	CL5M2	D	Type 2 CdS, Peak resp. 5150 A., bluest response photosensitive material; high stability, low temp. error. Use with fluorescent and incandescent lamps.	.55x.18	55k	1:100	250	2000/500§	2.00	1.55
51-1700	CL602	B		.25x.5	1 meg	1:100	300	75	1.50	1.15
51-1901	CL702	C		.36x.18	1 meg	1:100	300	125	2.00	1.55
51-2401	CL902	E		.21x.15	1 meg	1:100	250	50	2.00	1.55
51-1400	CL503	A	Type 3 CdSe, peak spectral response 7350 angstroms, fast response, and very high light-to-dark resistance ratio. Can be used for high-speed switching or counting. Sensitive to near infra red. For use with incandescent or neon lamps.	.5x.5	7.2k	1:10,000	250	500/250§	1.50	1.25
51-1301	CL5M3	D		.55x.18	7.2k	1:10,000	250	2000/500§	1.50	1.25
51-1701	CL603	B		.25x.5	133k	1:10,000	300	75	1.75	1.50
51-1702	CL603A	B		.25x.5	75k	1:10,000	300	75	1.75	1.50
51-1703	CL603AL	B		.25x.5	3.5k	1:10,000	170	75	1.75	1.50
51-1902	CL703	C		.35x.18	133k	1:10,000	300	125	1.50	1.25
51-1903	CL703A	C		.36x.18	67k	1:10,000	300	125	1.50	1.25
51-1904	CL703L	C		.36x.18	2.7k	1:10,000	100	125	1.50	1.25
51-2404	CL903	E		.21x.15	133k	1:10,000	250	50	1.50	1.25
51-2402	CL903A	E		.21x.15	67k	1:10,000	250	50	1.50	1.25
51-2403	CL903L	E		.21x.15	6k	1:10,000	100	50	1.50	1.25
51-1402	CL504	A	Type 4 CdSe, peak spectral response 6900 angstroms, very low resistance photocells. Can be used for "on-off" applications when low resistance is desired. For use with either incandescent or neon lamps.	.5x.5	1.5k	1:1000	250	500/250§	1.50	1.25
51-1302	CL5M4	D		.55x.18	1.5k	1:1000	250	2000/500§	1.50	1.25
51-1403	CL504L	A		.5x.5	0.25k	1:1000	170	500/250§	1.50	1.25
51-1303	CL5M4L	D		.55x.18	0.25k	1:1000	170	2000/500§	1.50	1.25
51-1704	CL604	B		.25x.5	30k	1:1000	300	75	1.75	1.50
51-1705	CL604L	B		.25x.5	1.5k	1:1000	170	75	1.75	1.50
51-1907	CL704	C		.36x.18	30k	1:1000	300	125	1.50	1.25
51-1908	CL704L	C		.36x.18	0.6k	1:1000	100	125	1.50	1.25
51-2406	CL904	E		.21x.15	30k	1:1000	250	50	1.50	1.25
51-2405	CL904L	E		.21x.15	2k	1:1000	100	50	1.50	1.25
51-1404	CL505	A	Type 5 CdS, peak spectral response 5500 angstroms (closely matches the human eye), stable, low memory photocell. Can be used in light measuring applications. and precision low speed switching. For use with incandescent, fluorescent or neon lamps.	.5x.5	9k	1:100	250	500/250§	1.50	1.15
51-1304	CL5M5	D		.55x.18	9k	1:100	250	2000/500§	1.50	1.15
51-1405	CL505L	A		.5x.5	1.5k	1:100	170	500/250§	1.50	1.15
51-1305	CL5M5L	D		.55x.18	1.5k	1:100	170	2000/500§	1.50	1.15
51-1706	CL605	B		.25x.5	166k	1:100	300	75	1.50	1.15
51-1707	CL605L	B		.25x.5	7.5k	1:100	170	75	1.50	1.15
51-1911	CL705	C		.36x.18	166k	1:100	300	125	2.00	1.55
51-1913	CL705L	C		.36x.18	3.3k	1:100	100	125	1.50	1.15
51-2410	CL905	E		.21x.15	166k	1:100	250	50	1.50	1.15
51-2409	CL905L	E		.21x.15	10k	1:100	100	50	1.50	1.15
51-1912	CL705HL	C	Type 5H CdS, peak response 5500A Uniform color temp. response. For speed switching, histability measuring; incandescent, fluorescent, neon lamps.	.36x.18	28k	1:1000	100	125	1.50	1.35
51-2407	CL905HL	E		.21x.15	100k	1:1000	100	50	1.50	1.35
51-2408	CL905HN	E		.21x.15	700k	1:1000	100	50	1.50	1.35
51-1406	CL507	A	Type 7 CdS, peak spectral response 6150 angstroms, moderate speed and ratio. Can be used in general beam breaking applications. For use with incandescent, neon or fluorescent lamps.	.5x.5	7.2k	1:1000	250	500/250§	1.50	1.15
51-1306	CL5M7	D		.55x.18	7.2k	1:1000	250	2000/500§	1.50	1.15
51-1708	CL607	B		.25x.5	133k	1:1000	300	75	1.50	1.15
51-1916	CL707	C		.36x.18	133k	1:1000	300	125	1.50	1.15
51-1920	CL707L	C		.36x.18	2.7k	1:1000	100	125	1.50	1.15
51-2417	CL907	E		.21x.15	133k	1:1000	250	50	1.50	1.15
51-2416	CL907N	E		.21x.15	66k	1:1000	100	50	1.50	1.15
			DUAL ELEMENT							
51-1906	CL703/2	C	Type 3 CdSe Photocells contain	.36x.18	50k	1:10,000	300	125	2.30	1.95
51-1905	CL703L/2	C	Type 3 CdSe two separate ele-	.36x.18	6.5k	1:10,000	100	125	2.30	1.95
51-1909	CL704/2	C	Type 4 CdSe ments with two	.36x.18	17k	1:1000	300	125	1.80	1.55
51-1910	CL704L/2	C	Type 4 CdSe separate leads and	.36x.18	1.5k	1:1000	100	125	1.80	1.55
51-1915	CL705/2	C	Type 5 CdSe one common lead.	.36x.18	166k	1:100	300	125	2.30	1.95
51-1914	CL705L/2	C	Type 5 CdS	.36x.18	7.5k	1:100	100	125	1.80	1.45
51-1917	CL707H	C	Type 7H CdS Peak Spectral response 6150 angstroms. Very fast decay time coupled with low resistance and high linearity. Ideal for beam breaking applications.	.36x.18	500k	1:1000	300	125	1.50	1.35
51-1919	CL707HM	C		.36x.18	100k	1:1000	250	125	1.50	1.35
51-1918	CL707HL	C		.36x.18	10k	1:1000	100	125	1.50	1.35
51-2413	CL907H	E		.21x.15	600k	1:1000	250	50	1.50	1.35
51-2415	CL907HN	E		.21x.15	300k	1:1000	100	50	1.50	1.35
51-2414	CL907HL	E		.21x.15	24k	1:1000	100	50	1.50	1.35

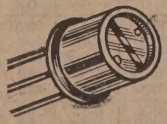


DESIGNER'S PHOTOCELL KIT

ive CdS and CdSe cells. CdS types include: L505, which closely matches human eye re- onse; CL707, for general beam-breaking; L902, for linear resistance vs. light-level re- onse (smallest hermetically sealed unit). dSe types include: CL603A, high speed; L704L, sensitive—66-ohm resistance @ 100 fc. 51-3300. Wt., 5 oz. 10.00

PHOTOCHOPPER CELLS

laintain high efficiency over wide tempera- re range and eliminate warmup time. Ef- iency levels, in spite of SPDT configura- on: 72% at 1 kHz, 93% at 400 kHz, 98% 60 Hz. Efficiency change from 28° C to)° C less than 15%. Range, —50° to +75° . Rated 50 mW at 25° C. Conductive ass windows and third lead grounded to se for shielding. Size, .210 x .150". Shpg. t., 2 oz.



Stock No.	Mfr's Type	Res. ON Ohms	Res. OFF Ohms	EACH 1-99	EACH 100-Up
751-2412	CL906CS	82k	8 megs	2.54	1.91
751-2411	CL906CLS	2.75k	.27 meg	2.54	1.91

PHOTOMOD® PHOTOCELL-LAMP MODULE

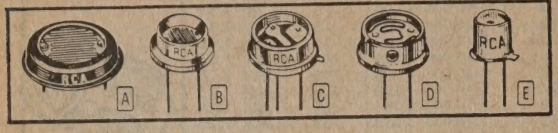
Clairex high stability photocells in photocell-lamp modules. Ideal for use in automation and data processing systems. Hermetically-sealed, high reliability lamps have been combined with proven hermetically-sealed photocells in a rugged potted package. For maximum efficiency, the cells are optically coupled to the lamps. Operating temperature, 20° C to 75° C. Maximum power dissipation 50 mW at 25° C. Maximum cell volts, 120 volts with lamp off. †Maximum voltage for 5000-hour life. *Neon lamps are of the "high-brightness" type. Their brightness, on an equal life basis is approximately ten times that of the standard brightness. In table below, Rise Time is the time-required to reach 110% of on-resistance from off condition; tested after lamp has been on 24 hours. Size, 1⅛" long by ⅜" diameter. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Max. ON Res. In Ohms	Rise Time Seconds	Lamp †Volt.	Lamp mA	EACH
751-0200	CLM3006 A	160	.060	6V	40	3.25
751-0400	CLM4006 A	55	.080	6V	40	3.25
751-0206	CLM3012 A	160	.080	12V	40	3.25
751-0406	CLM4012 A	30	.080	12V	40	3.25
751-0300	CLM3120 A	1150	.005	120V	2.5*	3.25
751-0500	CLM4120 A	160	.005	120V	2.5*	3.25
751-0600	CLM5H10A	3000	.120	10V	17	3.50
751-1100	CLM7H16A	550	.090	16V	17	3.50

Photocells, Readouts and Warning Devices

RCA CADMIUM-SULFIDE AND CADMIUM-SULFO-SELENIDE PHOTOCELLS

Maximum response for the cadmium-sulfide types occurs at about 5100 angstroms and for the cadmium sulfo-selenide photocells at about 6150 angstroms. The 5100-angstrom cells are for general-purpose use, while the 6150-angstrom cells are for use where faster time-response characteristics are required—the 6150-angstrom units are three times faster. Hermetically sealed glass-metal cases. *Voltage between terminals DC or peak AC. **Power dissipation. †Photocurrent. ‡Voltage between terminals. §Illumination. §§Photocurrent minimum. #Continuous service. ##AC. Av. shpg. wt., 2 oz.



BROAD-AREA CADMIUM-SULFIDE TYPES

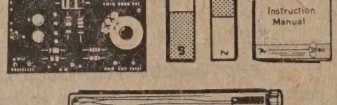
Stock No.	Mfr's Type	Fig.	Dia. In.	Max. Rating * V	** W	† mA	Char. @ 25°C ‡ DC	§ fc	§§ mA	EACH 1-99	100-Up
902-0510	SQ2503	A	1	600	.75#	75	50##	1	0.8	1.21	.88
902-0511	SQ2508	D	1/3	300	.125	10	12	10	0.065	1.24	.90
902-0512	SQ2519	D	1/3	300	.125	20	12	10	1.6	1.16	.84
902-0513	SQ2520	B	1/2	200	.70	75	12	1	3.6	1.32	.96
902-0514	SQ2521	B	1/2	250	.70	50	50##	1	1.5	1.40	1.02
902-0515	SQ2526	B	1/2	200	.70	75	12	1	1	1.32	.96
902-0516	SQ2527	B	1/2	200	.70	75	12	1	2	1.32	.96
902-0517	SQ2529	D	1/3	300	.125	3	12	1	0.004	1.24	.90
902-0519	SQ2534	D	1/3	300	.125	1	90	30	0.057	1.24	.90
902-0520	SQ2535	E	1/3	200	.03	10	12	10	0.8	1.57	1.14
902-0521	SQ2536	D	1/3	150	.125	25	12	1	1	1.24	.90
902-0528	SQ2554	D	1/3	150	.125	25	12	1	1.6	1.13	.82
902-0529	SQ2555	D	1/3	200	.125	15	12	10	1.4	1.17	.85
902-0530	SQ2556	B	1/2	200	.70	75	12	1	2	1.44	1.05
902-0531	SQ2557	C	1/3	100	.125	5/E1.	12	1	0.033	1.40	1.02
902-0532	SQ2558	C	1/3	100	.125	10/E1	12	1	0.3	1.57	1.14
902-1800	4403	A	1	350	.75#	100	50##	1	8	1.21	.88
902-1801	4404	A	1	600	.75#	75	50##	1	2.5	1.32	.96
902-1830	4448	A	1	600	.75#	75	50##	1	1.5	1.32	.96
902-1840	4453	A	1	600	.75#	75	50##	1	3	1.28	.93
902-1850	7163	A	1	600	.75#	75	50##	1	1	1.21	.88

BROAD-AREA CADMIUM-SULFO-SELENIDE TYPES

Three times faster response than above.

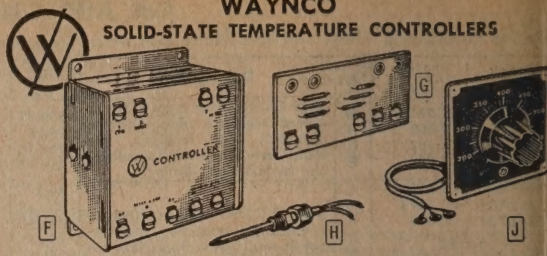
902-0522	SQ2543	E	1/3	100	.03	15	12	1	0.45	2.06	1.50
902-0523	SQ2544	D	1/3	100	.125	25	12	1	1.5	1.90	1.38
902-0524	SQ2544V1	D	1/3	150	.125	25	12	1	0.6	1.90	1.38
902-0525	SQ2545	B	1/2	125	.70	75	12	1	4	1.90	1.38
902-0526	SQ2545V1	B	1/2	200	.70	75	12	1	2.5	1.90	1.38
902-0527	SQ2546	A	1	200	.75#	100	12	1	5	1.90	1.38

F. W. BELL "HALL PAK" EXPERIMENTAL KIT



Shows Hall effect—the development of a voltage between two edges of a strip of metal in which electric current is flowing longitudinally. Kit includes: Hall-effect device; circuit board (contains balancing network and transistorized DC amplifier with a voltage gain of 50); magnet; instructions.
739-0001. Shpg. wt., 4 lbs. 21.95

WAYNCO SOLID-STATE TEMPERATURE CONTROLLERS



Solid-state temperature controllers using low-cost thermistor o platinum temperature sensors. Ideal for ovens, heat seling, plasti processing, medical and biological apparatus, liquid level control heat treating, cyrogenics.

F ON-OFF TEMPERATURE CONTROLLERS

Model 15 Series. Removable bridge board for fast temperatur changes; switching sensitivity 0.1° to 0.3°F. For ambient tem perature from 0° to 125°F, and voltage variations from 105-13 volts. Use with Bridge-Board—Remote Set Pot Assembly an Sensors (below). Where load exceeds current capacity of outpu relay, units may be used as pilot relays to larger load contactor 15-00-01 has SPST reed relay output, others SPDT. 115 VAC *230 VAC. Av. wt., 1½ lbs.

Stock No.	Type	Output/Relay	1-9 EA.	10-Up EA
989-2607	15-00-01	50 VA, SPST	41.50	29.00
989-2608	15-00-10	1 A, SPDT	41.50	29.00
989-2609	15-00-11	10 A, SPDT	49.40	34.60
989-2610	15-00-12	*10 A, SPDT	49.40	34.60

F PROPORTIONAL TEMPERATURE CONTROLLERS

Model 03 Series. Handle loads up to 1000 watts at 115 VAC. In clude remote set pot assembly, built-in bridge and adjustable pr portional band. Order sensors separately below. Av. wt., 1½ lb

Stock No.	Mfr's Type	Temp. Range	Use Sensor	EACH 1-9	10-Up
989-2603	03-03-09A	25°-250°F	A	89.00	74.50
989-2604	03-03-09B	100°-400°F	B	89.00	74.50
989-2605	03-03-09C	200°-600°F	C	89.00	74.50

G J BRIDGE BOARDS—REMOTE SET-POT ASSEMBLIES

For use with Series 15 controllers above. Use temperature sens (below) as indicated in table. Av. wt., 6 oz.

989-2614	212/218-133	25°-250°F	A	13.95	8.80
989-2615	212/218-134	100°-400°F	B	13.95	8.80
989-2611	212/218-045	200°-600°F	C	13.95	8.80
989-2613	212/218-110	0°-500°F	D	13.95	8.80
989-2612	212/218-067	0°-1000°F	D	13.95	8.80

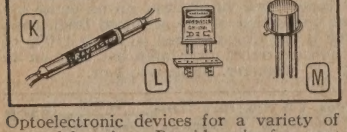
H TEMPERATURE SENSORS

3/16" dia. stainless steel sheath. 18" leads; stainless steel compre sion fitting w/standard 1/8" NPT thread. Sensor type column refe to controllers above. Lgth. is length below fitting. 5 oz.

Stock No.	Mfr's Type	Sensor Type	Base (Ohms)	Element Type	Lgth.	EACH 1-9	10-U
989-2616	104-800-007	A	3K	Thermistor	3"	25.85	15.9
989-2617	104-800-008	A	3K	Thermistor	6"	25.85	15.9
989-2620	104-800-013	B	15K	Thermistor	3"	25.85	15.9
989-2621	104-800-014	B	15K	Thermistor	6"	25.85	15.9
989-2618	104-800-009	C	100K	Thermistor	3"	25.85	15.9
989-2619	104-800-010	C	100K	Thermistor	6"	25.85	15.9
989-2622	104-801-001	D	100	Platinum	3"	41.39	25.7
989-2623	104-801-002	D	100	Platinum	6"	41.39	25.7

RAYTHEON

"RAYSISTOR" OPTOELECTRONIC DEVICES

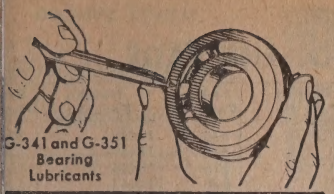


Optoelectronic devices for a variety of control functions. Provide noise-free control of AC and DC signals over wide dynamic range, with fast switching time and high reliability. Consist of light source and photo-resistive element in light-tight case. Rugged construction with no moving parts. *Includes socket. †50 volts minimum. ‡Typical switching time in seconds. Shpg. wt., 2 oz.

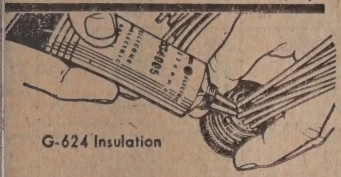
Stock No.	Mfr's Type	Fig.	Control Lamp Volts	Control Lamp mA	Signal Photocell Resis., Ohms On	Signal Photocell Resis., Ohms Off†	Signal Photocell Max. Volts	Signal Photocell Max. mW	Switch Time‡ On	Switch Time‡ Off	EACH 1-9	EACH 10-U
903-4000	CK1101	K	120	1-3	1000	10^6	100	75	.0012	.060	11.00	9.0
903-4001	CK1102	K	0-1	0-50	700	10^6	100	75	.020	.300	11.00	9.0
903-4002	CK1103	K	0-5	0-200	150	10^6	100	75	.020	.800	11.00	9.0
903-4003	CK1104	K	0-25	0-37	150	10^6	100	75	.010	.450	11.00	9.0
903-4004	CK1114	M	0-1	0-17	850	10^6	100	100	.018	.060	8.75	7.1
903-4005	CK1115	M	0-4	0-55	200	10^7	200	100	.020	.300	8.75	7.1
903-4006	CK1116	M	0-4	0-17	350	10^7	200	100	.010	.300	9.35	7.7
903-4007	CK1121*	L	0-5	0-55	150	10^7	200	100	.020	.250	4.00	3.2
903-4008	CK1122*	L	0-10	0-17	1000	10^7	200	100	.030	.225	4.00	3.2
903-4009	CK1123*	L	0-25	0-37	150	10^7	200	100	.010	.300	4.00	3.2
903-4010	CK1124*	L	150	.2-1.2	3000	10^7	200	100	.005	.100	4.00	3.2
903-4011	CK2000*	L	0-25	0-37	40	10^6	100	100	.030	.300	5.00	4.0
903-4012	CK2003*	L	150	.2-1.2	3000	10^7	150	100	.035	.250	4.60	3.6

Call Your Nearest Allied Electronics Facility for All Your Electronic Need

Silicones and Epoxy Compounds



G-341 and G-351 Bearing Lubricants



G-624 Insulation

SILICONE GREASES AND COMPOUNDS

Wide selection of silicone greases and compounds for applications ranging from special service lubricants to high-thermal conducting compounds for electronic components. Silicone greases and compounds withstand temperatures from −100° to +450°F; won't smoke, melt or char; are odorless and colorless; can be easily applied direct from the tube. Non-corrosive, water repellent. Won't solidify; not subject to oxidation, evaporation and excessive bleed losses.

G-623—Water repellent coating/seal.
G-624—Excellent component insulator.
G-322—Lubricant for slow oscillating or rotary motion applications.
G-341—Bearing lubricant for use in adverse environments.
G-351—Bearing lubricant for −40° to +400°F.

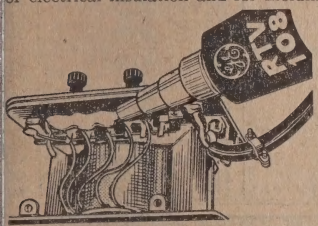
2-Oz. Tube		EACH		
Stock No.	Type	1-11	12-47	48-Up
798-0107	G-623	1.30	1.12	.95
798-0109	G-624	1.30	1.12	.95
798-0100	G-322	1.70	1.42	1.25
798-0103	G-341	1.30	1.12	.95
798-0105	G-351	1.30	1.12	.95

8-Oz. Tube		EACH		
Stock No.	Type	1-11	12-47	48-Up
798-0108	G-623	3.20	2.70	2.45
798-0110	G-624	3.30	2.85	2.60
798-0102	G-322	5.00	4.20	3.95
798-0104	G-341	3.65	3.10	2.85
798-0106	G-351	3.75	3.25	3.05

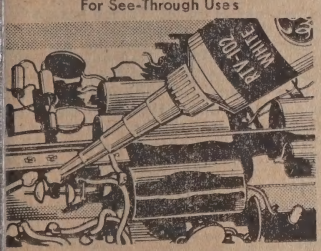
RTV-630 SILICONE RUBBER COMPOUND (Not Illus.)

Blue silicone, pourable compound cures within minutes with addition of curing agent (catalyst) to a high-strength, tough solid. Ideal for electrical insulation and for molding of prototype parts. High dielectric strength. Consists of compound and curing agent. 1-lb. can. Shpg. wt., 1 lb.

798-0618. 1-11.....Each 8.50 12-Up.....Each 7.50



RTV-108. Translucent For See-Through Uses



RTV-102, White for Affixing Name Plates

RTV-103, Black For Rubber Repairs

SILICONE RUBBER SEALANTS

Ready-to-use silicone rubber adhesive/sealants for industrial applications. In squeeze tubes, they are easily applied and air cure to form a durable, flexible silicone rubber. Needs no catalyst. Applied at room temperature, adheres without priming. For use as insulation, bonding silicone rubber parts to metal surfaces, encapsulating. Withstand −75° F to +300° F. Never harden, crack or dry out. Resist moisture, weathering and aging. Contain no solvent and cure with minimum of shrinkage. Excellent electrical properties.

RTV-102. Excellent for shock mounting. White in color.
RTV-103. For rubber repair, other uses. Black in color.
RTV-106. For long term use at temperatures up to 600° F. Red.
RTV-108. Where "see-through" is required. Translucent.
RTV-112. For brushing or spraying on production line. White.

PHYSICAL PROPERTIES OF PRESSED SHEETS CURED 1 WEEK AT 77°F: Hardness, Shore A: 30. Tensile Strength: 350 psi. Tear Resistance: 45 lb/in.
ELECTRICAL PROPERTIES OF PRESSED SHEETS CURED 10 DAYS AT 77°F: Dielectric strength, vpm: 550 for .058"-thickness. Volume Resistivity, ohm-cm: $3x10^{15}$.

Type RTV-	3-Oz. Tube Stock No.	EACH			12-Oz. Tube Stock No.	EACH			
		1-5	6-47	48-Up		1	2-11	12-47	48-Up
102	798-0203	1.75	1.50	1.27	798-0204	5.55	5.40	5.10	4.90
103	798-0206	1.75	1.50	1.27	798-0208	5.55	5.40	5.10	4.90
108	798-0212	1.75	1.50	1.27	798-0213	5.55	5.40	5.10	4.90
106	798-0210	2.20	1.90	1.60	798-0211	7.10	6.90	6.55	6.21
112	798-0216	2.20	1.90	1.60	798-0217	7.10	6.90	6.55	6.21

RTV CARTRIDGE PACK

Speeds up production-line sealing. Type RTV 102 white silicone rubber, excellent for shock-mounting. Type 108 translucent silicone rubber, for use where "see-through" is required. Need no catalyst. Apply at room temp. Use with any standard caulking gun, or automatic dispenser.

Stock No.	RTV Type	Oz. per Unit	Color	EACH		
				1-5	6-11	12-Up
798-0205	102	12	White	3.49	3.09	2.69
798-0214	108	12	Trans.	3.49	3.09	2.69

RTV-615 POTTING COMPOUND

(Not illus.) Clear silicone, low-viscosity liquid that cures at room temperature, after addition of curing agent, to form a rubber-like, tough, transparent solid. Offers improved physical properties—can be cured within 15-30 minutes at 150° C. Cures in absence of air. Withstands temperatures within the range of −65° C to +200° C. High dielectric strength. Consists of compound and curing agent. 1-lb. can. Wt., 1 lb.

798-0218. 1-11.....Each 9.50
12-Up.....Each 8.00

RTV-616 POTTING COMPOUND

(Not illus.) Black silicone, low-viscosity liquid cures within 15-30 minutes at room temperature, without air, with the addition of a curing agent. Forms a tough, transparent solid. Withstands temperatures between −65° C to +200° C. High dielectric strength. Consists of compound and curing agent. One-pound can. Wt., 1 lb.

798-0604. 1-11.....Each 8.30 12-Up.....Each 7.00

RTV-9950 CATALYST (fast cure)

Paste-consistency catalyst for RTV encapsulants above. Light tan. 1½ lbs.

798-0625. 1-11...Ea. 8.20 12-Up.Ea. 7.50

RTV-9930 CATALYST (standard cure)

Blue paste-consistency catalyst for RTV encapsulants. Cures in 5 to 12 hours. 1¼ lbs.

798-0623. 1-11...Ea. 8.20 12-Up.Ea. 7.50

RTV-9910 CATALYST (heat cure)

Light yellow. Paste-consistency catalyst for curing RTV encapsulants at room temperature or with added heat. Wt., 1½ lbs.

798-0620. 1-11...Ea. 8.20 12-Up.Ea. 7.50

RTV-910 DILUENT

For wipe-on treatment of rubber molds.

798-0619. 1-lb. Package.....Each 6.00

Type G-640 HEAT SINK COMPOUND

Greaselike silicone material heavily filled with heat-conductive metal oxides. Combination of base and fillers produces a material with higher thermal conductivity than previously available silicon heat sink compounds. Applies to base or mountng studs of components. Properties of the compound are such that it will not dry out, harden or melt under virtually any atmospheric condition. Withstands long term exposure to temperatures up to 200° C. Compound maintains a positive heat seal that improves heat transfer from the device to heat sink or chassis. Actually increases life expectancy and overall efficiency of circuit component. Evaporation, 1% after period of 24 hours at temperature of 200° C. Sold in 4-oz. container. Shpg. wt., 4 oz.

798-0111. 1-11..Ea. 2.95 12-Up.Ea. 2.50

TYPE RTV-11 ENCAPSULANT

White, low viscosity silicone rubber base with excellent deep section curing characteristics. Wt., 1 lb.

798-0200. 1-11..Ea. 7.60 12-Up.Ea. 6.38

TYPE RTV 41 ENCAPSULANT

A white, medium viscosity silicone rubber base that cures readily in deep sections to high durometer, high strength rubber. 16 oz.

798-0201. 1-11..Ea. 6.10 12-Up.Ea. 5.10

TYPE RTV-60 ENCAPSULANT

Red, medium viscosity silicone rubber base that cures readily in deep sections to a high durometer, high strength rubber. Has excellent high temperature resistance being usable for short periods to 600°F. 16 oz.

798-0202. 1-11..Ea. 6.10 12-Up.Ea. 5.10

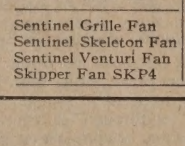
Rotron Fans and Accessories

FOR EFFICIENT ELECTRONIC COOLING

QUICK INDEX LISTING OF ROTRON PART NO. AND PAGE

Rotron Part No.	See Page	Rotron Part No.	See Page	Rotron Part No.	See Page	Rotron Part No.	See Page	Rotron Part No.	See Page
Aximax 1, 367JS	524	Muffin Skeleton Fan	521	Skipper Fan SKR4	523	1350	526	17826	521
Aximax 1, 464YS	524	Muffin Venturi Fan	521	SKP4	523	2783	525	18440	521
Aximax 1, 623YS	524	NTH2	526	SKR4	523	1600	526	18944	526
Aximax 2, 367JS	524	NTP2	526	Spartan SL682YS	523	1800	526	19263	526
Aximax 2, 368YS	524	Nugget Blower	526	Spartan SL810DS	523	2000	526	19263-4	526
Aximax 2, 395JS	524	Propeller PFL	521	Spartan ST682YS	523	2450	526	19342	526
Aximax 2, 415YS	524	Propeller PFR	521	Spartan ST810DS	523	3000	526	19561-2	526
Aximax 2, 464YS	524	Propimax 2, 366ZS	524	Sprite Fan SP2A2	522	4000	526	19699	525
Aximax 2, 606NS	524	Propimax 2, 367JS	524	Tarzan Fan TN3B2	522	12783	427	19803	526
Aximax 3, 341JS	524	Propimax 2, 395JS	524	Tarzan Fan TN3D2	522	13967	521	19869	523
Aximax 3, 387JS	524	Propimax 2, 415ZS	524	Twinpax MB5100-100	525	13996	526	20049	526
Aximax 3, 400YS	524	Propimax 2, 464ZS	524	Whisper Fan Kit	521	14559	522	20132-2	526
Aximax 3, 422DS	524	Propimax 2, 606NS	524	Whisper Filter Fan	521	14611	522	20509	522
Aximax 3, 528YS	524	Propimax 3, 341JS	524	Whisper Grille Fan	521	14651	522	20509-1	522
Aximax 3, 599NS	524	Propimax 3, 409ZS	524	Whisper Skeleton Fan	521	15448	521	20575	526
Centaur CT3A2	522	Propimax 3B, 387JS	524	Whisper Venturi Fan	521	15449	526	20576	526
Caravel CL2L	521	Propimax 3B, 400ZS	524	2A	526	16238	526	20757	526
Caravel CL2T	521	Propimax 3B, 473JS	524	2A Determinator Kit	526	16398	522	20787	522
Determinator Kit	526	Propimax 3B, 754DS	524	2A1000	526	16410	436	20990	522
Feather Fan 103	522	Propimax 3B, 763ZS	524	2A1350	526	16415	526	21196-2	522
Mark 4 Filter Fan	521	RF Cooling Panel	525	2A1600	526	17181	526	22509	526
Mark 4 Grille Fan	521	Saucer Fan 340ZS	523	2A1800	526	17469	526	22509-4	526
Mark 4 Skeleton Fan	521	Sentinel Filter Fan	523	2A2000	526	17471	526	17785	522
Mark 4 Venturi Fan	521	Sentinel Grille Fan	523	2A2450	526	17555	521	24254	523
Modulair	525	Sentinel Skeleton Fan	523	2A3000	526	17597	526	24326-2	521
Muffin Filter Fan	521	Sentinel Venturi Fan	523	2A4000	526	14015	523	24361-3	525
Muffin Grille Fan	521	Skipper Fan SKP4	523	1000	526	17597-1	526	24947	522

25 CFM



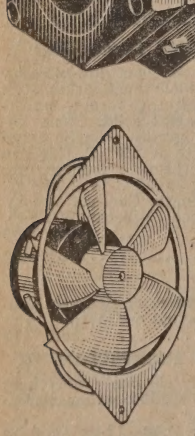
BISCUIT BLOWER

MODEL BT2A-1. Only air-moving device that can be packaged in a 1¾" rack panel mounted instrument. Depth is only 1⅜" and free delivery performance is 25 cfm. Pressure building capability drives air through tightly packed units, permits temperature decrease even in high packaging densities. Ideal in instruments, projector lamps, power supplies, computer terminals, etc. 10-year life expectancy without maintenance. Max. ambient is 160°F. Low 44 dB noise level. Impedance meets U.L. requirements. Draws 16 watts. Mount to the back of blower inlet or outlet. Tinned brass solde terminals or plug/cord connectio Blower housing and impeller are hig strength glass-filled compression-molde phenolic, bearing single-piece sintere bronze impregnated with high tempera ture silicone oil. 115V, 50-60 Hz. Shpg wt. 1½ lbs.

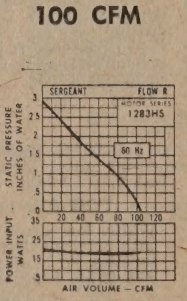
907-0180, 1-9 ..... 20.3
10-24 ..... 18.5
25-49 ..... 16.9
50-99 ..... 15.6
100-249 ..... 14.5
250-Up 13.5

ACCESSORIES

Stock No.	Description	Wt. (oz.)	EACH					
			1-9	10-24	25-49	50-99	100-249	250-U
907-1150	Outlet guard #24540	2	.55	.55	.55	.55	.55	.55
907-1026	Plug and Cord #17555	6	.70	.70	.70	.70	.70	.70
907-1160	Clamp #001-048	2	.70	.70	.70	.70	.70	.70



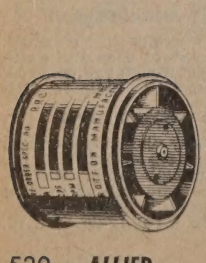
100 CFM



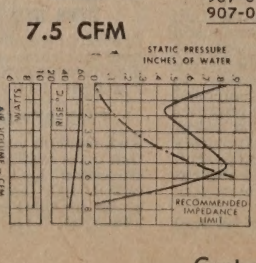
SERGEANT FAN

Extremely reliable, perfect for cooling electrical equipment. Measures only 4 11/16 x 2¾". For applications in power supplies, office copiers, computer terminals, minicomputers, etc. Available for either direction of airflow. Quickly mounted using two mounting holes fitting industry standard of 4.125" square-hole layout. Choise of flush or skeleton mount design. For ambients up to 130°F (55°C). 5-year design life at 75°F (25°C) without maintenance. Meets U.L. requirements Sound interference 43 dB at free delivery Draws 20 watts with electrical connec tions made of 12"-long 18-gauge leads Concentric motor employs Class A insula tion. Two sintered bronze bearings lu bricated for life, include wide-supplie reservoirs. Mounting spiders are brigh zinc-plated formed steel wire. For 11 VAC, 50-60 Hz. Shpg. wt. 1½ lbs. Order from table below.

Stock No.	Mfr's. Type	Flow	Mounting	EACH							
				1-9	10-24	25-49	50-99	100-249	250-499	500-749	750-U
907-0610	ST2A-1	L	Flush	8.50	7.85	7.30	6.90	6.55	6.20	5.95	5.65
907-0612	ST2A-3	L	Skeleton	8.25	7.60	7.10	6.70	6.35	6.00	5.75	5.50
907-0613	ST2A-4	R	Flush	8.50	7.85	7.30	6.90	6.55	6.20	5.95	5.65
907-0615	ST2A-6	R	Skeleton	8.25	7.60	7.10	6.70	6.35	6.00	5.75	5.50



7.5 CFM



NANOS FAN

For limited mounting space, measures only 1x1" dia, delivers up to 7.5 cfm free delivery. For micro-electronic avionics equipment such as airborne communications, inertial guidance systems, radio back-pack units for defogging airborne optical equipment. Impeller and correctional vanes are air foil-constructed for maximum aerodynamics efficiency and minimal acoustical noise. Inverted hysteresis motor with an air-lubricated hydro dynamic journal bearing. Withstand 100G shock in any direction. Tem perature range: −55°C to +100°C Life expectancy of over 20,000 Hrs Mounts in any attitude. For 26 VAC 400 Hz. Net wt. 1 oz.

907-0915, 1039 ZS.
1-9 ... 129.60 10-24 ..... 111.1
25-49 ... 97.20 50-Up 86.5

Contact Allied Electronics for Prices on Large Production Quantities

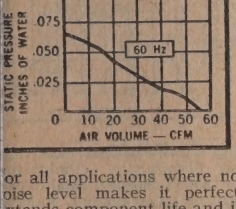
Rotron Commercial Flushing Fans

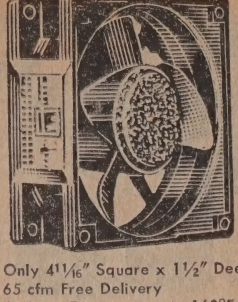
ROTRON

DELIVERS 65-CFM

Whisper Fan

SUPER-QUIET





- Only 4 1/16" Square x 1 1/2" Deep
- 65 cfm Free Delivery
- Ambient Temperature to 160°F

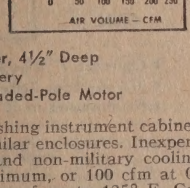
or all applications where noise must be minimized. Low 18 dB oise level makes it perfect for offices, laboratories, systems. xtends component life and improves performance by delivering a ıbstantial quantity of cooling air. Advanced bearing system and elative slow speed (1800 rpm nominal) assure long life. Interıangeable with the Muffin Fan (shown at right). Can be used in ound or square opening or mounted with two spring-steel clips rder below). High-impact, flame-retardant, polycarbonate frame. ncapsulated bus-bar leads with solder terminals provide maximum esistance to humidity. Draws only 6 watts. U.L. approved. 115 V, 0-60 Hz AC. *Less venturi block. Net wt., 1 lb. Av. shpg. wt., 1 lb.

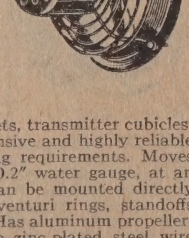
Stock No.	Description	EACH				
		1-9	10-24	25-49	50-99	100-Up
07-0600	Skeleton Fan*	13.95	12.50	11.30	10.00	9.75
07-0803	Venturi Fan	14.20	12.75	11.55	10.25	10.00
07-0204	Grille Fan	15.25	13.80	12.60	11.30	11.05
07-0203	Filter Fan	17.10	15.65	14.45	13.15	12.90

ACCESSORIES FOR MUFFIN, WHISPER, SENTINEL FANS

ype 15449. Filter Assembly. Includes filter, frame and clips.
07-1018.....Each 3.00
07-1019. Type 16238 Standard Spiral Grille.....Each 1.00
07-1030. Type 17826 Grille, Expanded Metal.....Each 1.00
07-1012. Type 13996 Mounting Clips.....Per Pair .30
07-1133. Type 20132-2. Finger Guard.....Each .70
07-1022. Type 16415. Plug and Cord Assembly.....Each .70
07-1017. Type A15448 Filter Cartridge for Muffin Fan.....Each 2.25
07-1031. Type 18440 Filtercoat.....Each 1.25
07-1011. Type 13967. Filter Frame.....Each 1.00
07-1143. Type 24326-1. Clip.....Each .06
07-1144. Type 24326-2. Clip.....Each .06

COMPACT 220-CFM PF PROPELLER FAN





- Only 8 1/8" Diameter, 4 1/2" Deep
- 220 cfm Free Delivery
- Sleeve-Bearing, Shaded-Pole Motor

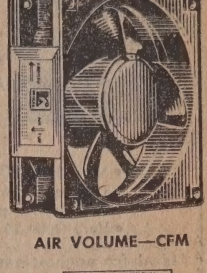
Compact fan for flushing instrument cabinets, transmitter cubicles, relay racks, and similar enclosures. Inexpensive and highly reliable for mild ambient and non-military cooling requirements. Moves 220 cfm of air, optimum, or 100 cfm at 0.2" water gauge, at an ambient temperature of up to 125° F. Can be mounted directly against enclosure wall without spacers, venturi rings, standoffs or brackets. May be used with dust filter. Has aluminum propeller, anodized aluminum mounting ring, lustre zinc-plated steel wire guard. Motor is shaded-pole type with sleeve bearings. Motor case is drawn steel, finished in green baked enamel. Designed for continuous duty, with choice of airflow direction: Model PF-L is push type, Model PF-R is pull type. Size, 8 1/8-inches diameter and 4 19/32-inches deep. For 110-115 volts, 50-60 Hz AC, single-phase. Net wt., 2.8 lbs. Shpg. wt., 3 1/4 lbs.

Stock No.	Mfr's Type	Air-Flow	EACH			
			1-9	10-24	25-49	50-Up
907-0214	PF-L	Push	16.85	14.30	13.75	13.45
907-0215	PF-R	Pull	16.85	14.30	13.75	13.45

ATTENTION BUYERS—Allied Electronics makes immediate shipment on all models of Rotron fans. Make Allied your headquarters for Rotron fans and all electronic components at quantity prices.

MARK 4 "MUFFIN" FAN

- Extra Lightweight—Only 1 lb.
- Low Noise Level of 42 dB
- Choose from Four Models

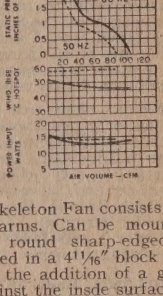


Small size and high air performance make this economical fan ideal for flushing computers, power supplies, office machinery, instruments, and electronic control equipment. This efficient fan minimizes component derating, increases life expectancy and assures reliable performance of instruments. Weighs only 1 pound and measures only 4 1/16" square. Extremely thin for mounting in tight space requirements. Entire fan assembly is only 1 1/2" deep.

Though small in size, this fan delivers 100 cubic feet per minute free delivery at a scarcely audible noise level of 42 dB. No lubrication is necessary. Air flow is reversible by turning fan end-to-end.

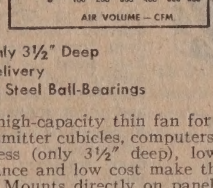
Ambient temperature: 0 to 160°F. Long operating life of up to 10 years at normal room temperature. Aluminum heatsink at base of bearing. Encapsulated winding resists moisture and humidity. Impedance-protected, ■U.L. Recognized motor. Electrical connection to tinned terminals or by using plug and cord assembly See adjacent column #16415. Available in four models: Skeleton Fan consists of a motor driven propeller with 4 mounting arms. Can be mounted among hot components or mounted in a round sharp-edged or bellmouth aperture. Venturi Fan is mounted in a 4 1/16" block and is without a grill. Grille Fan results from the addition of a grille and mounting clips. May be mounted against the inside surface of an equipment enclosure. The Filter Fan is complete with matched fan and filter assembly providing maximum efficiency. Draws 14 watts. 115 V, 50-60 Hz AC. Also available for 220V on special order. Shpg. wt. 1 lb.

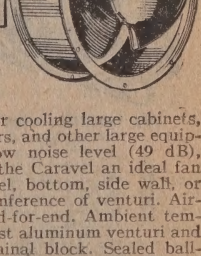
AIR VOLUME—CFM



Stock No.	Description	EACH				
		1-9	10-24	25-49	50-99	100-Up
907-0210	Skeleton Fan	12.40	11.45	10.25	9.30	8.65
907-0211	Venturi Fan	12.65	11.70	10.50	9.55	8.90
907-0208	Grille Fan	13.70	12.75	11.55	10.60	9.95
907-0209	Filter Fan	15.55	14.60	13.40	12.45	11.80

HIGH-CAPACITY 575-CFM Caravel "THIN" FAN





- 10" Diameter, Only 3 1/2" Deep
- 575 cfm Free Delivery
- Sealed Stainless Steel Ball-Bearings

Smartly styled, high-capacity thin fan for cooling large cabinets, relay racks, transmitter cubicles, computers, and other large equipment. Its thinness (only 3 1/2" deep), low noise level (49 dB), reliable performance and low cost make the Caravel an ideal fan for any cabinet. Mounts directly on panel, bottom, side wall, or top of cabinet, using holes around circumference of venturi. Airflow may be reversed by turning fan end-for-end. Ambient temperature range, —20° to +140° F. Die-cast aluminum venturi and spider; polycarbonate propeller and terminal block. Sealed ball-bearing motor assures long, quiet life with no maintenance. Choice of connections: terminal block, Type CL2T; or 24" leads, Type CL2L. Mating cord and plug are available (below). Type 19694-2 Screen Guard is optional (below). 1650 rpm. 115 volts, 50-60 Hz AC, single-phase. Net wt., 4.3 lbs. Shpg. wt., 5 3/4 lbs.

907X0201. Type CL2T Terminal block connection. 1-9 . . Each 28.70
10-24.....Each 25.50
25-49.....Each 22.45 50-Up.....Each 22.00

907X0200. Type CL2L. With 24" leads. 1-9.....Each 28.20
10-24.....Each 24.95
25-49.....Each 21.95 50-Up.....Each 1.50

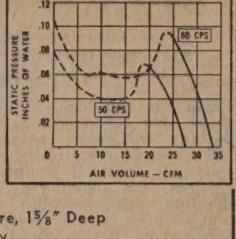
907-1127. Type 19694-2 Screen Guard. 1-9.....Each 2.15
10-24.....Each 1.90
25-49.....Each 1.70 50-Up.....Each 1.65

907-1026. Type 17555 Plug and Cord. 1-99.....Each .70

■Recognized Under the Component Program of Underwriter's Laboratories, Inc.

Rotron Commercial Flushing Fans

33-CFM
SPRITE
AXIAL FAN



- Very Small, Only 3⅛" Square, 1⅝" Deep
- Provides 33 cfm Free Delivery
- Ambient Temperatures from —20°F to +140°F
- Very Quiet 35 dB Noise Level

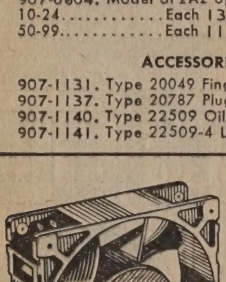
Ideal for applications where space is at a premium. Size, only 3⅛" square by 1.635" deep. Specially designed to fit 3½" panel height in relay racks. Delivers 33 cfm (free delivery) with aerodynamic performance tailored to produce high pressure in the range approaching free delivery. In many applications, the Sprite will outperform larger, conventionally designed fans. Typical commercial uses include: office copying machines, power supplies, transmitters and receivers, counters, core memory equipment, paper-tape equipment, printers, digital voltmeters, etc.

Mounts easily with holes in flanges. Extremely quiet operation: only 35 dB noise level. Wide temperature range: —20° F to +140°F. Venturi, spiders, and motor mounting are aluminum. Nine-blade propeller is molded of high-impact, flame-retarding polycarbonate. Airflow is reversible by turning fan end-for-end. Life expectancy is up to 5 years if lubricated with oil kit (below). Plug and cord available as accessory. Brass solder terminals. For 115 volts, 50-60 Hz AC; 11 watts. Motor is impedance-protected to ■U.L. requirements. Accessories listed below. Net wt. 14 oz. Shpg. wt. 12 oz.

907-0604. Model SP2A2 Sprite Fan. 1-9.....Each 14.95
10-24.....Each 13.65 25-49.....Each 12.60
50-99.....Each 11.30 100-Up.....Each 10.50

ACCESSORIES FOR SPRITE FAN

907-1131. Type 20049 Finger Guard.....Each .75
907-1137. Type 20787 Plug and Cord Set.....Each .95
907-1140. Type 22509 Oiler Kit.....Each 3.50
907-1141. Type 22509-4 Lubricant.....Each 2.00

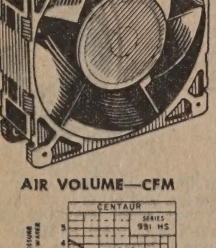


CENTAUR CT3A2 FAN

- High Air Performance
- Impedance Protected Motor
- Interchangeable with Muffin Fan

New aerodynamic principles provide maximum air performance of 115 cfm free delivery) on 60 Hz and operation up to .43" of water at zero delivery. Only 4¹¹⁄₁₆" square by 1½" deep. Interchangeable with Muffin Fan. Ideal for flushing electronic control equipment, office copying machines, telephone equipment, and other industrial applications.

AIR VOLUME—CFM

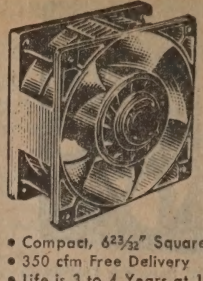


Equipped with 5-blade, high impact polycarbonate propeller that is flame retardent. Phenolic venturi block. Die-cast aluminum alloy mounting spiders. Sleeve bearings suitable for operation over range of —40° to +72° C. Impedance protected, ■U.L. Recognized motor.

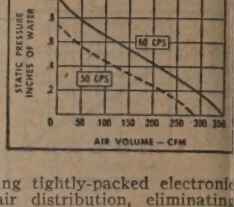
Tinned brass terminals or Plug and Cord assembly (sold below). Exceptionally low noise level of 41 dB. Reversible airflow. Venturi Model CT3A2 only. Draws 15 watts, 115 VAC. Net wt., 1.2 lb. Shpg wt., 1.5 lb.

Stock No.	Description	EACH					
		1-9	10-24	25-49	50-99	100-249	250-Up
907-0202	CT3A2 Fan	16.80	15.20	13.70	12.25	11.45	10.00

907-1019. Type 16238 Spiral Grille.....Each 1.00
907-1018. Type 15449 Filter Assembly.....Each 3.00
907-1012. Type 13996 Mounting Clips (set of 2).....Per pair .30
907-1133. Type 20132-2 Finger Guard.....Each .70
907-1022. Type 16415 Plug and Cord Assembly.....Each .70
907-1031. Type 18440 Filtercoat.....Each 1.25



COMPACT
350-CFM
TARZAN
FAN



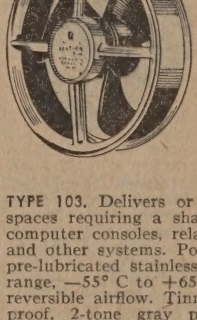
- Compact, 6²³⁄₃₂" Square, 4¹¹⁄₃₂" Deep
- 350 cfm Free Delivery
- Life is 3 to 4 Years at 120°F

Unique axial fan designed for cooling tightly-packed electronic cabinets and chassis. Large-area air distribution, eliminating space-consuming discharge diffusers, and shallow axial-depth (4¹¹⁄₃₂") dramatically reduce the amount of space needed. Radical departure in fan design provides centrifugal blower performance in a compact axial-flow fan. Ideal for compact air-to-liquid heat exchangers, printed-circuit-card chassis for solid-state components, densely packaged relay-rack communications equipment, and other applications where impedance to airflow is higher than normal. Circulates air at 350 cfm (free delivery) and up to 0.9" of water at cutoff. Airflow is reversible by turning fan end-for-end.

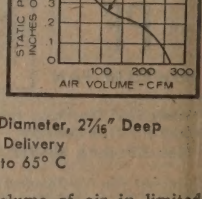
For use at ambient temperatures up to 131° F. Life to 4 years when operated at 120° F. Has phenolic venturi, diecast aluminum spiders. High-impact, flame-retarding, polycarbonate 5-blade propeller. Double-shielded ball bearings are lubricated for life to allow continuous-duty operation without maintenance. Ventilated impeller hub to insure positive cooling of motor. Fan is easily mounted by through-holes at corners of flanges, at opposite end of barrel. Size, only 6²³⁄₃₂" square and 4¹¹⁄₃₂" deep. Two models give choice of electrical connections: Model TN3B2 has solder terminals; Model TN3D2 has 12" leads. For 115 volts, 50-60 Hz AC, single-phase. Net wt., 5 lbs. Shpg. wt., 5 lbs.

Stock No.	Mfr's Type	Connector Type	EACH			
			1-9	10-24	25-49	50-Up
907-0802	TN3B2	Terminals	45.40	39.40	36.50	33.45
907-0801	TN3D2	12" leads	44.70	38.75	35.80	32.75
907-1139	21196-2	Guard	1.60	1.50	1.40	1.30
907-1138	20990	Filter Box	10.00	9.50	8.90	8.25

907-1026. Type 17555 Plug and Cord Set. For Model TN3B2 Tarzan Fan, with terminal connections. 1-99.....Each .70
907-1031. Type 18440 Filtercoat. 1-99.....Each 1.25



EXTRA-LIGHT
270-CFM
FEATHER
FAN



- Compact, 7" Diameter, 2⅞" Deep
- 270 cfm Free Delivery
- For Ambients to 65° C

TYPE 103. Delivers or exhausts large volume of air in limited spaces requiring a shallow fan (only 2⅞" deep). Excellent for computer consoles, relay racks, power supplies, heat exchangers, and other systems. Powered by multi-slot induction motor with pre-lubricated stainless steel ball bearings. Ambient temperature range, —55° C to +65° C. Easy clamping-rim mounting provides reversible airflow. Tinned brass terminals. High-impact, fungus-proof, 2-tone gray polycarbonate plastic. Includes capacitor mounted on fan venturi. Permanent, non-loading washable Filter Box, cord, plug below. Aerodynamically and mechanically interchangeable with Rotron Saucer Fan. 20 watts. 115 V, 50-60 Hz AC, single-phase. ■U.L. Recog. Net. wt., 1.5 lbs. Shpg. wt., 2 lbs.

Stock No.	Mfr's Type	Description	EACH			
			1-9	10-24	25-49	50-Up
907-0830	103	Feather Fan	33.00	31.70	28.10	25.40
907-1029	17785	Filter Box	10.15	9.20	8.60	8.10
907-1014	14559	Rim-Mount Guard	3.65	3.25	2.90	2.70
907-1016	14651	Panel-Mount Guard	3.65	3.25	2.90	2.70

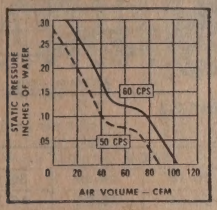
907-1021. Type 24947 Mounting Clamp. Uses 3.....Each .15
907-1051. Type 14611 Panel-Mount Clip. For Type 14651 Panel-Mount Guard. 3 required per Guard.....Each .15
907-1020. Type 16398 Plug and Cord.....Each .90
907-1031. Type 18440 Filtercoat. 1-99.....Each 1.25

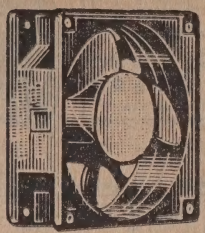
■Recognized Under the Component Program of Underwriter's Laboratories, Inc.

Rotron Military and Commercial Fans

ROTRON COMPACT 100-CFM COMMERCIAL FLUSHING FANS

Sentinel FAN





Meets MIL-E-4970A

- Provides 100 cfm Free Delivery
- Dimensionally Interchangeable with Muffin Fan
- For Ambient Temperatures to 100° C
- Meets MIL-E-4970A • U.L. Recognized

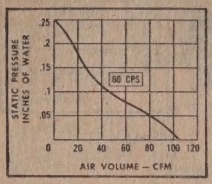
Lightweight fan with heavyweight stamina and power. For ultra-rugged applications where heat and the avoidance of maintenance are major factors. Weighs only 1 pound and measures only $4\frac{11}{16}$" square by $1\frac{1}{2}$" deep, yet delivers 100 cfm at ambient temperatures up to 100° C. Every feature for cool operation at high ambient temperatures and long life. Aluminum heat sink draws heat from the winding for a cooler running motor. Lifetime-lubricated stainless-steel ball bearings. Venturi is high-impact glass-filled phenolic for maximum durability and insulation. Stator is completely encapsulated for protection from moisture and humidity. Meets requirements of MIL-E-4970A. ■U.L. Recog. motor Series 747. For 115 V, 50-60 Hz AC. Skeleton fan for use where only fan and motor are required. Available with glass-filled phenolic venturi (Venturi Fan); with venturi, grille and mtg. clips (Grille Fan); with filter assembly, mtg. clips (Filter Fan). Shpg. wt., 1 lb.

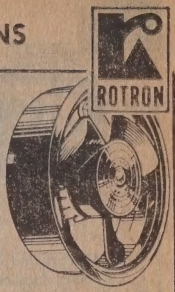
Stock No.	Description	EACH				
		1-9	10-24	25-49	50-99	100-Up
907-0908	Skeleton Fan	24.75	23.45	21.25	18.55	17.85
907-0910	Venturi Fan	25.00	23.70	21.50	18.80	18.10
907-0907	Grille Fan	26.10	24.80	22.60	19.90	19.20
907-0906	Filter Fan	28.00	26.70	24.50	21.80	21.10

See Page 526 for Sentinel Fan Accessories.

LOW-COST, 100-CFM

Skipper COMPACT FAN





- Only $5\frac{3}{16}$" Diameter, $1\frac{13}{16}$" Deep
- 100 cfm Free Delivery

An economical cooling fan that delivers 100 cubic feet of air per minute free delivery at ambient temperatures up to 140° F. Has heat sink for cooling of motor. Very quiet, 38 dB noise level. Airflow can be easily reversed with mounting accessories listed below. No holes needed for mounting—mounts easily with a single retaining ring. Venturi is molded from rugged polypropylene; motor and mounting spiders are die-cast thermal conductive aluminum. Solder terminals. 115 volts, 50-60 Hz AC. 15 watts. ■U.L. recognized. Life expectancy of the shaded-pole motor is in excess of 5 years if lubricated regularly with oiler kit (below). Skeleton fan includes only fan and motor. Venturi fan includes fan, motor and venturi ring. Net wt. 14 oz. Shpg. wt. 15 oz.

Stock No.	Mfr's Type	Fan Type	EACH					
			1-9	10-24	25-49	50-99	100-249	250-Up
907-0601	SKP2	Skel.	9.30	8.70	8.35	7.70	7.10	6.75
907-0602	SKR2	Ven.	9.75	9.15	8.75	8.00	7.45	7.05

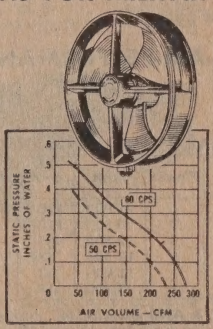
ACCESSORIES FOR SKIPPER FAN

907-1126. Type 19561-2 Mounting Plate.....Each .50
907-1125. Type 19342 Ring.....Each .50
907-1134. Type 20575 Clamp.....Each .50
907-1136. Type 20757 Grille.....Each .45
907-1032. Type 18944 Plug and Cord Set.....Each .75
907-1135. Type 20576 Solder Boat.....Each .15
907-1123. Type 19263 Oiler Kit.....Each 3.50
907-1124. Type 19263-4 Lubricant.....Each 2.00

FLUSHING FANS FOR MILITARY GROUND-SUPPORT EQUIPMENT

SAUCER® FAN

- 280 cfm Free Delivery
- Very Thin 7" Diameter x $2\frac{1}{2}$" Deep
- For Ambients to 72° C
- Meets Applicable MIL Specs



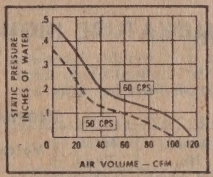
TYPE 340ZS. Specially designed for flushing tightly packaged electronic equipment cabinets and consoles where high air performance is required and space limited to where depth of fan is critical. Provides an air delivery of 280 cubic feet per minute. Powered by a multi-slot induction motor which incorporates stainless-steel ball bearings that are prelubricated for life. Ambient temperature range of −55° C to +72° C. Airflow is reversible by turning the fan end-for-end. Electrical connections are made to a compact terminal block. *Requires a 2.0 μF capacitor for proper motor operation. Dimensionally interchangeable with Feather Fan on facing page. Clamping rims are located at each end of the venturi for easy mounting. A filter box is available with a permanent, non-loading washable filter (below). Meets MIL specs for ground, shipboard. 115 VAC, 50-60 Hz. Actual wt., 1.6 lbs. Shpg. wt., 2 lbs.

907-0831. 1-9.....Each 70.40 10-24.....Each 58.30
25-49.....Each 54.70 50-Up.....Each 51.95
*Requires 2.0 μF @ 220 VAC, oil-impreg., paper dielectric.

ACCESSORIES

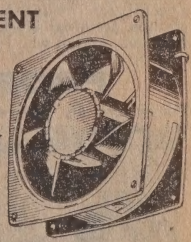
Stock No.	Mfr's Type	Description	EACH			
			1-9	10-24	25-49	50-Up
907-1014	14559	Rim mt. guard	3.65	3.25	2.90	2.70
907-1016	14651	Panel mt. guard	3.65	3.25	2.90	2.70
907-1130	19869	Filter box	21.40	20.00	18.75	17.65

907-1142. 24254 Synclamps. (3 required per fan).....Each .60
907-1013. 14015 Reverse Synclamps. (3 required).....Each .60
907-1015. 14611 Panel Mtg. Clip. (3 per 14651 guard).....Each .15
907-1031. 18440 Filtercoat, Can.....Each 1.25



VERY THIN MILITARY-TYPE FAN

SPARTAN



- Provides 110 cfm Free Delivery
- Size is Only $4\frac{11}{16}$" Square x $1\frac{1}{2}$" Deep
- For Ambient Temperatures to 100° C
- Meets Applicable Military Specifications

Military version of famous Muffin Fan, but with higher pressure-to-volume characteristics. Has all the utility of vane-axial and tube-axial fans. Only $4\frac{11}{16}$" sq. x $1\frac{1}{2}$" deep. 5-blade propeller; double-shielded, stainless-steel, lifetime-lubricated ball bearings for 100° C max. ambient. Reversible by turning fan end-for-end. Venturi ring, mtg. spider and hub are black-enameled, integral aluminum casting. Through-hole mtg. Meets MIL specs for ground, shipboard. For 115 V, 50-60 Hz AC, *400 Hz., single-phase. With terminal block (Types ST682YS and ST810DS) or 12" leads (Types SL682YS and SL810DS). Actual, 1 lb. Shpg. wt., $1\frac{1}{4}$ lbs

Stock No.	Mfr's Type	EACH			
		1-9	10-24	25-49	50-Up
907-0603	SL682VS	45.50	38.20	35.00	33.90
907-0605	ST682VS	48.55	40.70	38.10	36.05
907-0606	SL810DS*	57.30	53.70	50.75	53.00
907-0607	ST810DS*	71.30	59.80	56.05	53.00

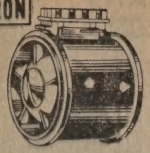
Capacitor. 1.0 μF, 220 VAC, required for SL682YS and ST682YS.

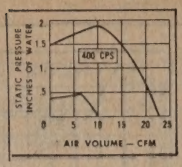
Capacitor. 0.39 μF, 220 VAC required for SL810DS and ST810DS.

■Recognized Under the Component Program of Underwriter's Laboratories, Inc.

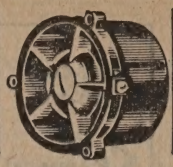
Rotron Military Cooling Fans

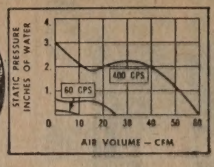
AXIMAX® MINIATURE FANS FOR AIRBORNE COOLING



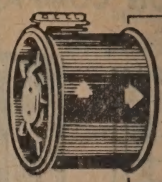


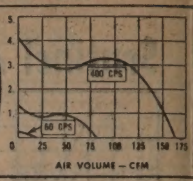
AXIMAX 1





AXIMAX 2





AXIMAX 3

- For Aircraft and Missile Cooling Applications
- 115 or 200 VAC, 60 or 400 Hz
- Constant or Variable Speed

Vane-axial fans for airborne cooling where fan size and weight are critical. Recommended for use where space is too limited to permit the use of a propeller-type fan. Choice of 115 or 200 VAC, 60 or 400 Hz, 1 or 3-phase installations. Constant-speed motor or *Altivar® design that increases shaft speed inversely with density, for constant cooling at all altitudes.

Lubricated for maximum ambient temperature of 125° C. Running life, 10,000 hours at 72° C ambient at 14.7 psi, at 20,000 rpm. Airflow is parallel to motor shafts; can be reversed by turning fan end-for-end (Aximax 1 and Aximax 3 only). Meet applicable MIL specifications. †60 Hz only; all others for 400 Hz. Single-phase fans require capacitors (order appropriate type at right). Av. shpg. wt., 1 lb.

AXIMAX 1. Clamping rims at end of venturi for easy mounting (use Synclamps at right). Terminal block connections. Actual wt., 4 oz.
AXIMAX 2. Three mounting lugs, solder terminals. Actual wt., 4½ oz.
AXIMAX 3. Clamping rims at end of venturi for mounting with Synclamps, terminal block power connections. Actual wt., 14 oz.

AXIMAX 1 (1½x1½″ diameter)

Stock No.	Mfr's Type	Volts	Phase	rpm	cfm	EACH 1-9	10-24	25-49	50-Up
907-0850	464YS	115	1	11,500	11	60.45	54.65	48.05	45.35
907-0904	623YS	115	1	22,750	23	60.45	54.65	48.05	45.35
907-0835	367JS	200	3	22,500	23	60.45	54.65	48.05	45.35
AXIMAX 2 (1½x2″ diameter)									
907-0836	367JS	200	3	20,500	59	51.30	46.35	40.80	38.45
907-0838	368YS	115	1	20,000	58	51.30	46.35	40.80	38.45
907-0846	*415YS	115	1	11,000	32	51.30	46.35	40.80	38.45
907-0841	*395JS	200	3	11,000	32	51.30	46.35	40.80	38.45
907-0851	464YS	115	1	11,000	30	51.30	46.35	40.80	38.45
907-0902	†606NS	115	1	3,150	8	54.30	49.35	43.80	41.45
AXIMAX 3 (2⅝6x3″ diameter)									
907-0832	341JS	200	3	22,000	157	70.00	63.30	55.65	52.50
907-0900	528YS	115	1	22,500	157	70.00	63.30	55.65	52.50
907-0839	*387JS	200	3	13,900	95	70.00	63.30	55.65	52.50
907-0843	*400VS	115	1	11,000	76	70.00	63.30	55.65	52.50
907-0849	422DS	115	1	11,300	78	70.00	63.30	55.65	52.50
907-0401	†599NS	115	1	3,500	23	73.00	66.30	58.65	55.50

SYNCLAMPS FOR MOUNTING AXIMAX 1 AND AXIMAX 3

907-1142. Type 24254 Synclamp. (3 required per fan.) ..... Each .60
907-1013. Type 14015 Reverse Synclamps. (3 required per fan.) ..... Each .60

CAPACITOR REQUIREMENTS FOR SINGLE-PHASE AXIMAX

Requires oil-impregnated paper dielectric. 220 VAC for 115-volt fans; 330 VAC for 200-volt fans. See index for capacitors.

Fan Types 464YS and 415YS require 0.15 μF capacitor.

Fan Type 623YS requires 0.25 μF capacitor.

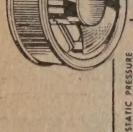
Fan Types 368YS, 400YS, and 599NS require 0.5 μF capacitor.

Fan Types 606NS and 422DS require 1.0 μF capacitor.

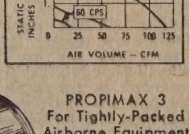
Fan Type 528YS requires 2.0 μF capacitor.

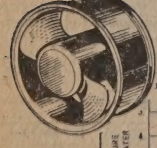
PROPIMAX® MINIATURE HIGH-AIR-PERFORMANCE TUBE-AXIAL FANS

Offers high air performance for their size and weight. Excellent for cooling small airborne equipment in limited-space area. *Altivar® types provide constant cooling at all altitudes. Max. ambient temp.: 125° C. Life: 10,000 hours at 72° C, 14.7 psi. Clamping rims (use Synclamps, below). Terminal block connections. Meet applicable MIL specs. †60 Hz; others 400 Hz. Av. shpg. wt., 1 lb.

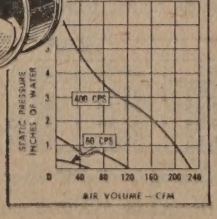


PROPIMAX 2
For Missiles and Airborne Equipment





PROPIMAX 3
For Tightly-Packed Airborne Equipment



PROPIMAX 2 (1½x3¼″ diameter; actual wt., 6½ oz.)

Stock No.	Mfr's Type	Volts	Phase	rpm	cfm	EACH 1-9	10-24	25-49	50-Up
907-0834	366ZS	115	1	21,000	120	66.80	56.45	52.65	50.10
907-0837	367JS	200	3	20,500	118	66.80	56.45	52.65	50.10
907-0842	*395JS	200	3	12,500	67	66.80	56.45	52.65	50.10
907-0847	*415ZS	115	1	12,300	68	66.80	56.45	52.65	50.10
907-0852	464ZS	115	1	11,000	62	66.80	56.45	52.65	50.10
907-0903	†606NS	115	1	3,100	18	69.80	59.45	55.65	53.10

PROPIMAX 3 AND 3B (2x3¾″ diameter; actual wt., 16 oz.)
Propimax 3 has 2 blades, 3B has 4 blades. All are 3B except 341JS and 409ZS.

907-0833	341JS	200	3	22,500	220	71.25	59.00	55.25	52.55
907-0845	409ZS	115	1	22,500	220	71.25	59.00	55.25	52.55
907-0859	473JS	200	3	11,000	190	71.25	59.00	55.25	52.55
907-0844	*400ZS	115	1	6,000	117	71.25	59.00	55.25	52.55
907-0840	*387JS	200	3	8,200	140	71.25	59.00	55.25	52.55
907-0909	754DS	115	1	11,000	190	71.25	59.00	55.25	52.55
907-1000	†763ZS	115	1	3,450	58	74.25	62.00	58.25	55.55

907-1142. Type 24254 Synclamp. (3 required per fan) ..... Each .60
907-1013. Type 14015 Reverse Synclamps. (3 per fan) ..... Each .60

CAPACITOR REQUIREMENTS FOR SINGLE-PHASE PROPIMAX FANS

Require oil-impregnated paper dielectric. 220 VAC for 115-volt fans. 330-VAC for 200-volt types.
For Fan Types 415ZS and 464ZS. 0.15 μF capacitor.

For Fan Types 400ZS and 763ZS. 0.5 μF capacitor.

For Fan Type 366ZS. Requires 0.75 μF capacitance.

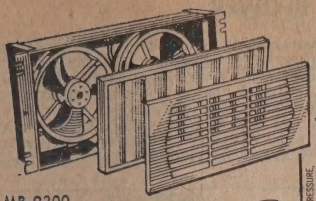
For Fan Type 606NS. 1.0 μF capacitor.

For Fan Type 754DS. 2.0 μF capacitor.

For Fan Type 409ZS. Requires 2.5 μF capacitance.

Make Allied Your Headquarters for Everything in Electronics

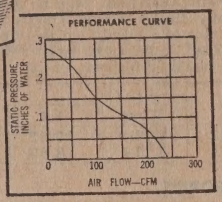
Rotron Panel Fans and Accessories

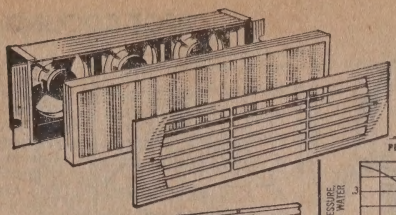


MB 9200

Built with Quality Parts for Low Noise, Better Overall Cooling, and Low Maintenance

Easy Mounting—No Sheet-Metal Work Required

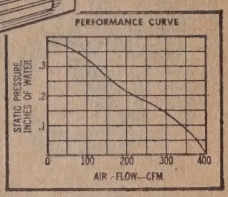




MB 9100

Requires No Sheet-Metal in Mounting

Quality Constructed Panel Has Life Expectancy of 10 Years



MODULAIR 400-cfm COOLING PANEL

- Two Type 103 Feather Fans in Parallel for Reliability
- Latest Advances in Fan Design for Better Performance
- For Use with Washable Porous Scott Foam Filter

MODEL MB 9200, TYPE 100. High-performance cooling panel for use in a variety of applications. Specially designed for flushing standard 19" EIA relay racks where component density and airflow resistance are low. For easy mounting, the unit is built so that no sheet-metal operations are required. Incorporates two powerful Type 103 Feather Fans in parallel which turn at 3380 rpm. This pair together provides 400 cubic feet per minute free delivery. Includes the latest advances in fan design for low noise and better overall cooling. Very quiet noise level of only 56.6 dB. Power consumption is only 40 watts. Quality construction throughout to virtually eliminate maintenance for years. Designed for use with a low-impedance, washable porous Scott foam filter enclosed in a rigid aluminum frame. Size, 8¾" high, 3½" deep. 115 volts, 50-60 Hz AC. Order filter, finger guards and mounting clips below.

Stock No.	Wt., Lbs.	EACH 1-4	5-9	10-24	25-49	50-Up
907 X 0207	19	79.10	75.60	72.10	70.00	67.20

MODULAIR 240-cfm COOLING PANEL

- Three 3200-rpm Mark IV Muffin Venturi Fans
- Flushes Standard 19" EIA Relay Racks
- For Use with Porous Scott Foam Filter

MODEL MB 9100, TYPE 100. Sturdy construction and quality fans make this a reliable cooling panel for use in a variety of commercial and industrial applications. Flushes standard 19" EIA relay racks where component density and air flow resistance are low. Built so that no sheet-metal operations are required in mounting. Incorporates three powerful 3200-rpm Mark IV Muffin Venturi Fans in parallel to provide 240 cubic feet per minute free delivery of clean, filtered air. Designed for high efficiency, low noise and generally fine performance. Noise level is a low 52.6 dB. Engineered to have a long life expectancy of 10 years at ambient temperature of 70°F. Low power consumption of just 42 watts. For use with low-impedance, washable porous Scott foam filter in a rigid aluminum frame. Size: 5¼" high, 3½" deep. For 115 volts, 50-60 Hz AC. For filter, finger guards, see below.

Stock No.	Wt., Lbs.	EACH 1-4	5-9	10-24	25-49	50-Up
907 X 0206	19	61.10	58.50	55.60	54.10	52.00

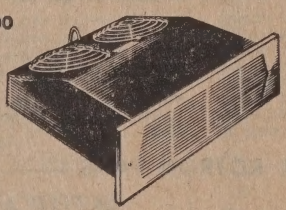
ACCESSORIES

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH 1-9	10-24	25-49	50-Up
907-1016	14651	Finger Guard (2)	¼	3.65	3.25	2.90	2.70
907 X 1147	24361-3	**Dust Filter.** Shpg. wt., ¼ lb.					Each 6.00
907-1015	14611	**Mounting Clips** (6 required.) Wt., 1 oz.					Ea. .15

ACCESSORIES

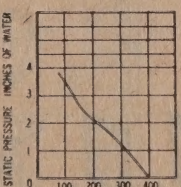
Stock No.	Mfr's Type	Description	
907 X 1145	24361-1	**Dust Filter.** Shpg. wt., ¼ lb.	Each 5.00
907 X 1133	20132-2	**Finger Guard.** (3 required.) Wt., 1 oz.	Ea. .70

TWINPAX® MB5100, Type 100 400-cfm COOLING PANEL FOR 19" EIA-NOTCHED RELAY RACKS



- With Washable Aluminum Filter
- Equipped with Two Feather Fans
- Only 5¼" Panel Height Required for mounting
- Pre-Lubricated Motor

New engineering designs went into this cooling panel to provide it with maximum effectiveness. At the heart of the panel are twin Rotron Feather Fans which deliver up to 400 cubic feet of filtered air per minute. The special parallel position of the fans direct the air to minimize dead-spots or eddying to assure cooling effectiveness. Built to provide easy mounting to any standard 19" EIA notched rack with no special sheet metal modifications.



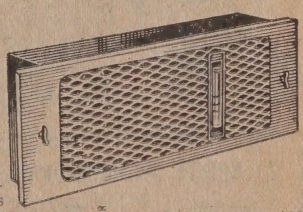
The motors have features that assure long and reliable service. The two single-phase multi-slot induction motors are pre-lubricated and use precision ball bearings to provide years of maintenance-free operation. Equipped with a permanent aluminum washable filter. Wide ambient temperature range from −55°C to +65°C.

Shell of black steel; chrome-plated grill; zinc-plated fan guards. Very quiet operation, 55 dB. Dissipates 1.9 kW of heat at 15°F rise. Capacitor, cord. 5¼x19⅛x13²³⁄₃₂". 115 V, 50-60 Hz AC. Actual wt. 13 lbs. Shpg. wt. 17 lbs.

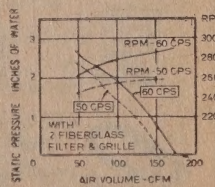
907 X 0205. 1-9.....Each 96.90 10-24.....Each 87.85
25-49.....Each 79.75 50-Up.....Each 71.80
907-1031. 18440 Filtercoat.....Can 1.25
907-1128. 19699 Guard. 1-9... Each 3.30 10-24.....Each 3.00
25-49..... Each 2.70 50-Up.....Each 2.50

RF CABINET COOLING PANEL

- Full 2" Thick Oil-Wetted Filter for Dust-Free Air
- Unique "Filter Pilot" Warns of Needed Replacement
- Consumes 40 Watts
- Upward-Forced Air



Specially designed for flushing 19-inch enclosed racks of any height with clean, filtered air. The panel forces air upward through the cabinet for better cooling than natural convection alone. Installation at the bottom of the rack will ensure forced ventilation of all panels mounted above it. Dissipates 1 kilowatt of heat with 20°F rise. Operating temperature range to 125°F. Noise level only 54 dB.



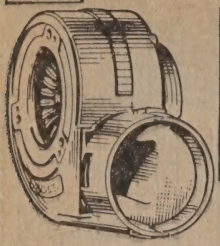
Equipped with a full size 2-inch thick oil-wetted fiberglass filter easily removed with 2 wing screws. Filter will clean the full volume of 170 cfm passed through the panel. Unique filter pilot warns when the filter is dirty enough for replacement.

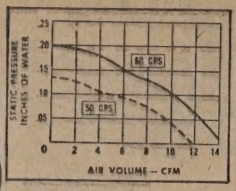
Shell of steel with black enamel; chrome-plated grill. Single-phase shaded-pole, AC motor consumes 40 watts. For lubrication, contains self-aligned sleeve bearings with large felt-filled oil reservoirs which need maintenance once every 6 months with SAE-20 oil. Overall size, 7x19x8⅜". 115 V, 50-60 Hz AC. Order additional filters below. Actual wt. 7.3 lbs. Shpg. wt. 9½ lbs.

907-0216. 1-9.....Each 60.00
10-24.....Each 51.00 25-49.....Each 49.00
50-Up.....Each 47.20
907-1010. 2783 Filters.....Package of 6 for 9.40

Rotron Blower, Switches, and Accessories

SPOT-COOLING 14-CFM nugget BLOWER





- Compact
- 14 cfm Free Delivery

Provides stable cooling for specific component or hot spot in electronic equipment. For test instruments, transmitters, TV cameras, office machinery, tape recorders. Newly designed with a centraxial wheel for greater efficiency and volume to pressure characteristics. Rugged plastic housing rotates to three positive locking positions. May be mounted from inlet, end of motor, or outlet using optional flange, below. Ducting to inlet or from outlet. 3200-rpm induction motor draws 7 watts; weighs 0.6 lb. *Type NTP2 without housing. Size 3 1⁹⁄₃₂x4 1⁄₃₂x2 1⁄₄". Accessories below. ■U.L. Recognized. For 115 VAC, 50-60 cps AC. Single phase. Shpg. wt. 14 oz.

Stock No.	Mfr's Type	EACH 1-9	10-24	25-49	50-99	100-Up
907-0212	NTH2	19.95	18.05	16.20	15.15	14.35
907-0213	NTP2*	18.85	16.95	15.10	14.05	13.25

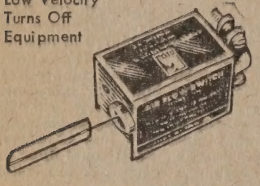
ACCESSORIES

Stock No.	Type	Description	EACH
907-1023	17181	Housing	1.75
907-1025	17471	Outlet Flange	1.00
907-1024	17469	Inlet Rim	.70
907-1027	17597	Inlet Clamp	.70

Stock No.	Type	Description	EACH
907-1028	17597-1	Outlet Clamp	.70
907-1029	19803	Threaded Inserts for Inlet	3 for .25
907-1026	17555	Plug and Cord	.70

AIRFLOW INTERLOCK SWITCHES

Low Velocity Turns Off Equipment



MODEL 2A AIRFLOW INTERLOCK SWITCH WITH VANE

SPDT air-velocity-actuated switch protects your equipment against fan failure. Low velocity in fan air-duct opens switch and turns off equipment; correct velocity turns equipment on. Single screw mounting. Switch supplied with any one of 8 different vanes. Rating: 5 amps at 250 volts AC. ‡Vane Type Number indicates maximum feet-per-minute airflow increase that will actuate vane. Av. shpg. wt., 14 oz.

Velocities in ft./minute. 10% tolerance, except *±15%; †±20%.

Vane Type No.	Vertical Airstream				Horizontal Airstream			
	Up-Airstream		Down-Airstream		Arm Horizontal		Arm Vert. Vane Down	
	Actuate	De-actuate	Actuate	De-actuate	Actuate	De-actuate	Actuate	De-actuate
1000	785	700	Unusable	Unusable	735	630	750	615*
1350	1125	1030	720†	685†	1025	970	1000	890
1600	1340	1212	1040*	865†	1215	1095	1225	1130
1800	1550	1450	1280	1115*	1460	1335	1500	1375
2000	1800	1675	1595*	1425*	1790	1580	1760	1580
2450	2340	2120	2125	1950	2120	1867	2270	2035
3000	2925	2700	2780	2395	2690	2420	2880	2570
4000	4000	3680	3760	3565	3720	3485	3870	3520

ADDITIONAL VANES

Stock No.	Vane Type‡	Vane Lgth.	Stock No.	Vane Type‡	Vane Lgth.
907-1001	1000	2 27⁄32"	907-1005	2000	1 7⁄16"
907-1002	1350	2 7⁄32"	907-1006	2450	1 1⁄8"
907-1003	1600	1 15⁄16"	907-1007	3000	1 5⁄16"
907-1004	1800	1 21⁄32"	907-1009	4000	3⁄4"

Each.....1.2

Stock No.	Vane Type‡	Vane Lgth.	EACH 1-9	10-24	25-49	50-Up
907-0805	1000	2 27⁄32"	8.90	8.50	8.20	8.00
907-0806	1350	2 7⁄32"	8.90	8.50	8.20	8.00
907-0807	1600	1 15⁄16"	8.90	8.50	8.20	8.00
907-0808	1800	1 21⁄32"	8.90	8.50	8.20	8.00
907-0809	2000	1 7⁄16"	8.90	8.50	8.20	8.00
907-0810	2450	1 1⁄8"	8.90	8.50	8.20	8.00
907-0811	3000	1 5⁄16"	8.90	8.50	8.20	8.00
907-0812	4000	3⁄4"	8.90	8.50	8.20	8.00

INTERLOCK SWITCH DETERMINATOR KIT

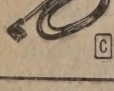
Kit contains all that is needed to determine experimentally which Model 2A Airflow Interlock Switch has the correct size vane to provide the right sensitivity for a given application. Complete with Model 2A switch and a set of 8 actuating vanes (as listed in table above). By interchanging these vanes on the switch, it is possible to quickly determine which has the required sensitivity. The vanes can be interchanged by simple snap-on and the switch and vane assembly chosen may be retained for final installation. In some circumstances a pair of pliers is needed to bend the vane arm for locating the point of snap-on of switch mechanism. In plastic box.

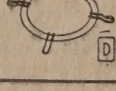
907-0804. Wt. ½ lb. 1-9.....Each 21.00
10-24.....Each 18.90 25-49.....Each 18.00
50-Up.....Each 17.50

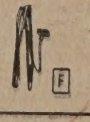
ACCESSORIES FOR ROTRON FANS

SPRITE ACCESSORIES

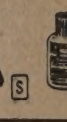
MUFFIN, SENTINEL, WHISPER, CENTAUR FAN ACCESSORIES







SKIPPER ACCESSORIES



Stock No.	Mfr's Type	Fig.	Device	EACH
907-1140	22509	A	Oiling Kit	3.50
907-1141	22509-4	B	Oil	2.00
907-1137	20787	C	Plug and Cord	.95
907-1131	20049	D	Guard	.75
907-1133	20132-2	E	Finger Guard	.70
907-1023	16415	F	Plug and Cord Assembly	.70
907-1012	13996	G	Mounting Clips (Set of 2)	.30
907-1019	16238	H	Spiral Grille	1.00
907-1018	A15449	J	Filter Assembly	3.00

Stock No.	Mfr's Type	Fig.	Device	EACH
907-1125	19342	K	Ring	.50
907-1126	19561-2	L	Mounting Plate	.50
907-1134	20575	M	Clamp	.50
907-1136	20757	N	Grille	.45
907-1032	18944	P	Plug and Cord	.75
907-1135	20576	R	Solder Boot	.15
907-1123	19263	S	Oiling Kit	3.50
907-1124	19263-4	T	Oil	2.00

■Recognized Under the Component Program of Underwriters' Laboratories, Inc.

Attractive Quality-Built Metal Products by BUD

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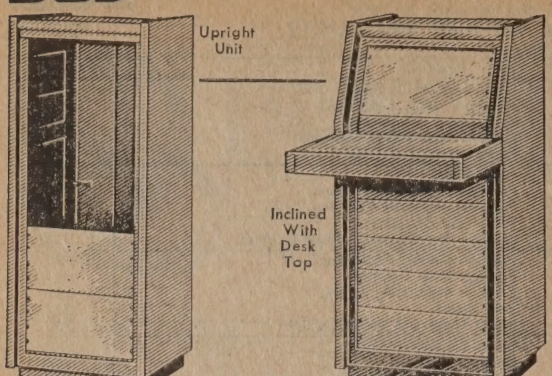
BUD Series 2000 Cabinet Racks and Accessories



UPRIGHT CABINET RACKS

Combines dramatic appearance with rugged construction. Basic frame is all-welded construction with 14 gauge steel members. 18 gauge steel door, sides and top. "U" braces are welded to sides of frame for extra strength and act as mounting for vertical rails, which may be horizontally adjusted. Front panel mounting rails are tapped 10-32. Rear rails are pierced 9-23. Caster bracket in base is drilled for casters. Completely assembled and ready for use. *Panel space. SPECIFY GRAY OR BLUE FINISH.

Stock No.	Mfr's Type	Ht. In.	P.S.* In.	Wt. Lbs.	EACH 1-3	4-6	7-9	10-Up
736CF3800	E-2000	20¼	21	115	135.10	121.60	108.10	101.35
736CF3801	E-2001	40¾	31½	152	167.10	150.40	133.70	125.35
736CF3802	E-2002	44¼	35	160	176.35	158.70	141.10	132.25
736CF3803	E-2003	51¼	42	167	185.65	167.10	148.50	139.25
736CF3804	E-2004	61¾	52½	186	206.40	185.75	165.10	154.80
736CF3805	E-2005	70½	61¼	210	229.10	206.20	183.30	171.85
736CF3806	E-2006	79¼	70	225	254.55	229.10	206.65	190.90
736CF3807	E-2007	88	78¾	255	277.95	250.15	222.35	208.45
736CF3808	E-2008	30¼	21	150	159.55	143.60	127.65	119.65
736CF3809	E-2009	40¾	31½	170	185.30	166.75	148.25	139.00
736CF3810	E-2010	44¼	35	180	195.55	176.00	156.45	146.65
736CF3811	E-2011	51¼	42	185	205.90	185.30	164.70	154.45
736CF3812	E-2012	61¾	52½	200	228.55	205.70	182.85	171.40
736CF3813	E-2013	70½	61¼	230	254.00	228.60	203.20	190.50
736CF3814	E-2014	79¼	70	245	282.15	253.95	225.70	211.60
736CF3815	E-2015	88	78¾	257	308.00	277.20	246.40	231.00

LOUVERED SIDES AND DOOR

736CF3816	E-2016	30¼	21	115	140.80	126.70	112.65	105.60
736CF3817	E-2017	40¾	31½	152	174.25	156.85	139.40	130.70
736CF3818	E-2018	44¼	35	160	184.75	166.30	147.80	138.55
736CF3819	E-2019	51¼	42	168	195.25	175.75	156.20	146.45
736CF3820	E-2020	61¾	52½	186	223.15	200.85	178.50	167.35
736CF3821	E-2021	70½	61¼	210	242.95	218.65	194.35	182.20
736CF3822	E-2022	79¼	70	225	269.80	242.80	215.85	202.35
736CF3823	E-2023	88	78¾	255	293.05	263.75	234.45	219.80
736CF3824	E-2024	30¼	21	150	165.35	148.80	132.30	124.00
736CF3825	E-2025	40¾	31½	170	199.80	179.80	159.85	149.85
736CF3826	E-2026	44¼	35	180	211.15	190.05	168.90	158.35
736CF3827	E-2027	51¼	42	185	222.45	200.20	177.95	166.85
736CF3828	E-2028	61¾	52½	200	247.25	222.55	197.80	185.45
736CF3829	E-2029	70½	61¼	230	274.85	247.35	219.90	206.15
736CF3830	E-2030	79¼	70	245	305.20	274.70	244.15	228.90
736CF3831	E-2031	88	78¾	257	332.65	299.40	266.15	249.50

INCLINED CABINETS

Positioned 20 degrees off vertical for extra viewing comfort. Front vertical and inclined panel section, as well as rear are adjustable from front to rear. All models have same following specifications: Height, 51¼"; width, 24 3/16"; outside depth, 23⅞"; clear inside depth, 20½"; weight, 160 lbs. *Inclined panel space. †Vertical panel space. SPECIFY GRAY OR BLUE FINISH.

Stock No.	Mfr's Type	* In.	† In.	EACH 1-3	4-6	7-9	10-Up
736CF7000	SE-2064	10½	29¾	184.05	165.65	147.25	138.05
736CF7001	SE-2065	15¾	24½	195.10	175.60	156.10	146.35
736CF7002	SE-2066	17½	22¾	195.10	175.60	156.10	146.35

LOUVERED SIDES AND REAR DOORS

Same as above, but for welded frame.

736CL7003	SE-2067	10½	29¾	197.70	177.95	158.15	148.30
736CF7004	SE-2068	15¾	24½	209.30	188.35	167.45	157.00
736CF7005	SE-2069	17½	22¾	209.30	188.35	167.45	157.00

ADD-A-RACK ENCLOSURES FOR INCLINED CABINETS

Each assembly consists of a frame, top, bottom, rear door and cow ings. Any number of racks may be combined for optimum width SPECIFY GRAY OR BLUE FINISH.

Stock No.	Mfr's Type	For Cabinet	Wt. Lbs.	EACH 1-3	4-6	7-9	10-Up
736CF0800	ASE-2084	SE-2064	115	155.75	140.20	124.60	116.8
736CF0801	ASE-2085	SE-2065	115	166.15	149.55	132.90	124.6
736CF0802	ASE-2086	SE-2066	120	166.15	149.55	132.90	124.6
736CF0803	ASE-2087	SE-2067	115	157.55	141.80	126.05	117.1
736CF0804	ASE-2088	SE-2068	115	170.20	153.20	136.15	127.6
736CF0805	ASE-2089	SE-2069	120	170.20	153.20	136.15	127.6

UPRIGHT CABINET DOORS

SPECIFY GRAY OR BLUE FINISH. P. S.: Panel Space.

Stock No.	Mfr's # (Plain)	P.S. In.	Wt. Lbs.	EACH 1-3	4-6	7-9	10-Up
736CF3900	E-9000	21	8	20.20	18.20	16.15	15.15
736CF3901	E-9001	31½	11	24.95	22.45	19.95	18.70
736CF3902	E-9002	35	12	26.30	23.70	21.05	19.75
736CF3903	E-9003	42	16	27.65	24.90	22.10	20.75
736CF3904	E-9004	52½	20	30.85	27.75	24.70	23.15
736CF3905	E-9005	61¼	22	34.05	30.65	27.25	23.55
736CF3906	E-9006	70	24	39.85	35.90	31.90	30.00
736CF3907	E-9007	78¾	26	41.25	37.15	33.00	30.95

INCLINED CABINET DOORS

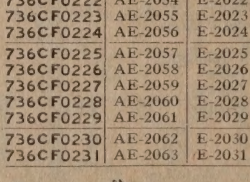
SPECIFY GRAY OR BLUE FINISH. V. S: Vertical Space.

Stock No.	Mfr's # (Plain)	V.S. In.	Wt. Lbs.	EACH 1-3	4-9	7-9	10-Up
736CF3908	E-9008	29¾	11	25.05	22.55	20.05	18.90
736CF3909	E-9009	24½	10½	23.30	21.00	18.65	17.50
736CF3910	E-9010	22¾	9	22.80	20.50	18.25	17.10

UPRIGHT ADD-A-RACK ENCLOSURES

SPECIFY GRAY OR BLUE FINISH.

Stock No.	Mfr's Type	For Use With	Wt. Lbs.	EACH 1-3	4-6	7-9	10-Up
736CF0200	AE-2032	E-2000	90	114.95	103.45	91.95	86.20
736CF0201	AE-2033	E-2001	110	134.65	121.20	107.75	101.00
736CF0202	AE-2034	E-2002	113	141.10	127.00	112.90	105.85
736CF0203	AE-2035	E-2003	115	147.55	132.80	118.05	110.65
736CF0204	AE-2036	E-2004	145	161.25	145.15	129.00	120.95
736CF0205	AE-2037	E-2005	148	180.00	162.00	144.00	135.00
736CF0206	AE-2038	E-2006	152	200.50	180.45	160.40	150.40
736CF0207	AE-2039	E-2007	158	215.35	193.80	172.30	161.50
736CF0208	AE-2040	E-2008	120	128.55	115.70	102.85	96.40
736CF0209	AE-2041	E-2009	130	150.65	135.60	120.50	113.00
736CF0210	AE-2042	E-2010	135	157.65	141.90	126.10	118.25
736CF0211	AE-2043	E-2011	138	164.55	148.10	131.65	123.40
736CF0212	AE-2044	E-2012	142	179.65	161.70	143.70	134.75
736CF0213	AE-2045	E-2013	164	200.80	180.70	160.65	150.60
736CF0214	AE-2046	E-2014	168	223.65	201.30	179.90	167.75
736CF0215	AE-2047	E-2015	172	247.50	222.75	198.00	185.65
736CF0216	AE-2048	E-2016	90	119.55	107.60	95.65	89.65
736CF0217	AE-2049	E-2017	110	138.50	124.65	110.80	103.90
736CF0218	AE-2050	E-2018	113	145.10	130.60	116.10	108.85
736CF0219	AE-2051	E-2019	115	151.70	136.55	121.35	113.80
736CL0220	AE-2052	E-2020	145	165.75	149.20	132.60	124.30
736CF0221	AE-2053	E-2021	148	185.10	166.60	148.10	138.85
736CF0222	AE-2054	E-2022	152	205.75	185.20	164.60	154.30
736CF0223	AE-2055	E-2023	158	221.40	199.25	177.10	166.05
736CF0224	AE-2056	E-2024	120	130.20	117.20	104.15	97.65
736CF0225	AE-2057	E-2025	130	152.95	137.65	122.35	114.70
736CF0226	AE-2058	E-2026	135	160.85	144.75	128.95	120.65
736CF0227	AE-2059	E-2027	138	168.70	151.85	134.95	126.55
736CF0228	AE-2060	E-2028	142	184.10	165.70	147.30	138.10
736CF0229	AE-2061	E-2029	164	205.75	185.20	164.60	154.30
736CF0230	AE-2062	E-2030	168	229.45	206.50	183.55	172.10
736CF0231	AE-2063	E-2031	172	253.70	228.35	202.95	190.30



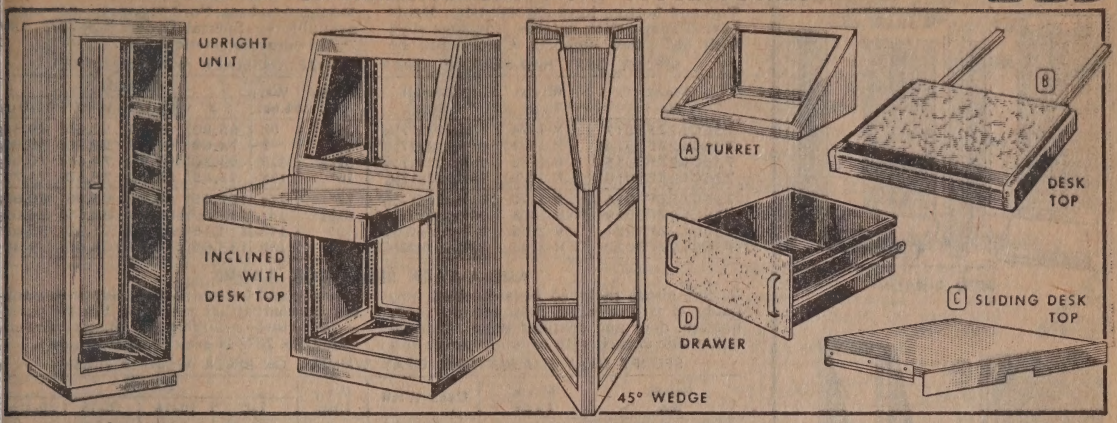
DESK TOPS

May be installed on any Series 2000 cabinet rack. Wood-grained Formica. 24 3/16x19½x3 1/16". *Fits Series 2000 unit; †Supporting channel.

Stock No.	Mfr's Type	*Depth In.	† In.	Wt. Lbs.	EACH 1-3	4-6	7-9	10-Up
736F3700	DT-2960	22	21⅜	22	43.75	39.40	35.00	32.80
736F3701	DT-2962	25½	24¾	23	45.10	40.60	36.10	33.85

Metal Racks, Accessories and Wedges

SERIES 60 CABINET RACKS AND ACCESSORIES



UPRIGHT CABINET RACKS

Welded frame of 14-gauge steel. Sides and rear door of 16-gauge steel. Door mounts to open from either left or right. Adjustable vertical panel-mounting rails. Front rails are drilled and tapped at 10-32 W.E. spacing; rear rails are drilled with universal spacing. 24⅛" wide, 23¾" deep inside, except †20¼". Top opening 18½" wide, 17" deep on types having 22" outside depth, 20½" deep on others. *Panel space. Depth, 25½", except §22". SPECIFY GRAY OR BLUE FINISH.

Stock No.	Type 60-	Ht. In.	P.S.* In.	Wt., Lbs.	EACH 1-3	4-6	7-9	10-Up
736CZF8703	2300†	29⅝§§	21	118	128.95	116.05	103.15	96.70
736CZF8704	2301†	40⅛§§	31½	156	159.60	143.65	127.70	119.70
736CZF8705	2302†	50⅝§§	42	173	177.25	159.55	141.80	132.95
736CZF8706	2303†	61⅛§§	52½	197	196.90	177.20	157.50	147.70
736CZF8707	2304†	69⅞§§	61¼	220	218.70	196.85	174.95	164.05
736CZF8708	2305†	78⅝§§	70	235	243.10	218.80	194.50	182.35
736CZF8709	2307	29⅝	21	156	152.25	137.05	121.80	121.80
736CZF8710	2308	40⅛	31½	176	176.95	159.25	141.55	132.70
736CZF8711	2309	50⅝	42	185	196.55	176.90	157.25	147.40
736CZF8712	2310	61⅛	52½	211	218.20	196.40	174.55	163.65
736CZF8713	2311	69⅞	61¼	240	242.55	218.30	194.05	181.90
736CZF8714	2312	78⅝	70	256	269.45	242.50	215.55	202.10
736CZF8715	2313	87⅜	78¾	267	210.10	189.10	168.10	157.60

PERFORATED TOPS (Specify Smooth Blue or Smooth Gray) Av., 18 lbs.

Stock No.	Type 60-	WxD	Fits Rack with overall depth of	EACH 1-3	4-6	7-9	10-Up
736CF8725	2370	21⅝x17"	22"	7.90	7.10	6.30	5.95
736CF8728	2371	21⅝x20½"	25½"	8.30	7.45	6.65	6.25

FULLY ASSEMBLED INCLINED PANEL RACKS

Accept 19" panel and optional desk top. Front rails drilled and tapped at 10-32 W.E. spacing. Welded frame of 14-gauge steel; sides and door of 16-gauge steel. Inclined panel slanted 20°. 50⅝" high, 24⅛" wide, 22" deep outside, 20¼" deep inside. *Inclined top panel height; †Vertical bottom panel height. SPECIFY GRAY OR BLUE FINISH. Wt., 165 lbs.

Stock No.	Type 60-	I.P.* In.	V.P.† In.	EACH 1-3	4-6	7-9	10-Up
736CZF8717	2330	10½	29¾	193.30	173.95	154.65	145.00
736CZF8719	2331	15¾	24½	204.85	184.35	163.90	153.65
736CZF8721	2332	17½	22¾	204.85	184.35	163.90	153.65

SERIES 60 WEDGES

Standard 45° wedge units designed to create custom consoles or any configuration with Series 60 Panel Cabinet Racks. SPECIFY GRAY OR BLUE FINISH. Av. shpg. wt., 125 lbs.

45° WEDGES FOR SERIES 60 UPRIGHT RACKS

Stock No.	Type 60-	Panel Space	Depth	Wedge Width	EACH 1-3	4-6	7-9	10-Up
736CF8803	8400	21"	22"	18⅜2"	88.80	79.90	71.05	66.60
736CF8804	8401	31½"	22"	18⅜2"	102.80	92.50	82.25	77.10
736CF8805	8402	42"	22"	18⅜2"	112.00	100.80	89.60	84.00
736CF8806	8403	52½"	22"	18⅜2"	121.20	109.10	96.95	90.90
736CF8807	8404	61¼"	22"	18⅜2"	137.40	123.65	109.90	103.05
736CF8808	8405	70"	22"	18⅜2"	150.40	135.35	120.30	112.80
736CF8809	8406	78¾"	22"	18⅜2"	162.80	146.50	130.25	112.10
736CF8810	8407	21"	25½"	20⅛4"	97.40	87.65	77.90	73.05
736CF8811	8408	31½"	25½"	20⅛4"	113.60	102.25	90.90	85.20
736CF8812	8409	42"	25½"	20⅛4"	126.60	113.95	101.30	94.95
736CF8813	8410	52½"	25½"	20⅛4"	137.40	123.65	109.90	103.05
736CF8814	8411	61¼"	25½"	20⅛4"	152.10	136.90	121.70	114.10
736CF8815	8412	70"	25½"	20⅛4"	169.90	152.90	135.90	127.45
736CF8816	8413	78¾"	25½"	20⅛4"	188.30	169.45	150.65	141.25

45° WEDGES FOR SERIES 60 INCLINED RACKS. Av. wt. 125 lbs.

Stock No.	Type 60-	Panel Space	Wedge Width	EACH 1-3	4-6	7-9	10-Up
736CF8825	8430	29¾"	18⅜2"	130.40	117.35	104.30	97.80
736CF8826	8431	24½"	18⅜2"	139.60	125.65	111.70	104.70
736CF8827	8432	22¾"	18⅜2"	139.60	125.65	111.70	104.70

SERIES 60 ACCESSORIES

A STEEL TURRETS. Fit 19" rack panels. 16-ga. steel. Mtg. rails have universal hole spacing. Panel space (front, bottom, rear): Type 2364—17½", 14", 8¾"; Type 2365—12¼", 10½", 7"; Type 2366—21", 17½", 10½". Panel spaces recessed ⅜". Type 2364, 17 lbs.; Type 2365, 14½ lbs.; Type 2366, 20 lbs.

SPECIFY GRAY OR BLUE FINISH

Stock No.	Type 60-	Outside Size H	W	D	EACH 1-3	4-6	7-9	10-Up
736CX8520	2364	12⅝16"	22⅛16"	17⅞"	41.05	36.95	32.85	30.80
736CX8521	2365	10⅜16"	22⅛16"	14⅜"	34.25	30.85	27.40	25.70
736CX8522	2366	14⅛"	22⅛16"	20⅛16"	43.15	38.85	34.50	32.35

B DESK TOPS. Light-gray wood-grained formica top. Metal sides and cowl. Support over 200 lbs. 3⅛16x24⅛16" wide. Choice of Gray or Blue finish. Shpg. wt., 22 lbs.

SPECIFY GRAY OR BLUE FINISH

Stock No.	Mfr's Type	Depth	EACH 1-3	4-6	7-9	10-Up
736CU8517	60-2360	22"	41.70	37.55	33.35	31.30
736CU8518	60-2362	25½"	43.05	38.75	34.45	32.30

C SLIDING DESK TOPS. Light-gray formica surface. Support 75 lbs. Need only 1¾" panel height. SPECIFY SMOOTH GRAY OR SMOOTH BLUE FINISH. Shpg. wt., 8 lbs.

Stock No.	Mfr's Type	Width	Depth	Panel	EACH 1-3	4-6	7-9	10-Up
736CF8720	60-2361	16⅞"	15⅛"	19x1¾"	22.45	20.20	17.95	16.85

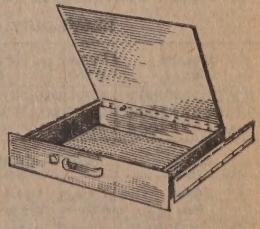
D TYPE 60-2368 DRAWER. Roll-out drawer slides out 16 inches on friction-free nylon rollers. 16-gauge steel with 11-gauge 19" panel and brackets. Safety drawer stops. Shipped completely assembled. Silver-anodized aluminum handles. Inside dimensions, 6⅜x16⅝x19¼". Requires 8¾" vertical space. Choice of Gray or Blue finish. Shpg. wt., 28 lbs.

SPECIFY GRAY OR BLUE FINISH

736CU8523. 1-3.....Each 35.70 4-6.....Each 32.10
7-9.....Each 28.50 10-Up.....Each 26.70

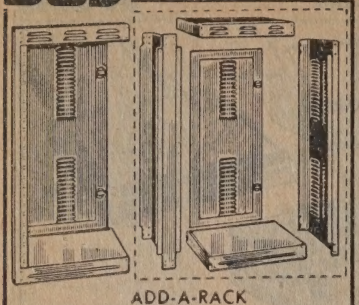
DESK-TOP DRAWER

TYPE 60-2363. Spacious drawer for small tools and components, circuit designs, and manuals. Designed for use with Bud Series 60 cabinets. Hinged desk-top made of formica bonded to aluminum, has piano-type hinge. Latch locks and releases drawer and top. Slides travel quietly on nylon rollers. Front panel is 3½x19". Inside dimensions, 16⅝x3¼x15". Shpg. wt., 19 lbs. Specify smooth gray or blue finish.

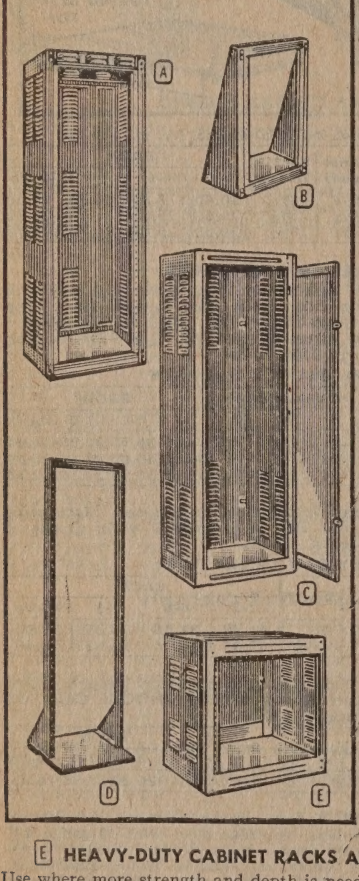


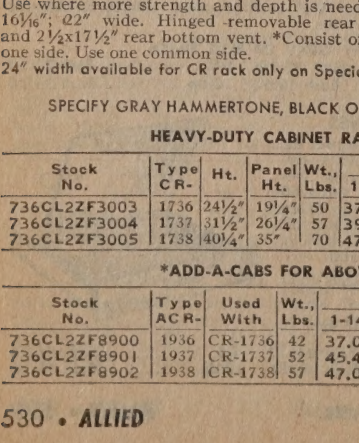
736CX8519. 1-3.....Each 61.30 4-6.....Each 55.20
7-9.....Each 49.00 10-Up.....Each 46.00

BUD Relay Racks and Rack Cabinets



ADD-A-RACK





A DELUXE ENCLOSED RELAY RACKS

Top and bottom have chrome trim. Doors have 2 snap-action catches. 16-gauge steel with 7/64" panel supports. Casters can be mounted on base. For 19" panels—24" wid available on Special Order. *CR-2072, 2073 in gray hammertone only.

SPECIFY GRAY HAMMERTONE, GRAY WRINKLE, OR BLACK WRINKLE FINISH

Stock No.	Mfr's Type	Overall Size	Panel Ht.	Wt., Lbs.	EACH 1-9	10-14	15-19	20-U
736CL2ZF3017	CR-1774	42 1/16x22x17 1/8"	36 3/4"	82	65.80	59.20	52.65	49.
736CL2ZF3014	CR-1771	47 5/16x22x17 1/8"	42"	92	74.60	67.15	59.70	55.
736CL2ZF3015	CR-1772	66 5/16x22x17 1/8"	61 1/4"	115	93.30	83.95	74.65	70.
736CL2ZF3018	CR-1780	75 5/16x22x17 1/8"	70"	125	95.65	86.10	76.50	71.
736CL3ZF3016	CR-1773	82 5/16x22x17 1/8"	77"	135	107.45	96.70	85.95	80.
736CL2ZF3019	*CR-2072	66 9/16x22x22 1/8"	61 1/4"	137	112.05	100.85	89.65	84.
736CL2ZF3021	CR-2075	75 5/16x22x22 1/8"	70"	148	114.15	102.75	91.30	85.
736CL2ZF3020	*CR-2073	82 5/16x22x22 1/8"	77"	159	133.05	119.75	106.45	99.

ADD-A-RACK SERIES FOR ABOVE

Permit above racks to be assembled into banks of two or more. Four sections: top, bottom, door and coupling panel. Replace either side of rack with coupling panel; add new top and bottom; attach side to new t and bottom; attach new door. For 19" pan —24" width available on Special Orde *AR-2276, 2277 in gray hammertone only.

SPECIFY GRAY HAMMERTONE, GRAY WRINKLE, OR BLACK WRINKLE FINISH

Stock No.	Mfr's Type	Used With	Wt., Lbs.	EACH 1-9	10-14	15-19	20-U
736CL2ZF0710	AR-1775	CR-1771	74	68.80	61.90	55.05	51.
736CL2ZF0712	AR-1776	CR-1772	100	85.50	76.95	68.40	64.
736CL2ZF0714	AR-1779	CR-1780	107	90.40	81.35	72.30	67.
736CL2ZF0716	AR-1777	CR-1773	113	105.05	94.55	84.05	78.
736CL2ZF0718	AR-1778	CR-1774	70	64.75	58.30	51.80	48.
736CL2ZF0720	*AR-2276	CR-2072	110	101.75	91.60	81.40	76.
736CL2ZF0722	AR-2279	CR-2075	120	103.85	93.45	83.10	77.
736CL2ZF0724	*AR-2277	CR-2073	130	123.80	111.40	99.05	92.

B DESK-TYPE RELAY RACKS

Chassis-type base. Supporting angles assure steadiness.

Gray Hammertone	Black Wrinkle	Mfr's Type	Overall Size	Panel Ht.	Wt., Lbs.	EACH 1-14	15-24	25-34	35-U
736U6200	736X6201	RR-1248	24x20 3/8x12"	21"	15	12.80	11.50	10.25	9.6
736X6203	736X6204	RR-1249	31x20 3/8x12"	28"	18	15.10	13.60	12.10	11.3

C SUPER-DELUXE ENCLOSED 2-DOOR CABINET RACKS

Like deluxe racks (Fig. A.), but panel supports adjustable 1-6" at 1" intervals. Takes casters. 16-ga. steel. For 19" panel—2 width available on Special Order.

SPECIFY GRAY HAMMERTONE, GRAY WRINKLE OR BLACK WRINKLE FINISH

Stock No.	Mfr's Type	Overall Size	Panel Ht.	Wt., Lbs.	EACH 1-9	10-14	15-19	20-U
736CL2ZF3025	CR-2174	42 1/16x22x17 1/8"	36 3/4"	102	86.55	77.90	69.25	64.9
736CL2ZF3022	CR-2171	47 5/16x22x17 1/8"	42"	104	93.65	84.30	74.90	70.2
736CL2ZF3023	CR-2172	66 9/16x22x17 1/8"	61 1/4"	138	120.85	108.85	96.70	90.6
736CL2ZF3026	CR-2175	75 5/16x22x17 1/8"	70"	150	129.90	116.90	103.90	97.4
736CL2ZF3024	CR-2173	82 5/16x22x17 1/8"	77"	163	145.00	130.50	116.00	108.7

D OPEN-TYPE RELAY RACKS

Chassis-type base, except*, has base of 1/4" iron angles and brackets. For 19" panel—2 width available on Special Order. †RR-1265 in black wrinkle only.

SPECIFY GRAY HAMMERTONE OR BLACK WRINKLE FINISH

Stock No.	Type CR-	Overall Size	Panel Ht.	Wt., Lbs.	EACH 1-9	10-14	15-19	20-U
736CL2ZF6205	RR-1263	35 3/64x19 3/4x22"	31 1/2"	35	29.80	26.80	23.85	22.3
736CL2ZF6209	RR-1363	40 5/64x19 3/4x22"	36 3/4"	37	28.80	25.90	23.05	21.6
736CL2ZF6206	RR-1264	70 39/64x19 3/4x22"	66 1/2"	46	34.20	30.80	27.35	25.6
736CL2ZF6207	*†RR-1265	72 1/4x20 3/8x13"	66 1/2"	68	79.40	71.45	63.50	59.5
736CL2ZF6210	RR-1364	75 5/64x19 3/4x22"	71 3/4"	48	35.85	32.25	28.70	26.9
736CL2ZF6211	RR-1366	81 7/64x20x22"	77"	50	39.25	35.25	31.40	29.4
736CL2ZF6213	RR-1369	80 3/8x20 7/8x26"	77"	105	68.00	61.20	54.40	51.0

E HEAVY-DUTY CABINET RACKS AND ADD-A-CABS

Use where more strength and depth is needed; clear inside depth, 16 1/16"; Ø2" wide. Hinged removable rear door. Louvered sides and 2 1/2x17 1/2" rear bottom vent. *Consist of top, bottom, back and one side. Use one common side.

24" width available for CR rack only on Special Order.

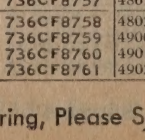
SPECIFY GRAY HAMMERTONE, BLACK OR GRAY WRINKLE

HEAVY-DUTY CABINET RACKS

Stock No.	Type CR-	Ht.	Panel Ht.	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736CL2ZF3003	1736	24 1/2"	19 1/4"	50	37.20	33.50	29.75	27.90
736CL2ZF3004	1737	31 1/2"	26 1/4"	57	39.95	35.95	31.95	29.95
736CL2ZF3005	1738	40 1/4"	35"	70	47.65	42.90	38.10	35.75

*ADD-A-CABS FOR ABOVE

Stock No.	Type ACR-	Used With	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736CL2ZF8900	1936	CR-1736	42	37.05	33.35	29.65	27.80
736CL2ZF8901	1937	CR-1737	52	45.45	40.90	36.35	34.10
736CL2ZF8902	1938	CR-1738	57	47.00	42.30	37.60	35.25



SERIES SIXTY CONVERTIBLES

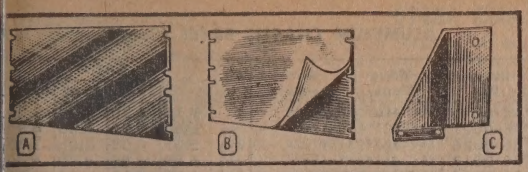
Rugged housing for delicate instruments an systems. Provide correct viewing angl Allow maximum access to equipment. *Plai sides. **Louvered sides. †Plain rear doo ††Louvered rear door. Vertical panel spac 3 1/2". Outside depth, 22". Inside depth, 20 1/4 For 19" panel. BLUE OR GRAY. Av., 100 lbs.

Stock No. 60-	Type 60-	Size HxW	EACH 1-3	4-6	7-9	10-U
736CF8750	4600*†	22 1/16x24 1/16"	192.50	173.25	154.00	144.4
736CF8751	4601*†	27 5/8x24 1/16"	194.70	175.25	155.75	146.0
736CF8752	4602*†	29 3/8x24 1/16"	197.10	177.40	157.70	147.8
736CF8753	4700**†	22 1/16x24 1/16"	200.50	180.45	160.40	150.4
736CF8754	4701**†	27 5/8x24 1/16"	204.00	183.60	163.20	153.0
736CF8755	4702**†	29 3/8x24 1/16"	206.20	185.60	164.95	154.6
736CF8756	4800*††	22 1/16x24 1/16"	197.10	177.40	157.70	147.8
736CF8757	4801*††	27 5/8x24 1/16"	199.30	179.35	159.45	149.5
736CF8758	4802*††	29 3/8x24 1/16"	201.70	181.55	161.35	151.3
736CF8759	4900**††	22 1/16x24 1/16"	202.20	182.00	161.75	151.6
736CF8760	4901**††	27 5/8x24 1/16"	204.80	184.30	163.85	153.6
736CF8761	4902**††	29 3/8x24 1/16"	207.20	186.50	165.75	155.4

When Ordering, Please Specify Stock No. and Mfr's Type No

Rack Panels, Accessories and Boxes

BUD



STANDARD RACK PANELS

Heavy-duty 1/8" thick aluminum for high strength. 19" wide (available 24" wide on Special Order) have notched edges that mtg. screw spacing of all Series 60 standard and telephone-type ay racks. For prices on quantities larger than those shown, te, wire or phone Allied Electronics. Specify black wrinkle, gray nkle, gray hammertone, smooth gray, or smooth blue finish.

ALUMINUM (Specify Finish)

Stock No.	Mfr's Type	Ht.	Wt., Lbs.	EACH 1-49	50-99	100-149	150-Up
36CX5200	PA-1101	1¾"	¼	1.60	1.45	1.30	1.20
36CX5201	PA-1102	3½"	¾	2.30	2.05	1.85	1.75
36CX5202	PA-1103	5¼"	1	3.00	2.70	2.40	2.25
36CX5203	PA-1104	7"	1¾	3.80	3.40	3.05	2.85
36CX5204	PA-1105	8¾"	2	4.35	3.90	3.50	3.25
36CX5205	PA-1106	10½"	2½	5.50	4.95	4.40	4.15
36CX5206	PA-1107	12¼"	2¾	6.55	5.90	5.25	4.90
36CX5207	PA-1108	14"	4	7.35	6.60	5.90	5.50
36CX5208	PA-1109	15¾"	3½	8.30	7.45	6.65	6.25
36CX5209	PA-1110	17½"	4	9.00	8.10	7.20	6.75
36CX5210	PA-1111	19¼"	4¼	9.90	8.90	7.90	7.45
36CX5211	PA-1112	21"	5	10.95	9.85	8.75	8.20

SURFACE-SHIELD RACK PANELS

1/8" thick bright aluminum alloy rack panels in blemish-free mill finish. Each panel is covered on both sides with sturdy essure sensitive white paper to protect against damage. Panels ed are 19" wide. (24" width available on Special Order.)

Stock No.	Mfr's Type	Ht.	Wt., Lbs.	EACH 1-49	50-99	100-149	150-Up
36X7200	SFA-1831	1¾"	¼	1.50	1.35	1.20	1.15
36X7201	SFA-1832	3½"	¾	2.30	2.05	1.85	1.75
36X7202	SFA-1833	5¼"	1	3.00	2.70	2.40	2.25
36X7203	SFA-1834	7"	1¾	3.80	3.40	3.05	2.85
36X7204	SFA-1835	8¾"	2	4.35	3.90	3.50	3.25
36X7205	SFA-1836	10½"	2½	5.50	4.95	4.40	4.15
36X7206	SFA-1837	12¼"	2¾	6.55	5.90	5.25	4.90
36X7207	SFA-1838	14"	3	7.35	6.60	5.90	5.50
36X7208	SFA-1839	15¾"	3½	8.30	7.45	6.65	6.25
36X7209	SFA-1840	17½"	4	9.00	8.10	7.20	6.75
36X7210	SFA-1841	19¼"	4¼	9.90	8.90	7.90	7.45
36X7211	SFA-1842	21"	5	10.95	9.85	8.75	8.20

CHASSIS MOUNTING BRACKETS

Insure proper support of heavily loaded chassis. Heavy-gauge steel brackets cut away to accommodate chassis 3" high, except " chassis. Black enamel. Sold only in pairs.

Stock No.	Mfr's Type	Ht.	Depth	Wt., Lbs.	PER PAIR 1-49	50-99	100-149	150-Up
6-4503	MB-458	6½"	8"	1¼	1.75	1.60	1.40	1.30
6-4500	MB-448	6½"	10"	1¾	1.75	1.60	1.40	1.30
6-4504	MB-459	6½"	11"	2	2.00	1.80	1.60	1.50
6-4501	MB-449	6½"	12"	2	2.30	2.05	1.85	1.75
6-4505	MB-460	6½"	13"	2½	2.20	2.00	1.75	1.65
6-4502	MB-451	*8½"	13"	3	2.75	2.50	2.20	2.05

HEAVY-GAUGE STEEL RACK SHELVES

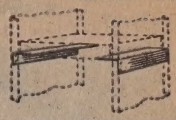
ide-in shelves for heavy power supplies, odulator units, etc. Require chassis support gles listed above. Black enamel. HWD: B-1976, 1x19x15". CB-1977, 1x19x12".

Stock No.	Mfr's Type	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
36X2285	CB-1976	6½	4.95	4.45	3.95	3.70
36X2286	CB-1977	5½	3.95	3.55	3.15	2.95

The Bud line of Rack Panels, Boxes, and Accessories includes a wide variety of metalware to give you the broadest selection of quality cabinets and other enclosures. They give your equipment the true professional touch, not only in neatness of appearance, but in the safety it can and does provide. Ideal for applications in military, industrial, and commercial use that require the solid strength a Bud piece of metalware provides. Remember, a single order to Allied Electronics will take care of all your electronic needs. Contact the Allied Electronics facility nearest you for prompt handling of your order.

CHASSIS SUPPORTING ANGLES

Where heavy weights occur in chassis construction, these supporting angles distribute the weight to the sides of the rack to relieve the panel. Relay-rack runners of 7/64" steel for heavy chassis shelves. Rugged long-wearing construction; designed for years of dependable service.



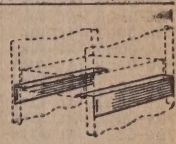
Stock No.	Mfr's Type	HxWxD	Wt., Lbs.	PER PAIR 1-24	25-49	50-99	100-Up
736-6600	SA-1349	1⅜x3x14½"	4	3.20	2.90	2.55	2.40
736-6601	SA-1350	1⅜x3x12"	3	3.20	2.90	2.55	2.40

TRIANGULAR MOUNTING BRACKETS

Performance-tested triangular mounting brackets designed and made for durability. Will give long, dependable service. Quality-constructed of heavy-gauge steel to provide rigid support for panel and chassis assemblies and for shelves where heavy weights are involved. Black enamel finish.

Stock No.	Mfr's Type	Ht.	Depth	Wt., Lbs.	PER PAIR 1-49	50-99	100-149	150-Up
736-4506	MB-1266	5"	5"	1	1.45	1.30	1.15	1.10
736-4507	MB-1267	7"	7"	1	1.55	1.40	1.25	1.15
736-4508	MB-1268	9"	9"	1½	1.90	1.70	1.50	1.45

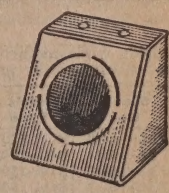
PRESTIGE SUPPORTING ANGLES



CE-2219. Constructed of heavy-duty steel. Designed for attaching to rails of Console Pedestal and Prestige Relay Racks. Slotted to provide infinite vertical adjustment. Extend entirely from front to rear to accept full-depth chassis. 21x3x2¾". Black enamel finish. Shpg. wt., 7½ lbs.

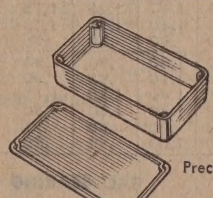
736 U 2800. 1-24.....Per Pair 4.45 25-49.....Per Pair 4.00
50-99.....Per Pair 3.55 100-Up.....Per Pair 3.35

UNIVERSAL METER CASES



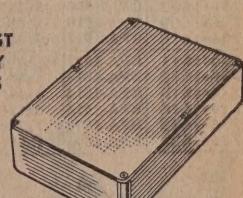
Sloping-front meter housings. Panel cut for 2" meters; knockout ring enlarges hole for 3" meters. Case top has two ⅜" knockouts for mounting terminal posts or feed-through insulators. Type CMA1930 accepts small components as well as meter. Type CM1935 is steel; Types CMA1930 and CMA1936 are aluminum. To minimize magnetic effect on meter, use aluminum case. In light-gray hammertone. 4¼x4x4", except CMA1930, which is 4¼x6x4". Shpg. wts., CM1935, 1 lb.; CMA1936, ¾ lb.; CMA1930, 1 lb.

Stock No.	Mfr's Type	EACH 1-9	10-49	50-99	100-149	150-Up
736-2901	CM1935	2.04	1.85	1.65	1.50	1.40
736-2903	CMA1936	2.31	2.10	1.90	1.70	1.60
736-2902	CMA1930	4.02	3.65	3.30	2.90	2.75



DIE-CAST UTILITY BOXES

Precision Made



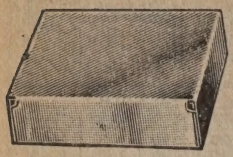
LM-380 Aluminum

Exceptionally versatile die-cast utility boxes for applications requiring a sturdier structure than a sheet-metal cabinet. These high-quality boxes are ideal for instrument and meter cases, filter networks, junction boxes, switch boxes, audio and radio-frequency distributors, plus many other purposes where a small box is needed. They are especially desirable for concealed or other interior use where safety enclosure is required. Feature close-fitting flanged lids fastened to bosses in the body. The close fit of the lids and the thickness of the aluminum alloy combine to provide excellent screening properties. Cast of LM-380 aluminum, these boxes are lightweight and easy to machine.

Stock No.	Mfr's Type	Thickness	Wt., Lbs.	LxWxH	EACH 1-9	10-24	25-49	50-Up
736-3600	CU-124	1/16"	½	4⅜x2⅜x1 1/16"	1.71	1.55	1.40	1.25
736-3601	CU-234	3/32"	¾	4 1/16x3 1/16x2 1/16"	2.75	2.50	2.25	2.00
736-3602	CU-247	3/32"	1¼	7⅜x4 1/16x2 1/16"	4.51	4.10	3.70	3.30
736-3604	CU-347	3/32"	1½	7⅜x4 1/16x3 1/16"	4.84	4.40	3.95	3.50

BUD Chassis Bases, Plates and Slides

ALUMINUM CHASSIS BASES



Construction and design same as the steel chassis bases on the facing page. Each made from one piece of sheet metal. Bases are welded on Government-approved spot-welders specially developed for aluminum. Assures strength and long lasting qualities. Natural finish aluminum alloy 5005 H-14. All are 18 ga., except †16 ga. and *14 ga. ‡Punched for chassis mounting brackets.

Stock No.	Mfr's Type	Size DxWxH	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736-0031	AC-431	4x6x2″	½	1.75	1.60	1.40	1.30
736-0030	AC-430	4x6x3″	½	2.00	1.80	1.60	1.50
736-0032	AC-432†	4x17x3″	1¼	3.40	3.05	2.70	2.55
736-0002	AC-402	5x7x2″	½	1.90	1.79	1.50	1.45
736-0029	AC-429	5x7x3″	¾	2.10	1.90	1.70	1.60
736-0003	AC-403	5x9½x2″	½	2.00	1.80	1.60	1.50
736-0021	AC-421	5x9½x3″	¾	2.40	2.15	1.90	1.80
736-0004	AC-404	5x10x3″	¾	2.40	2.15	1.90	1.80
736-0022	AC-422	5x13x3″	¾	2.75	2.50	2.20	2.05
736-0033	AC-433†	6x17x3″	1¼	4.10	3.70	3.30	3.10
736-0005	AC-405	7x7x2″	½	2.00	1.80	1.60	1.50
736-0006	AC-406	7x9x2″	½	2.10	1.90	1.70	1.60
736-0007	AC-407	7x11x2″	¾	2.40	2.15	1.90	1.80
736-0008	AC-408	7x12x3″	1	2.95	2.65	2.35	2.20
736-0009	AC-409	7x13x2″	¾	2.55	2.30	2.05	1.90
736-0011	AC-411†	7x15x3″	1½	4.05	3.65	3.25	3.05
736-0023	AC-423†,	7x17x3″	1¾	4.10	3.70	3.30	3.10
736-0024	AC-424†	8x12x3″	1½	3.50	3.15	2.80	2.65
736-0025	AC-425†	8x17x2″	1½	3.65	3.30	2.90	2.75
736-0012	AC-412†‡	8x17x3″	1¾	4.15	3.75	3.30	3.10
736-0013	AC-413†	10x12x3″	1½	4.15	3.75	3.30	3.10
736-0014	AC-414†	10x14x3″	1¾	4.20	3.80	3.35	3.15
736-0015	AC-415†‡	10x17x2″	1¼	4.10	3.70	3.30	3.10

ALUMINUM CHASSIS BASES (Cont'd)

Stock No.	Mfr's Type	Size DxWxH	Wt., Lbs.	EACH 1-24	25-49	50-99	100-U
736-0016	AC-416†‡	10x17x3″	2	4.75	4.30	3.80	3.55
736-0027	AC-427*‡	10x17x4″	3½	6.60	5.95	5.30	4.95
736-0026	AC-426*‡	11x17x2″	2¼	5.05	4.55	4.05	3.80
736-0017	AC-417*‡	11x17x3″	2¾	5.85	5.25	4.70	4.40
736-0018	AC-418*‡	12x17x3″	2¾	5.95	5.35	4.75	4.45
736-0019	AC-419*‡	13x17x2″	2½	5.30	4.75	4.25	4.00
736-0020	AC-420*‡	13x17x3″	2¾	6.25	5.65	5.00	4.70
736-0028	AC-428*‡	13x17x4″	3¾	7.70	6.95	6.15	5.80
736-0202	AC-1402	3½x4½x1″	⅛	1.45	1.30	1.15	1.10
736-0203	AC-1403	3½x5½x1″	¼	1.45	1.30	1.15	1.10
736-0204	AC-1404	4x5x2″	¼	1.75	1.60	1.40	1.30
736-0205	AC-1405	4x6x1½″	¼	1.55	1.40	1.25	1.15
736-0206	AC-1406	4x8x2″	⅜	2.00	1.80	1.60	1.50
736-0208	AC-1408	5x9x1½″	⅜	1.75	1.60	1.40	1.30
736-0001	AC-401	5x9½x2½″	1¾	1.75	1.60	1.40	1.30
736-0213	AC-1413	6x8x2″	½	2.00	1.80	1.60	1.50
736-0214	AC-1414†	6x14x3″	1¼	3.65	3.30	2.90	2.75
736-0215	AC-1415†	7x15x2″	1	3.20	2.90	2.55	2.40
736-0216	AC-1416†	7x17x2″	1	3.65	3.30	2.90	2.75
736-0217	AC-1417†	7x17x2½″	1½	3.75	3.40	3.00	2.80
736-0218	AC-1418	8x10x2½″	1	3.10	2.80	2.50	2.35
736-0219	AC-1419†	8x12x2½″	1	3.65	3.30	2.90	2.75
736-0220	AC-1420†	8½x15x3″	1½	3.85	3.45	3.10	2.90
736-0221	AC-1421†	9x15x3″	1½	4.40	3.95	3.50	3.30
736X0222	AC-1422†	10x17x5″	2½	9.55	8.60	7.65	7.15
736X0223	AC-1423*	10x23x3″	3	6.95	6.25	5.55	5.20
736X0225	AC-1425†	12x17x2″	1½	4.20	3.80	3.35	3.15
736X0226	AC-1426*	13x17x5″	3½	5.30	4.75	4.25	4.00
736X0227	AC-1427*	14x17x3″	3	10.45	9.40	8.35	7.85
736X0228	AC-1428*	15x17x4″	3½	10.45	9.40	8.35	7.85
736X0229	AC-1429*	15x17x6″	3¾	14.30	12.85	11.45	10.75
736X0230	AC-1430*	17x17x3″	3¼	8.80	7.90	7.05	6.60
736X0231	AC-1431*	17x17x4″	4	12.45	11.20	9.95	9.35

ALUMINUM BOTTOM PLATES FOR CHASSIS BASES ABOVE

Shields wires and components against dust and dirt. Embossed feet at each corner prevent sharp edges from damaging table tops and other surfaces. Lightweight, natural finish gives a handsom appearance. Drilled for No. 6 self-tapping screws.

Stock No.	Mfr's Type	Size WxL	Wt., Lbs.	EACH 1-49	50-99	100-149	150-Up
736-1600	BPA-1501	2½x4½″	1/16	.75	.75	.70	.60
736-1601	BPA-1502	3½x4½″	1/16	.90	.90	.80	.70
736-1602	BPA-1503	3½x5½″	⅛	.90	.80	.70	.68
736-1603	BPA-1504	4x5″	⅛	.90	.80	.70	.68
736-1604	BPA-1505	4x6″	⅛	.90	.80	.70	.68
736-1605	BPA-1506	4x8″	⅛	1.10	1.00	.90	.85
736-1631	BPA-1532	4x17″	¼	1.10	1.00	.90	.85
736-1606	BPA-1507	4½x8″	⅛	1.20	1.10	.95	.90
736-1632	BPA-1589	5x7″	⅛	1.00	.90	.80	.75
736-1607	BPA-1508	5x9″	3/16	1.00	.90	.80	.75
736-1633	BPA-1590	5x9½″	¼	1.00	.90	.80	.75
736-1634	BPA-1591	5x10″	¼	1.00	.90	.80	.75
736-1608	BPA-1509	5x13″	¼	1.55	1.40	1.25	1.15
736-1609	BPA-1510	5x13½″	¼	1.55	1.40	1.25	1.15
736-1610	BPA-1511	5½x5½″	⅛	1.00	.90	.80	.75
736-1611	BPA-1512	5½x9½″	¼	1.10	1.00	.90	.85
736-1612	BPA-1513	6x8″	3/16	1.20	1.10	.95	.90
736-1613	BPA-1514	6x14″	⅜	1.55	1.40	1.25	1.15
736-1614	BPA-1515	6x17″	7/16	2.00	1.80	1.60	1.50
736-1635	BPA-1592	7x7″	⅓	1.00	.90	.80	.75
736-1636	BPA-1593	7x9″	⅓	1.10	1.00	.90	.85

Stock No.	Mfr's Type	Size WxL	Wt., Lbs.	EACH 1-49	50-99	100-149	150-U
736-1637	BPA-1594	7x11″	⅓	1.20	1.10	.95	.90
736-1638	BPA-1595	7x12″	½	1.45	1.30	1.15	1.10
736-1639	BPA-1596	7x13″	½	1.55	1.40	1.25	1.15
736-1615	BPA-1516	7x15″	7/16	1.75	1.60	1.40	1.30
736-1616	BPA-1517	7x17″	7/16	1.75	1.60	1.40	1.30
736-1617	BPA-1518	8x10″	⅜	1.65	1.50	1.30	1.25
736-1618	BPA-1519	8x12″	⅜	2.00	1.80	1.60	1.50
736-1619	BPA-1520	8x17″	9/16	2.10	1.90	1.70	1.60
736-1620	BPA-1521	8½x15″	½	2.40	2.15	1.90	1.80
736-1621	BPA-1522	9x15″	½	2.55	2.30	2.05	1.90
736-1622	BPA-1523	10x12″	½	2.00	1.80	1.60	1.50
736X1623	BPA-1524	10x14″	⅝	2.00	1.80	1.60	1.50
736-1639	BPA-1597	10x17″	¾	2.00	1.80	1.60	1.50
737X1624	BPA-1525	10x23″	15/16	2.95	2.65	2.35	2.20
736-1625	BPA-1526	11x17″	1	2.20	2.00	1.75	1.65
736-1626	BPA-1527	12x12″	⅝	2.20	2.00	1.75	1.65
736-1627	BPA-1528	12x17″	¾	2.65	2.40	2.10	2.00
736-1641	BPA-1598	13x17″	¾	2.60	2.30	2.10	1.55
736-1628	BPA-1529	14x17″	15/16	2.85	2.55	2.30	2.15
736X1629	BPA-1530	15x17″	1	3.85	3.45	3.10	2.90
736X1630	BPA-1531	17x17″	1 1/16	3.95	3.55	3.15	2.95

BALL-BEARING CHASSIS SLIDES

Precision-designed linear-motion chassis slides engineered to provide smooth, non-sticking movement. Suitable for a wide range of applications. Featherlight telescoping motion is tested for hundreds of thousands of cycles without wear.

Stock No.	Mfr's Type	Lgth.	Travel	Load Rating	Wt., Lbs.	PER PAIR 1-4	5-9	10-Up
736-0900	AS-5000	12″	9″	135	1¾	9.50	8.55	7.60
736-0901	AS-5001	16″	12″	104	2	11.00	9.90	8.80
736X0922	AS-5002	20″	15″	73	2½	11.80	10.60	9.45
736-0923	AS-5020	12″	12⅞″	175	3¼	22.40	20.15	17.90
736-0925	AS-5021	16″	16⅞″	160	4¼	24.90	22.40	19.90
736X0926	AS-5022	20″	20″	140	5¼	26.90	24.20	21.50
736-0940	AS-5040	12″	11⅞″	100	3¼	29.80	26.80	23.85
736-0941	AS-5041	16″	15⅞″	100	4¼	32.30	29.05	25.85

Each main member is press-formed to a constant and preci tolerance from high-tensile cold rolled steel to reduce breakdown Chrome-carbon-steel ball bearings are set in special retainers fo smoothness of movement. Self-cleaning bridged ball retainers fo efficient operation and long wear. Bright electro-zinc finish. A slide mounting holes are .180x.210″.

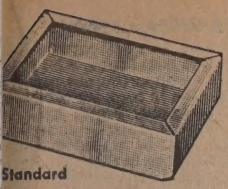
Stock No.	Mfr's Type	Lgth.	Travel	Load Rating	Wt., Lbs.	PER PAIR 1-4	5-9	10-Up
736X0942	AS-5042	20″	19⅞″	94	5¼	34.40	30.95	27.5
736-0943	AS-5060	12″	9″	135	1¾	8.70	7.85	6.9
736-0944	AS-5061	16″	12″	104	2	9.30	8.35	7.4
736X0945	AS-5062	20″	15″	73	2½	9.80	8.80	7.8
736-0946	AS-5080	12″	12″	100	3½	27.30	24.55	21.8
736-0947	AS-5081	16″	16″	93	4½	27.90	25.10	22.3
736X0948	AS-5082	20″	20″	87	5½	30.75	27.70	24.6

Allied Electronics maintains complete stocks of Bud products. For information and pricing on types not listed, simply contact the Allied facility nearest you. Depend on Allied Electronics for prompt service, fast shipment and OEM prices on all your electronic needs.

Metal Chassis Bases and Bottom Plates

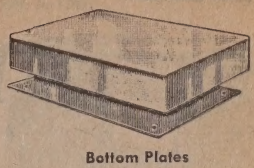
BUD

STEEL CHASSIS BASES



Standard

Sturdy, accurate construction makes these the best quality chassis bases. Two surface finishes are available: quality zinc-plated or black-wrinkle finished steel, standard 18-22 gauge. Carefully formed one-piece construction for reliability. Corners are rigidly reinforced and precisely spot-welded for strength. The four sides are uniformly folded at the bottom to provide additional strength. The bottom fold also permits easy installation of the bottom plate. Bases are less exact-matching bottom plates, see below. *Punched to accommodate chassis mounting brackets.



Bottom Plates

STANDARD CHASSIS BASES

Size H	Size W	Size D	Gauge	Wt., Lbs.	Black-Wrinkle Stock No.	Black-Wrinkle Type No.	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up	Zinc-Plated Stock No.	Zinc-Plated Type No.	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
	7″	5″	22	1	736-2207	CB-628	1.55	1.40	1.25	1.15	736-2208	CB-629	2.00	1.80	1.60	1.50
½″	9½″	5″	22	1¼	746-2215	CB-644	2.00	1.80	1.60	1.50	736-2216	CB-645	2.55	2.30	2.05	1.90
	10″	5″	22	1¼	736-2201	CB-604	2.00	1.80	1.60	1.50	736-2202	CB-605	2.60	2.35	2.10	1.95
	7″	7″	20	1½	736-2259	CB-789	2.00	1.80	1.60	1.50	736-2268	CB-1191	2.30	2.05	1.85	1.75
	9″	7″	20	1½	736-2260	CB-790	2.00	1.80	1.60	1.50	736-2269	CB-1192	2.30	2.05	1.85	1.75
	11″	7″	20	1½	736-2261	CB-791	2.10	1.90	1.70	1.60	736-2270	CB-1193	2.55	2.30	2.05	1.90
	12″	7″	20	1¾	736-2262	CB-792	2.30	2.05	1.85	1.75	736-2263	CB-793	3.10	2.80	2.50	2.35
	13″	7″	20	2	736-2217	CB-646	2.20	2.00	1.75	1.65	736-2271	CB-1194	2.75	2.50	2.20	2.05
	17″	4″	20	2¼	736-2265	CB-1068	2.65	2.40	2.10	2.00	736-2264	CB-1066	3.10	2.80	2.50	2.35
	17″	7″	20	1¾	736-2245	CB-757	3.20	2.90	2.55	2.40	736-2246	CB-758	3.75	3.40	3.00	2.80
½″	10″	8″	20	2	736-2238	CB-701	2.55	2.30	2.05	1.90	736-2239	CB-702	2.95	2.65	2.35	2.20
	12″	8″	20	1¾	736-2247	CB-759	2.65	2.40	2.10	2.00	736-2248	CB-760	3.40	3.05	2.70	2.55
	12″	10″	20	3	736-2223	CB-652	2.75	2.50	2.20	2.05	736-2272	CB-1195	3.50	3.15	2.80	2.65
	14″	10″	20	4	736-2224	CB-653	3.10	2.80	2.50	2.35	736-2257	CB-779	3.50	3.15	2.80	2.65
	17″	10″	20	4	736-2209	CB-636*	2.95	2.65	2.35	2.20	736-2210	CB-637	4.20	3.80	3.35	3.15
	17″	11″	18	4½	736X2229	CB-658*	4.10	3.70	3.30	3.10	736X2251	CB-771	5.15	4.65	4.10	3.85
	17″	12″	18	4½	736X2234	CB-663*	3.75	3.40	3.00	2.80	736X2232	CB-661	4.50	4.05	3.60	3.40
	17″	13″	18	5½	736X2231	CB-660*	4.95	4.45	3.95	3.70	736X2253	CB-773	5.95	5.35	4.75	4.45
	17″	10″	18	6½	736-2211	CB-640*	4.75	4.30	3.80	3.55	736-2212	CB-641	5.30	4.75	4.25	4.00
	17″	13″	18	7½	736X2213	CB-642*	5.85	5.25	4.70	4.40	736X2214	CB-643	6.95	6.25	5.55	5.20
	17″	10″	18	7½	736-2203	CB-623	6.60	5.95	5.30	4.95	736-2204	CB-624	7.80	7.00	6.25	5.85
	17″	13″	18	8	736X2205	CB-625	7.25	6.55	5.80	5.45	736X2206	CB-626	8.60	7.75	6.90	6.45

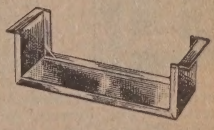
STEEL BOTTOM PLATES FOR STANDARD CHASSIS BASES

ttom plates to fit standard chassis bases above. In zinc-plated black-wrinkle finished steel for exact matching with chassis. ective shields against dust and dirt; protect wiring and components on the under side of the chassis. Bottom plates have four embossed feet in corners to prevent marring of table-tops or shelves. Drilled for No. 6 self-tapping screws.

lts Chassis D	lts Chassis W	Wt., Lbs.	Black-Wrinkle Stock No.	Black-Wrinkle Type No.	EACH 1-49	EACH 50-99	EACH 100-149	EACH 150-Up	Zinc-Plated Stock No.	Zinc-Plated Type No.	EACH 1-49	EACH 50-99	EACH 100-149	EACH 150-Up
5″	7″	½	736-1433	BP-705	.90	.80	.70	.68	736-1434	BP-706	.95	.85	.75	.70
5″	9½″	¾	736-1420	BP-680	.90	.80	.70	.65	736-1406	BP-667	1.00	.90	.80	.75
5″	10″	¾	736-1402	BP-536	1.00	.90	.80	.75	736-1404	BP-538	1.10	1.00	.90	.85
7″	7″	1	736-1421	BP-681	1.40	1.25	1.10	1.05	736-1407	BP-668	1.40	1.25	1.10	1.05
7″	9″	1	736-1422	BP-682	1.45	1.30	1.15	1.10	736-1408	BP-669	1.45	1.30	1.15	1.10
7″	11″	1	736-1423	BP-683	1.50	1.35	1.20	1.13	736-1410	BP-670	1.50	1.35	1.20	1.15
7″	12″	1¼	736-1403	BP-537	1.55	1.40	1.25	1.15	736-1405	BP-539	1.75	1.60	1.40	1.30
7″	13″	1¼	736-1424	BP-684	1.55	1.40	1.25	1.15	736-1411	BP-671	1.65	1.50	1.30	1.25
4″	17″	1½	736-1440	BP-1069	1.20	1.10	.95	.90	736-1439	BP-1067	1.65	1.50	1.30	1.25
7″	17″	1½	736-1426	BP-686	1.20	1.10	.95	.90	736-1413	BP-673	1.90	1.70	1.50	1.45
8″	10″	1¼	736-1435	BP-707	1.20	1.10	.95	.90	736-1436	BP-708	1.45	1.30	1.15	1.10
8″	12″	1½	736-1437	BP-709	1.50	1.35	1.20	1.13	736-1438	BP-710	1.75	1.60	1.40	1.30
10″	12″	1½	736-1428	BP-688	1.55	1.40	1.25	1.15	736-1415	BP-675	2.10	1.90	1.70	1.60
10″	14″	1½	736-1401	BP-517	2.00	1.80	1.60	1.50	736-1400	BP-514	2.00	1.80	1.60	1.50
10″	17″	1¾	736-1429	BP-689	1.65	1.50	1.30	1.25	736-1416	BP-676	2.15	1.95	1.70	1.60
11″	17″	1½	736-1430	BP-690	1.75	1.60	1.40	1.30	736-1417	BP-677	2.20	2.00	1.75	1.65
12″	17″	2	736-1431	BP-691	2.00	1.80	1.60	1.50	736-1418	BP-678	2.55	2.30	2.05	1.90
13″	17″	2¼	736-1432	BP-692	2.05	1.85	1.65	1.55	736-1419	BP-679	2.95	2.65	2.35	2.20

PANEL-MOUNTING CHASSIS

Stock No.	Mfr's Type	Ht.	Wt., Lbs.	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
736-2277	CB-1370	1¾″	¾	3.30	2.95	2.65	2.50
736-2278	CB-1371	3½″	1¼	3.65	3.30	2.90	2.75
736-2279	CB-1372	5¼″	1½	4.20	3.80	3.35	3.15
736-2280	CB-1373	7″	2	4.75	4.30	3.80	3.55
736-2281	CB-1374	8¾″	2¼	5.60	5.05	4.50	4.20
736-2282	CB-1375	10½″	2¾	6.50	5.85	5.20	4.90
736X2283	CB-1376	12¼″	3	7.25	6.55	5.80	5.45
736X2284	CB-1377	14″	3¼	7.90	7.10	6.30	5.95

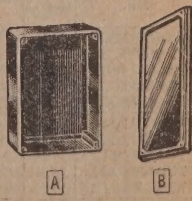


Durable aluminum panel-mounting chassis designed for vertical installation in places where depth in space is limited or access from the front of chassis is desired. Chassis are open-side type for standard 19″ mounting. All are sturdily constructed of .060″ aluminum sheet; have reinforced corners and natural finish. Front flanges are 1″ wide and have standard notching suitable for mounting to a rack. Other edges have ⅝″ flanges. 17″ wide, excluding flange, and 5⁹⁄₃₂″ deep. In heights from 1¾″ to 14″ (see table at left).

HARRY DAVIES PLASTIC CASES

Stock No.	Mfr's Type	Fig.	Size	EACH 1-49	EACH 50-249	EACH 250-499	EACH 500-Up
769-1503	220	A	4x2⅞x1⅜″	.39	.33	.31	.28
769-1506	240	A	6¼x3¼x1⅞″	.66	.48	.44	.40
769-1508	260	A	6¹³⁄₁₆x5⁹⁄₆₄x2⅝₆₄″	.89	.76	.71	.62
769-1505	221	B	4x2⅞x1⁄₁₆″	.23	.20	.19	.16
769-1504	241	B	6x3½″	.45	.38	.36	.31
769-1510	361	B	6½x5″	.61	.51	.48	.43

Versatile molded plastic cases (Fig. A) and plastic panels (Fig. B) of reliable quality for mounting a wide variety of test instruments. Meters fit easily into case with flanges designed to take sizes up to 4⅝x4³⁄₁₆″. Cases have recessed corner bosses to provide flush mounting with the cover. Take ½″ No. 6 self-tapping screws except Type 220 which uses 4-36x½″ screws. Walls and covers are made of a firm ⅛″ thick plastic. Cases, 1½ lbs. Panels, 1 lb.

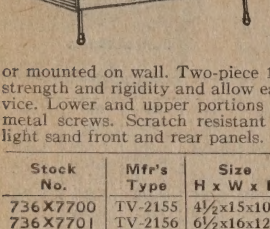


A B

When Ordering, Please Specify Stock No. and Mfr's Type No.

BUD Metal Cabinets and Cabinet Racks

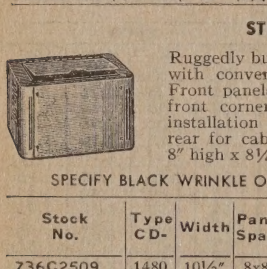
TILT-A-VIEW CABINETS



Designed to present selective angles of viewing for accurate reading of meters, dials, and recorders. These viewpoints are obtained with the slanted front face and the vertical rear face. The 2" detachable legs allow changing the position of the cabinet to a desired angle. Unit can be placed on desks, cabinets of various heights, or mounted on wall. Two-piece 16-gauge steel construction assure strength and rigidity and allow easy access for installation and service. Lower and upper portions of cabinet are fastened by sheet-metal screws. Scratch resistant vinyl finish. Charcoal-gray with light sand front and rear panels.

Stock No.	Mfr's Type	Size H x W x D	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736X7700	TV-2155	4½x15x10"	7	8.90	8.00	7.10	6.70
736X7701	TV-2156	6½x16x12"	12½	10.45	9.40	8.35	7.85
736X7702	TV-2157	8½x17x14"	17	15.20	13.70	12.15	11.40

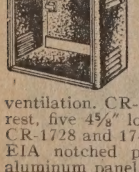
MARK-T CABINETS



Attractive, functional design with wide application in the realm of enclosures for controls. Angle of panel and door allow comfortable viewing of meters, dials, switches, lights, etc. All welded 16-gauge steel construction. Removable front panel and hinged door. Cam-action, self-adjusting spring latch holds door securely against frame. Recessed safety-shielded carrying handles. Four rubber feet prevent marring of surfaces. Vinyl-texture, scratch-resistant body. Light-gray enamel panel and door.

Stock No.	Mfr's Type	Width	Panel Size	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736X5100	MT-214	16"	5¾x14"	9	31.90	28.70	25.50	23.95
736X5101	MT-219	21"	5¾x19"	12	34.95	31.45	27.95	26.20
736X5102	MT-224	26"	5¾x24"	14½	41.15	37.05	32.90	30.85

STREAMLINED CABINETS

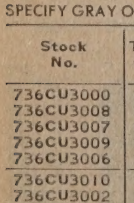


Ruggedly built units have recessed hinge cover with convenient finger-lift for easy opening. Front panels fit flush with embossed, rounded front corners and are removable for chassis installation or cutouts. 3½" high opening in rear for cables or controls. Louvers on sides. 8" high x 8¼" deep except *12x12".

SPECIFY BLACK WRINKLE OR GRAY HAMMERTONE FINISH

Stock No.	Type CD-	Width	Panel Space	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736C2509	1480	10½"	8x8"	5¾	8.35	7.50	6.70	6.25
736C2510	1481	12½"	8x10"	6	8.45	7.60	6.75	6.35
736CX2512	1482	14½"	8x12"	6½	9.00	8.10	7.20	6.75
736CX2600	1483	16½"	8x14"	7	9.70	8.75	7.75	7.30
736CX2601	1484	18½"	8x16"	7¾	10.35	9.30	8.30	7.75
736CX2602	1485*	20⅝"	12x18"	15	20.15	18.15	16.10	15.10

DELUXE CABINET RACKS

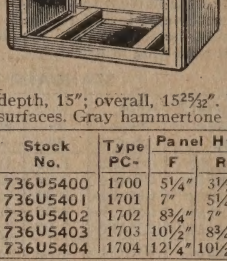


Deluxe racks with rounded corners and red inlaid trim. For 19" panels. 16-guage steel, welded joints. Recessed hinged-top doors with flush snap-locks. Types CR-1727, 1728, 1743, 1744, 1745 have hinged rear doors with snap-locks; rest have welded back panels. Louvered sides and 2½" opening in bottom provide ventilation. CR-1739 and 1742 have ten 9⅝" louvers per set; the rest, five 4⅝" louvers. All have 2 sets of louvers per side, except CR-1728 and 1743, 4 sets; CR-1727, 1744, 1745, 6 sets. Drilled for EIA notched panels, tapped for 10-32 screws. With full-size aluminum panel, mtg. screws. 14¾" deep, 22" wide.

SPECIFY GRAY OR BLACK WRINKLE, LIGHT GRAY HAMMERTONE FINISH.

Stock No.	Type CR-	Height	Panel Space	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736CU3000	1726	8²⁵⁄₃₂"	7"	24	20.70	18.65	16.55	15.55
736CU3008	1741	10⁹⁄₁₆"	8¾"	28¼	22.05	19.85	17.65	16.55
736CU3007	1740	12⅝"	10½"	31	25.85	23.25	20.70	19.40
736CU3009	1742	14⅛"	12¼"	32	26.65	24.00	21.30	20.00
736CU3006	1739	15¹³⁄₁₆"	14"	35	36.10	32.50	28.90	27.10
736CU3010	1743	19⅝"	17½"	40	35.40	31.85	28.30	26.55
736CU3002	1728	33⅝"	31½"	58	43.35	39.00	34.70	32.50
736CZ3012	1744	28⅛"	26¼"	51	40.85	36.75	32.70	30.65
736CZ3001	1727	22¹³⁄₁₆"	21"	43	38.00	34.20	30.40	28.50
736CZ3013	1745	36¹³⁄₁₆"	35"	63	45.55	41.00	36.45	34.15

PRESTIGE BALL-CORNERED VERSA-CABINETS



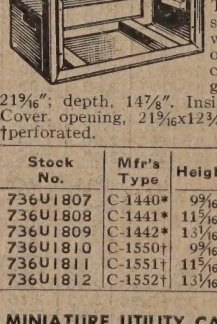
Has frame, two ball-cornered si perforated metal back, solid bot plate, two supporting channels. 19" opening in back for cables, trols, or knobs. Front, back, and bottom take standard panels. May be placed end-to- or stacked; can be fastened toge horizontally or vertically. Pa easily removed for servicing. In width, 22¼"; overall, 23⅜". In depth, 15"; overall, 15²⁵⁄₃₂". With 4 rubber feet to prevent mar surfaces. Gray hammertone finish.

Stock No.	Type PC-	Panel Ht. F	Panel Ht. R	Overall Height	Wt., Lbs.	EACH 1-14	15-24	25-34	35
736U5400	1700	5¼"	3½"	8¾"	28	38.00	34.20	30.40	2
736U5401	1701	7"	5¼"	10½"	29	40.20	36.20	32.15	3
736U5402	1702	8¾"	7"	12¼"	31	41.25	37.15	33.00	3
736U5403	1703	10½"	8¾"	14"	34	46.55	41.90	37.25	3
736U5404	1704	12¼"	10½"	15¾"	35	49.05	44.15	39.25	3

PERFORATED STEEL TOP PANEL

Stock No.	Type PC-	Size	Wt. Lbs.	EACH 1-14	15-24	25-34	35
736U5405	1710	12¼x19"	2½	4.20	3.80	3.35	3

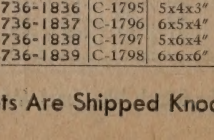
"PRESTIGE" SLOPING PANEL CABINETS



Expertly engineered to provide cus housings for quality apparatus. Feat include: swept-back top panel; ren able panel trim bar for chassis insta tion; recessed handle slots; ventila top; rear opening for cables or contr Uses 19" rack panels. Gray hammert Rear opening, 2½x18". Panel rec 1¼". Top depth, 9". Overall width 3½" vertical panel height; *incli panel height. Shpg. wts.: C-1555, lbs.; C-1556, 28 lbs.; C-1557, 31 lb

Stock No.	Mfr's Type	Height x Depth	Panel Space	EACH 1-14	15-24	25-34	35
736U1813	C-1555	11⅞x14⅜"	* 7"	48.20	43.40	38.55	36
736U1814	C-1556	13¼x15⅛"	* 8¾"	51.80	46.60	41.45	38
736U1815	C-1557	14¾x16⅛"	*10½"	55.55	50.00	44.45	41

"PRESTIGE" STEEL CABINETS



Stock cabinets of advanced design. movable hinged cover with gromme finger holes swings back. Cover sn closed by means of pressure fasten Two recessed handles. Two adjusta supporting channels for chassis of differ widths. Height of channels permits f of cooling air and easy removal of cabi contents. For 19" relay rack panels. gauge steel. Has embossed feet. Wid 21⅜16"; depth, 14⅞". Inside depth, 13⅞". Rear opening, 18 Cover opening, 21⅜x12¾". Gray hammertone. Covers: *so †perforated.

Stock No.	Mfr's Type	Height	Panel Space	Wt., Lbs.	EACH 1-14	15-24	25-34	35-
736U1807	C-1440*	9³⁄₁₆"	7"	26	40.05	36.05	32.05	30.
736U1808	C-1441*	11⅝"	8¾"	27	42.55	38.05	33.80	31.
736U1809	C-1442*	13¹⁄₁₆"	10½"	29	44.00	39.60	35.20	33.
736U1810	C-1550†	9³⁄₁₆"	7"	26	43.35	39.00	34.70	32.
736U1811	C-1551†	11⅝"	8¾"	27	45.10	40.60	36.10	33.
736U1812	C-1552†	13¹⁄₁₆"	10½"	29	47.65	42.90	38.10	35.

MINIATURE UTILITY CABINETS WITH ATTACHED CHASS

Sturdy steel cabinets with built-in chassis tached to front panel. For frequency met decade boxes, standing-wave bridges, etc. movable front and rear panels fasten with s tapping screws. Panels fit case flanges snug assure low RF leakage; protect compone from dust and damage. Heavy-duty bla wrinkle finish. Shpg. wts.: Mfr's Type C-1 and C-1795, 1 lb.; C-1796 and C-1797, 1¾ lb C-1798, 2¾ lbs.

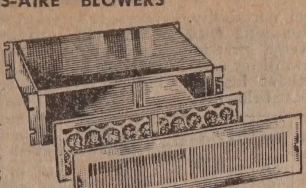
Stock No.	Mfr's Type	Cabinet HxWxD	Chassis HxWxD	EACH 1-49	50-99	100-149	150-
736-1835	C-1794	4x5x3"	1x4⅛x2⅞"	2.10	1.90	1.70	1.6
736-1836	C-1795	5x4x3"	1¼x3⅛x2⅞"	2.30	2.05	1.85	1.7
736-1837	C-1796	6x5x4"	1¾x4⅛x3⅞"	2.40	2.15	1.90	1.8
736-1838	C-1797	5x6x4"	1¼x5⅛x3⅞"	2.75	2.50	2.20	2.0
736-1839	C-1798	6x6x6"	1¾x4⅞x5⅞"	3.30	2.95	2.65	2.5

Bud Cabinets Are Shipped Knocked Down—Easy to Assemb

Quality Metal Cabinets and Blowers

BUD

"TRANS-AIRE" BLOWERS



Operate as intake or exhaust fan for equipment cooling. Rubber-mounted 2-speed motor with oilite bearings. Thermal overload protection with automatic reset. Fiberglass filter (included). Type B-23 uses BF-24 filter; B-25, BF-26; B-27, BF-28. Horsepower: B-23, 1/20; B-25, 1/6; B-27, ¼. Panel width, 19". Can be mounted to rails of 19" racks or cabinets. *Air displacement at 0° static pressure. 18" 3-wire cord. 110-120 V, 60 Hz AC. Shpg. wt., B-23, 16½ lbs.; B-25, 29 lbs.; B-27, 35¼ lbs.

Stock No.	Mfr's Type	Size H x D	cfm* High	cfm* Low	EACH 1-9	EACH 10-14	EACH 15-19	EACH 20-Up
736X1200	B-23	3½x12"	200	100	85.35	76.80	68.30	64.00
736U1201	B-25	5¼x14½"	500	250	97.50	87.75	78.00	73.15
736U1202	B-27	7x14½"	750	350	109.60	98.65	87.70	82.20

FILTERS FOR ABOVE (Shpg. wt., 1 lb.)

Stock No.	Mfr's Type	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
736-1300	BF-24	1.90	1.70	1.50	1.45
736-1301	BF-26	2.10	1.90	1.70	1.60
736-1303	BF-28	2.40	2.15	1.90	1.80

B-50 BLOWER

Engineered to give efficient cooling. Specially designed to blow air through slots on the top of the unit with very low noise level. Sleeve bearings in motor are lubricated for life eliminating troublesome maintenance. Two pole motor uses 115 volts 50/60 Hz single phase. *U.L. Listed with three wire power cord. Mounting size: 19x3½" with standard E.I.A. notching. 1850 rpm, 80 watts. Provided with disposable filter. Shpg. wt. 13 lbs.

736X1210. 1-9 ..... Each 83.05 — 10-14 ..... Each 74.75
15-19 ..... Each 66.45 — 20-Up ..... Each 62.30

B-52 BLOWER

Designed to deliver air at a rate of 150 cfm. Fan-cooled motor is rubber mounted and turns at 3000 rpm. Shaded-pole type with stainless steel shaft and double shielded ball bearings, per Spec. No. FF-B-171. Permanently lubricated from 20° F. to 250° F. Fungus protected, moisture and corrosion resistant, per Spec. No. CC-M-636-A. 80 watts, 115 volts, 50/60 Hz AC. Panel size, 19x5¼". Shpg. wt. 14 lbs.

736X1212. 1-9 ..... Each 85.75 — 10-14 ..... Each 77.20
15-19 ..... Each 68.60 — 20-Up ..... Each 64.35

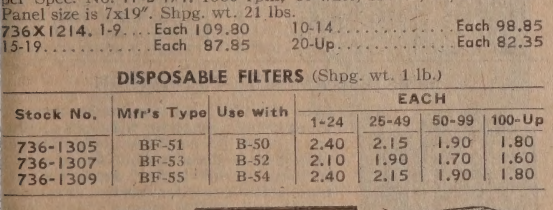
B-54 BLOWER

Well designed to provide reliable cooling. Delivers air at 300 cfm. Motor is fan-cooled, rubber mounted and shaded-pole. Has stainless steel shaft with life-lubricated ball bearings, double-shielded per Spec. No. FF-B-171. 1500 rpm, 60 watt, 115 V., 50/60 Hz AC. Panel size is 7x19". Shpg. wt. 21 lbs.

736X1214. 1-9 ..... Each 109.80 — 10-14 ..... Each 98.85
15-19 ..... Each 87.85 — 20-Up ..... Each 82.35

DISPOSABLE FILTERS (Shpg. wt. 1 lb.)

Stock No.	Mfr's Type	Use with	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
736-1305	BF-51	B-50	2.40	2.15	1.90	1.80
736-1307	BF-53	B-52	2.10	1.90	1.70	1.60
736-1309	BF-55	B-54	2.40	2.15	1.90	1.80

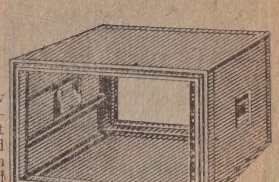


Removable top, side; front-panel flange-held—no screws. Body and rear panel 20-gauge steel; front panel (vertical or 15° incline), 18 gauge. 4 rubber feet on base. Chassis mounts to base, front or rear panel. Av. wt., 8 lbs. Specify smooth blue or gray finish.

Stock No.	Type MD-	Size, (H W D)	Panel Style	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
736CX4803	1960	7x13x8"	Vertical	10.35	9.30	8.30	7.75
736CX4804	1961	8x14x9"	Vertical	11.15	10.05	8.90	8.35
736CX4805	1962	8x16x9"	Vertical	11.50	10.35	9.20	8.65
736CX4806	1963	7x13x8"	Inclined	12.10	10.90	9.70	9.10
736CX4807	1964	8x14x9"	Inclined	13.00	11.70	10.40	9.75
736CX4808	1965	8x16x9"	Inclined	13.80	12.40	11.05	10.35

CLASSIC II CABINETS

- Functional Cabinet Beauty for Sophisticated Systems
- Identical Front and Back
- Accept Standard 19" Panels
- 17" of Clear Depth Inside



Classic II cabinets provide a new concept in enclosures. Newly revised design to bring you the best look of quality, elegance and substance artfully blended with practical efficiency. Ideally suited for sophisticated instrumentation and systems.

Extruded (6063-T5) aluminum frame. Patterned .050" aluminum panels on four sides. 16-gauge vertically-adjustable steel chassis supports. Front and rear mounting-rails tapped 10-32 W.E. Heavy-duty aluminum handle at each end. Completely assembled. Complete with 4 rubber feet and 2 chassis supports.

Chassis II cabinet doors are of ⅛" 5005-H36 aluminum alloy. Will fit any other cabinet or rack with 19" panel space. Stop fits on one panel mounting rail, hinged door attaches to other rail. If an opening is required above and/or below door, select a door whose height is smaller than the opening it is to cover. Plated, flush-type latch. Vinyl texture finish. *Panel space.

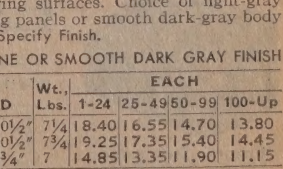
[A] CLASSIC II AGC CABINETS (Specify Charcoal-Gray or Sand)

Stock No.	Type AGC-	Size, In. Ht.	Size, In. PS*	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-14	EACH 15-Up
736CU0500	266	4⅞	3½	17	94.70	85.25	75.75	71.05
736CU0501	267	6⅜	5¼	19	97.00	87.30	77.60	72.75
736CU0502	268	8⅜	7	20	102.30	92.50	81.85	76.75
736CU0503	269	10⅛	8¾	22	104.80	94.30	83.85	78.60
736CU0504	270	11⅞	10½	23	108.30	97.45	86.65	81.25
736CU0505	271	13⅝	12¼	15	112.60	101.35	90.10	84.45
736CU0506	272	15⅜	14	26	116.10	104.50	92.90	87.10
736CU0507	273	17⅛	15¾	28	120.50	108.45	96.40	90.40
736CU0508	274	18⅞	17½	29	124.00	111.60	99.20	93.00
736CU0509	275	20⅝	19¼	31	126.80	114.10	101.45	95.10
736CU0510	276	22⅜	21	32	130.90	117.80	104.70	98.20
736CU0511	277	24⅛	22¾	34	134.40	120.95	107.50	100.80
736CU0512	278	25⅞	24½	35	138.20	124.40	110.55	103.65
736CU0513	279	27⅝	26¼	37	141.70	127.55	113.35	106.30
736CU0514	280	29⅜	28	38	144.60	130.15	115.70	108.45

[B] DOORS FOR CLASSIC II CABINETS (Specify Charcoal-Gray or Sand)

Stock No.	Type AGD-	Ht. In.	Wt., Lbs.	EACH 1-4	EACH 5-9	EACH 10-14	EACH 15-Up
736CU0600	366	3½	1¼	7.30	6.55	5.85	5.50
736CU0601	367	5¼	1¾	8.90	8.00	7.10	6.70
736CU0602	368	7	2¼	10.40	9.35	8.30	7.80
736CU0603	369	8¾	3	11.40	10.25	9.10	8.55
736CU0604	370	10½	3¼	12.50	11.25	10.00	9.40
736CU0605	371	12¼	3¾	13.40	12.05	10.70	10.05
736CU0606	372	14	4¼	13.70	12.35	10.95	10.30
736CU0607	373	15¾	4¾	15.50	13.95	12.40	11.65
736CU0608	374	17½	5¼	16.80	15.10	13.45	12.60
736CU0609	375	19¼	5¾	18.00	16.20	14.40	13.50
736CU0610	376	21	6¼	19.10	17.20	15.30	14.35
736CU0611	377	22¾	6¾	20.00	18.00	16.00	15.00
736CU0612	378	24½	7¼	21.00	18.90	16.80	15.75
736CU0613	379	26¼	7¾	22.20	20.00	17.75	16.65
736CU0614	380	28	8¼	23.70	21.35	18.95	17.80

STYLISH GRAND PRIX CABINETS



Attractive, modern cabinets of heavy-duty 20-gauge steel. Ideal for a variety of electronic equipment. Designed for easy access for installation and servicing. The upper and lower portions are held together by sturdy brushed-aluminum extrusions and fastened with setscrews. Four rubber feet prevent marring surfaces. Choice of light-gray hammertone body with matching panels or smooth dark-gray body with smooth light-gray panels. Specify Finish.

SPECIFY LIGHT GRAY HAMMERTONE OR SMOOTH DARK GRAY FINISH

Stock No.	Mfr's Type	Size H x W x D	Wt., Lbs.	EACH 1-24	EACH 25-49	EACH 50-99	EACH 100-Up
736CX4800	MD-1	4 3/16x19⅛x10½"	7¼	18.40	16.55	14.70	13.80
736CX4801	MD-2	7 3/16x19⅛x10½"	7¾	19.25	17.35	15.40	14.45
736CX4802	MD-3	4 3/16x12⅛x8¾"	7	14.85	13.35	11.90	11.15

*Recognized Under the Component Program of Underwriter's Laboratories, Inc.

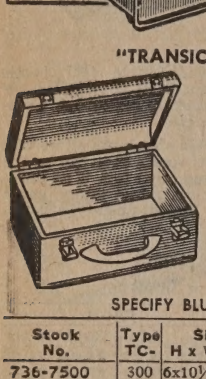
BUD Metal Cabinets and Foundations

PORTACAB CABINETS

For equipment requiring maximum portability. Sturdy one-piece body is .050" aluminum with contoured corners. Cabinet is louvered for adequate ventilation. Louvers point inward for side-to-side placement of cabinets without loss of space. Welded back has opening (table below) for access to interior. .062" aluminum front panel r cessed ½" to protect controls. Front panel mo flanges ½" wide. With 4 rubber feet. Gray ha mertone finish. "Use With" column in table belo indicates recommended Bud chassis (listed o page 532 of this catalog).

Stock No.	Mfr's Type	Depth	Width	Ht.	Opening	Louvers Per Side	Wt., Lbs.	Use With	EACH 1-24	25-49	50-99	100-U
736-8201	WA-1541	12"	8⅛"	9"	2x6½"	2 Sets	3	AC-407	16.15	14.55	12.90	12.1
736-8200	WA-1540	8"	6⅛"	8"	2x4½"	1 Set	2½	AC-402	12.45	11.20	9.95	9.3
736-8202	WA-1542	8"	10⅛"	8"	2x8½"	1 Set	3½	AC-406	14.40	12.95	11.50	10.8
736X8203	WA-1543	18"	11⅛"	11"	2x9½"	3 Sets	6½	AC-416	20.00	18.00	16.00	15.0
736X8204	WA-1544	18"	14⅛"	12"	2x12½"	3 Sets	7¾	AC-420	23.10	20.80	18.50	17.3

"TRANSICASE" INSTRUMENT CASES

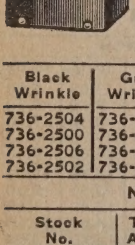


Handsome portable instrument cases with unlimited applications. Smart contoured design made of .040" thick alum. Flush-fitting aluminum panel; lid on 2 slide-off hinges—fastened by toggle catches (chromium plated). Inside of lid cushioned by foam rubber; $1\frac{15}{32}$" clearance from panel top. Rubber feet, base and back. TC-300 and TC-301 have $4\frac{13}{32}$" clearance below panel; wt., 4½ lbs. TC-302 and TC-303 have $5\frac{29}{32}$"; 8 lbs. TC-304 has $7\frac{1}{32}$"; 10 lbs. Choice of two colors.

SPECIFY BLUE OR GRAY ENAMEL FINISH

Stock No.	Type TC-	Size H x W x D	Panel Size	EACH 1-9	10-14	15-19	20-Up
736-7500	300	6x10$\frac{1}{16}$x7"	8$\frac{15}{16}$x5$\frac{15}{16}$"	29.20	26.30	23.35	21.90
736-7501	301	6x11½x8¼"	10$\frac{3}{8}$x7¼"	29.95	26.95	23.95	22.45
736-7502	302	7½x13x9"	11$\frac{7}{8}$x7$\frac{15}{16}$"	32.00	28.80	25.60	24.00
736-7503	303	7½x16½x9"	15$\frac{3}{8}$x7$\frac{15}{16}$"	32.55	29.30	26.05	24.40
736CX7504	304	9x20⅛x8"	19x7"	34.30	30.85	27.45	25.75

PORTABLE ALUMINUM AND STEEL CARRYING CASES



Ideal housings for portable transceivers, test instruments, power supplies, radio-control units, field-strength meters, phono oscillators, etc. Handle on top for portability. Panels are removable to provide access to interior; can be used for mounting components such as meters, transformers, power resistors, etc. Available in either welded steel for maximum strength or in aluminum for light weight. Made for hard usage and long life. Rigid construction assures proper support for components. Aluminum units weigh less than 2 lbs. Av. shpg. wt., 3 lbs.

STEEL CASES

Black Wrinkle	Gray Wrinkle	Type CC-	Size HxWxD	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736-2504	736-2505	1095	9x6x5"	3¼	4.50	4.05	3.60	3.40
736-2500	736-2501	1092	7x12x6"	4	6.25	5.65	5.00	4.70
736-2506	736-2507	1097	15x7¾x7"	5	6.95	6.25	5.55	5.20
736-2502	736-2503	1093	9x15x7"	5	8.70	7.85	6.95	6.55

NATURAL FINISH ALUMINUM CASES

Stock No.	Type ACC-	Size HxWxD	EACH 1-24	25-49	50-99	100-Up
736-0304	2095	9x6x5"	4.60	4.15	3.70	3.45
736-0300	2091	6x9x5"	4.60	4.15	3.70	3.45
736C0306	2096	12x7x6"	6.95	6.25	5.55	5.20
736-0302	2092	7x12x6"	6.95	6.25	5.55	5.20

GRAY HAMMERTONE ALUMINUM CASES

Stock No.	Type ACC-	Size HxWxD	EACH 1-24	25-49	50-99	100-Up
736-0305	2095	9x6x5"	5.30	4.75	4.25	4.00
736-0301	2091	6x9x5"	5.30	4.75	4.25	4.00
736C0306	2096	12x7x6"	8.05	7.25	6.45	6.05
736-0303	2092	7x12x6"	8.05	7.25	6.45	6.05

STANDARD AMPLIFIER FOUNDATIONS

Each foundation consists of a stur 20-gauge steel chassis with a r movable steel cover.

18-gauge steel angles are used c ends of each cover to provide fir bracing and allow a snug fit to cha sis. Entire side and top area betwee ends are enclosed by 20-gauge met screening which provides excelle ventilation and protection for components. Metal handles a attached to the chassis for increased portability.

All types have a 2½" high chassis, except Type CA-1128 has a high chassis. Attractive black wrinkle finish. Shpg. wt.: CA-69 3 lbs.; CA-1125, 4¾ lbs.; CA-1126, 6 lbs.; CA-1128, 7 lbs.

Stock No.	Type CA-	Size H x W x D	EACH 1-24	25-49	50-99	100-U
736-2000	699	8$\frac{5}{16}$x9$\frac{5}{16}$x5$\frac{1}{8}$"	8.35	7.50	6.70	6.25
736-2001	1125	8$\frac{5}{16}$x13$\frac{5}{16}$x5$\frac{1}{8}$"	8.70	7.85	6.95	6.55
736-2002	1126	8$\frac{5}{16}$x17$\frac{1}{8}$x7$\frac{1}{8}$"	9.80	8.80	7.85	7.35
736-2003	1128	8$\frac{13}{16}$x12$\frac{1}{8}$x10$\frac{1}{8}$"	10.10	9.10	8.10	7.60

STREAMLINED FOUNDATIONS

Modern styling and chrome trim mak these deluxe foundations ideal fo applications requiring attractive ap pearance. Feature rigid constructio and durability for long, hard servic Unit consists of a removable cove mounted on the chassis. Covers hav louvered sides and perforated top to provide proper ventilation. Alu minum handles are fitted to each en of chassis for easy portability. All chassis are 3" high. SPECIF BLACK WRINKLE OR GRAY WRINKLE ENAMEL FINISH.

Stock No.	Type CA-	Size H x W x D	Wt., Lbs.	EACH 1-24	25-49	50-99	100-U
736C2004	1750	9x10$\frac{1}{16}$x5"	4¾	10.00	9.00	8.00	7.50
736C2005	1751	9x12$\frac{1}{16}$x7"	5	11.90	10.70	9.50	8.95
736C2006	1752	9x17$\frac{1}{16}$x7"	8	12.65	11.40	10.10	9.50
736CX2007	1753	9x17$\frac{1}{16}$x10"	9	13.65	12.30	10.90	10.25

MINIATURE AMPLIFIER FOUNDATION

Type CA-1754. An extremely compact sturdily-built amplifier foundation. Ide for portable PA amplifiers, recording pr amplifiers, and much more. The chassis 2" high, 7" wide and 5" deep. With th foundation cover fastened in place, th entire unit stands only 6" high. Rigi steel construction for component prote tion; give years of dependable service. Re movable cover includes a carrying handl Cover is heavily perforated to allow fu circulation of air for efficient cooling. Cov er attached to the sides of the chassis with four self-tapping screws Black wrinkle finish. Shpg. wt. 1½ lbs.

736-2008. 1-24.....Each 5.95 25-49.....Each 5.3
50-99.....Each 4.75 100-Up.....Each 4.4

UNIVERSAL SLOPING-PANEL CABINETS

Rugged, Streamlined Sloping-Panel Design

Ideal for control boxes, mike mixers, etc. Have one-piece detachable back and side attached with 4 screws. Accommodate most small chassis. All are 4¼" high, 4" deep. Have gray hammertone finish. Shpg. wts.: 4 and 5" wide cabinets, aluminum, ½ lb., steel, ¾ lb 6" and 7" cabinets, aluminum, ¾ lb., steel, 1⅛ lbs

Width	ALUMINUM Stock No.	Mfr's Type	EACH 1-24	25-49	50-99	100-Up	STEEL Stock No.	Mfr's Type	EACH 1-49	50-99	100-149	150-Up
4"	736-0034	AC-1610	2.65	2.40	2.10	2.00	736-1830	C-1606	2.10	1.90	1.70	1.60
5"	736-0035	AC-1611	2.55	2.30	2.05	1.90	736-1831	C-1607	2.20	2.00	1.75	1.65
6"	736-0036	AC-1612	2.75	2.50	2.20	2.05	736-1832	C-1608	2.40	2.15	1.90	1.80
7"	736-0037	AC-1613	3.10	2.80	2.50	2.35	736-1833	C-1609	2.75	2.50	2.20	2.05

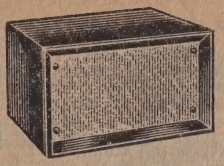
Write, Wire or Phone for Prices on OEM Quantities

Metal Cabinets, Miniboxes, Accessories

BUD

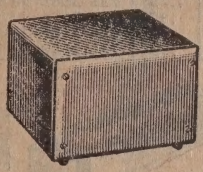
SHADOW CABINETS

-steel equipment cabinets. These
ts have been expertly engineered
provide attractive, functionally-
led housing for all types of elec-
nic devices. Ruggedly constructed,
y feature recessed front panel de-
n which not only improves appear-
e, but also protects equipment
obs, controls and switches from
ng moved accidentally. Sturdy, two-
ce bodies are made of 18-gauge steel and front and rear panels
of 16-gauge steel. Finish is light gray hammertone. Bottom,
nt, and rear panels are each attached by four self-tapping screws.
are equipped with four rubber feet to prevent marring surfaces
which they may be placed. SB-2140 (11½ lbs.) accepts Bud
ssis AC-424; SB-2141 (9¾ lbs.) accepts chassis AC-408; SB-2142
¼ lbs.) accepts CB-666; SB-2143 (9½ lbs.) accepts AC-409.



Stock No.	Mfr's Type	Size HxWxD	EACH 1-24	25-49	50-99	100-Up
36-6700	SB 2140	8x14¼x10″	9.80	8.80	7.85	7.35
36-6701	SB 2141	7½x13¼x9″	7.80	7.00	6.25	5.85
36X6702	SB 2142	9½x17x11″	13.10	11.80	10.50	9.85
36-6703	SB 2143	6x15½x9″	7.50	6.75	6.00	5.65

UTILITY CABINETS



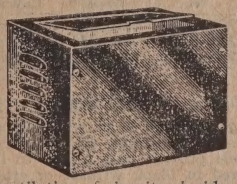
igged utility cabinets for housing elec-
nic equipment of all kinds. Sturdily
nstructed; made of 20-gauge steel
roughout. Have rounded contoured
rners; flanged panels also have rounded
rners to preserve symmetry of design.
ar panel is louvered to assure com-
ete ventilation of circuitry to be en-
sed; unit has solid front panel. Both
nt and rear panels are attached with
ur 6-32 screws each, and are easily removed. Four rubber feet
tached to base prevent scratching of surface on which unit is
aced. Cabinets are attractively finished; bodies dark gray enamel,
nels light gray enamel. Shpg. wts.: Type CU463, 1¾ lbs.;
U465, 2¼ lbs.; CU585, 3 lbs.; CU587, 3¾ lbs.; CU7125, 5 lbs.;
U7127, 6 lbs.

Stock No.	Mfr's Type	Size HxWxD	EACH 1-24	25-49	50-99	100-Up
36-3606	CU463	4⅞₂x6⅞₂x3¾″	6.50	5.85	5.20	4.90
36-3607	CU465	4⅞₂x6⅞₂x5¾″	7.45	6.70	5.90	5.60
36-3609	CU585	5⅞₂x8⅞₂x5¾″	9.55	8.60	7.65	7.15
36-3610	CU587	5⅞₂x8⅞₂x7¾″	10.50	9.45	8.40	7.90

Stock No.	Mfr's Type	Size HxWxD	EACH 1-49	50-99	100-149	150-Up
36-3669	CU7125	7⅞₂x12⅞₂x5¾″	9.65	8.70	7.70	7.25
36-3670	CU7127	7⅞₂x12⅞₂x7¾″	10.20	9.20	8.15	7.65

INSTRUMENT AND RECEIVER CABINETS

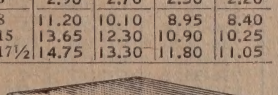
uggedly constructed, moderately
riced steel cabinets. Particularly
uitable for housing Amateur re-
eivers, transmitters, signal genera-
ors, etc. Each unit has recessed
inged cover for easy access to all
side locations. Front panel is held
ecurely in place with self-tapping
crews. Panel extends full width of
abinet—provides maximum space
or installation of controls. Louvers
n each side of cabinet assure ample ventilation of circuitry inside.
ody of cabinet is constructed of 20-gauge steel; panels are all 18-
auge steel, except those marked *, which are 16-gauge steel.
lack wrinkle enamel finish.



Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736-1800	C-973	7x8x8″	5	6.25	5.65	5.00	4.70
736-1802	C-993	7x10x8″	5½	7.15	6.45	5.70	5.35
736-1803	C-994	7x12x8″	5¾	7.35	6.60	5.90	5.50
736-1804	C-995	7x14x8″	6	2.90	2.70	2.30	2.20
736X1806	*C-1190	8x16x8″	8	11.20	10.10	8.95	8.40
736X1801	*C-975	9x15x11″	15	13.65	12.30	10.90	10.25
736X1805	*C-999	12x18x12″	17½	14.75	13.30	11.80	11.05

TABLE TOP

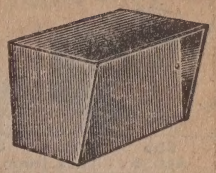
djustable table top of excep-
ional quality. Made of rugged
6-gauge steel. Solidly built for
ard usage. Mounting brackets
elded to underside. Easily adjust the front-to-back positions
o allow for required overhang front or rear. Mount to pedestals
y attached mounting brackets.



Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH 1-14	15-24	25-34	35-Up
736U3405	CT-2205	25x30x1 1/16″	18	27.60	24.85	22.10	20.70

COWL-TYPE MINIBOXES

Sturdy 18-gauge aluminum. For housing VFO's, test equipment, etc. Easy to drill or punch. Projecting cover reduces glare from overhead lighting. Protects dials, switches and meter faces. Cover has two ½″ box braces to which bottom is attached with 4 No. 6 self-tapping sheet metal screws provided with each "Minibox." Natural aluminum or gray hammertone finish.



GRAY HAMMERTONE

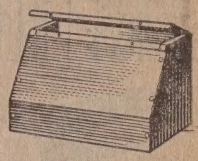
Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH 1-49	50-99	100-149	150-Up
736-6900	SC-2130	6x10x7″	1¼	8.05	7.25	6.45	6.05
736-6901	SC-2131	7x12x8″	1½	8.80	7.90	7.05	6.60
736-6902	SC-2132	3x8x5″	1	4.75	4.30	3.80	3.55
736-6903	SC-2133	5x5x5″	1	4.75	4.30	4.30	4.30

NATURAL ALUMINUM

736-6904	SC-3030	6x10x7″	1¼	5.85	5.25	4.70	4.40
736-6905	SC-3031	7x12x8″	1½	6.40	5.75	5.10	4.80
736-6906	SC-3032	3x8x5″	1	3.30	2.95	2.65	2.50
736-6907	SC-3033	5x5x5″	1	3.50	3.15	2.80	2.65

SLOPING-PANEL CABINETS

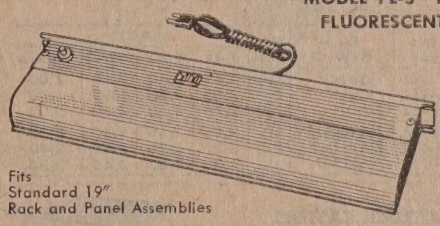
Sturdily built cabinets with hinged tops for easy access to tubes and other components. Front panel also removable for attachment of chassis. Fit following size chassis: C-1584, 7x6x2″; C-1585, 7x8x2″; C-1586, 7x10x2″; C-1587, 7x7x2″; C-1588, 7x9x2″; C-1892, 8x12x2½″; C-1893, 10x17x3″; C-1894, 7x13x2″; C-1896, 7x17x3″.



SPECIFY BLACK WRINKLE OR GRAY HAMMERTONE FINISH.

Stock No.	Mfr's Type	Size H x W x D	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736C1816	C-1584	6½x7 1/16x7 1/32″	2½	4.65	4.20	3.70	3.50
736C1817	C-1585	6½x9 1/16x7 1/32″	3	5.10	4.60	4.10	3.85
736C1818	C-1586	6½x11 1/16x7 1/32″	3½	5.85	5.25	4.70	4.40
736C1841	C-1892	8x13 1/16x8 13/32″	5¼	8.00	7.20	6.40	6.00
736C1842	C-1893	10x18 1/16x10 13/32″	8½	10.60	9.55	8.50	7.95
736C1820	C-1587	8x8 1/16x7 15/16″	2¾	6.15	5.55	4.90	4.60
736C1821	C-1588	8x10 1/16x7 15/16″	3¼	6.80	6.10	5.45	5.10
736C1843	C-1894	8x14 1/16x7 15/16″	4	7.25	6.55	5.80	5.45
736CX1844	C-1896	9x18 1/16x8 1/16″	7	10.15	9.15	8.10	7.60

MODEL PL-5 "PAN-L-LITE" FLUORESCENT FIXTURE



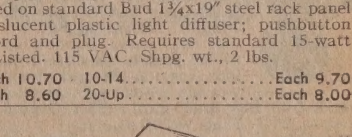
Fits Standard 19″ Rack and Panel Assemblies

Pushbutton Starter

Easily installs on rack or panel. Light (5x18x1¼″) has bronze-tone aluminum frame mounted on standard Bud 1¾x19″ steel rack panel with gray finish. Translucent plastic light diffuser; pushbutton switch; outlet; 6-ft. cord and plug. Requires standard 15-watt fluorescent bulb. U.L. Listed. 115 VAC. Shpg. wt., 2 lbs.

736X5600. 1-9..... Each 10.70 10-14.....Each 9.70
15-19.....Each 8.60 20-Up.....Each 8.00

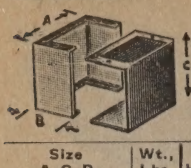
AC POWER OUTLET STRIPS



Quality-constructed outlet strips designed to add outlets easily to cabinets and racks. Mount vertically or horizontally. Ready to use. Have 15A, 125V grounding receptacles; 15A overload circuit breaker with reset button; 6-ft. cord, grounding plug. Heavy-duty light-gray enameled steel, designed for durability. U.L. Listed.

Stock No.	Mfr's Type	Length	No. Outlets	Wt., Lbs.	EACH 1-5	6-11	12-17	18-Up
736X5800	POS-4	17½″	4	2	24.95	22.45	19.95	18.70
736X5801	POS-7	48″	7	4	26.30	23.65	21.05	19.75
736X5802	POS-9	60″	9	4¼	28.95	26.05	23.15	21.70
736X5803	POS-11	72″	11	5	31.55	28.40	25.25	23.65

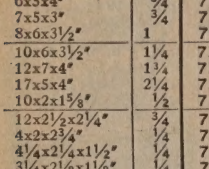
BUD Miniboxes and Utility Cabinets



ALUMINUM TWO-PIECE MINIBOXES

Self-contained units for use where shielding as well as protection from dust and dirt is desired. May be used for phono amplifiers, VHF and UHF converters, low-pass TVI filters, test and measurement units, etc. Valuable for experimenters, industrial and laboratory use. Two-piece construction permits installation of components or wiring modifications. Flanges assu low RF leakage and provide high rigidity. User h choice of snap-lock fastening or screw fastening; hardware supplied. Made of high-quality aluminu gray hammertone or natural finish; strong, yet ea to cut, punch and drill.

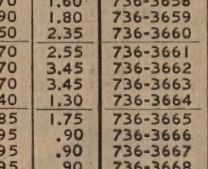
Size AxCxB	Wt., Lbs.	Gray Hammertone	Mfr's Type	EACH 1-49	50-99	100-149	150-Up	Natural Aluminum	Mfr's Type	EACH 1-49	50-99	100-149	150-U
2¾x2⅛x1⅝"	¼	736-3633	CU-2100-A	1.00	.90	.80	.75	736-3651	CU-3000-A	.90	.80	.70	.68
3¼x2⅛x1⅝"	¼	736-3634	CU-2101-A	1.00	.90	.80	.75	736-3652	CU-3001-A	.90	.80	.70	.68
4x2⅛x1⅝"	¼	736-3635	CU-2102-A	1.10	1.00	.90	.85	736-3653	CU-3002-A	.90	.80	.70	.68
4x2¼x2¼"	¼	736-3636	CU-2103-A	1.20	1.10	.95	.90	736-3654	CU-3003-A	1.10	1.00	.90	.85
5x2¼x2¼"	¼	736-3637	CU-2104-A	1.30	1.15	1.05	1.00	736-3655	CU-3004-A	1.20	1.10	.95	.90
5x4x3"	½	736-3638	CU-2105-A	1.65	1.50	1.30	1.25	736-3656	CU-3005-A	1.20	1.10	.95	.90
5¼x3x2⅛"	¼	736-3639	CU-2106-A	1.45	1.30	1.15	1.10	736-3657	CU-3006-A	1.20	1.10	.95	.90
6x5x4"	¾	736-3640	CU-2107-A	2.10	1.90	1.70	1.60	736-3658	CU-3007-A	1.55	1.40	1.25	1.15
7x5x3"	¾	736-3641	CU-2108-A	2.40	2.15	1.90	1.80	736-3659	CU-3008-A	2.00	1.80	1.60	1.50
8x6x3½"	1	736-3642	CU-2109-A	3.10	2.80	2.50	2.35	736-3660	CU-3009-A	2.55	2.30	2.05	1.90
10x6x3½"	1¼	736-3643	CU-2110-A	3.40	3.05	2.70	2.55	736-3661	CU-3010-A	2.75	2.50	2.20	2.05
12x7x4"	1¾	736-3644	CU-2111-A	4.60	4.15	3.70	3.45	736-3662	CU-3011-A	3.85	3.45	3.10	2.90
17x5x4"	2¼	736-3645	CU-2112-A	4.60	4.15	3.70	3.45	736-3663	CU-3012-A	3.85	3.45	3.10	2.90
10x2x1⅝"	½	736-3646	CU-2113-A	1.75	1.60	1.40	1.30	736-3664	CU-3013-A	1.45	1.30	1.15	1.10
12x2½x2¼"	¾	736-3647	CU-2114-A	2.30	2.05	1.85	1.75	736-3665	CU-3014-A	2.00	1.80	1.60	1.50
4x2x2¾"	¼	736-3648	CU-2115-A	1.20	1.10	.95	.90	736-3666	CU-3015-A	1.10	1.00	.90	.85
4¼x2¼x1½"	¼	736-3649	CU-2116-A	1.20	1.10	.95	.90	736-3667	CU-3016-A	1.10	1.00	.90	.85
3¼x2⅛x1⅛"	¼	736-3650	CU-2117-A	1.20	1.10	.95	.90	736-3668	CU-3017-A	.90	.80	.70	.68



"CONVERTA" BOXES

Versatile component enclosures of exceptional design and quality. Expertly engineered and made to exacting specifications to provide custom housings that will accommodate a wide variety of electronic equipment. Their design ideally suits them for sophisticated instrumentation. Applications for which they can be used are practically unlimited. Sturdy steel construction with welded base and two-sided cover. Specially designed to afford maximum protection to delicate electronic components. Components and controls can be mounted to any surface of these enclosures for complete versatility and design flexibility. Cover and base fasten together securely with self-tapping screws. Components remain easily accessible for efficient inspection and servicing. These boxes are valuable for experimenters as well as industrial and laboratory use. Made of 20-gauge steel for durability, maximum rigidity, and protection of internal equipment. Cadmium plated. Includes all hardware.

Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH 1-24	25-49	50-99	100-Up
736-3603	CU-341	1½x4x3"	½	2.65	2.40	2.10	2.00
736-3605	CU-452	2x5x4"	1	2.55	2.30	2.05	1.90
736-3608	CU-482	2x8x4"	1¼	2.75	2.50	2.20	2.05
736-3611	CU-592	2½x9½x5"	1¾	2.95	2.65	2.35	2.20
736-3612	CU-622	2½x12x6"	2¾	3.20	2.90	2.55	2.40
736-3613	CU-712	2½x15x7"	3½	4.30	3.85	3.45	3.25



MINISLIDES

Ideal housing where easy access for efficient inspection and servicing of intern parts is important. Provides a high degr of shielding, protection from dust, a mechanical protection to delicate comp nents. Designed for use with a wide va ety of electronic equipment. Expert engineered and made to exacting specifications. Can be mounte in a number of positions in rack or cabinet. Four self-tappi screws provide secure fastening. Easy accessibility to internal equi ment by removing the sliding cover. Made of 0.050" aluminu Light gray hammertone or natural aluminum finish.

GRAY HAMMERTONE

Stock No.	Mfr's Type	Size LxWxD	Wt., Lbs.	EACH 1-49	50-99	100-149	150-U
736-5000	MS-2150	13x3⅛x2⅝"	1	5.15	4.65	4.10	3.85
736-5001	MS-2151	13x5⅛x2⅝"	1½	5.85	5.25	4.70	4.40
736-5002	MS-2152	17x3⅛x2⅝"	1¼	5.70	5.15	4.55	4.30

NATURAL ALUMINUM

Stock No.	Mfr's Type	Size LxWxD	Wt., Lbs.	EACH 1-49	50-99	100-149	150-U
736-5004	MS-3050	13x3⅛x2⅝"	1	3.85	3.45	3.10	2.90
736-5005	MS-3051	13x5⅛x2⅝"	1½	4.75	4.30	3.80	3.55
736-5006	MS-3052	17x3⅛x2⅝"	1¼	4.50	4.05	3.60	3.40

SWIVEL TRUCK CASTERS

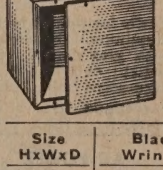
TYPE RC-7756. Heavy-duty ball-bearing casters especially designed for use on Bud deluxe relay racks. Support up to 400 pounds distributed on four casters. Rugged, long-wearing wheels are carefully made from high-grade hard rubber. Overall height, 2⅝". Shpg. wt. 10 oz.

736-6000. 1-4..... Each 1.30
5-9.....Each 1.15 10-24.....Each 1.05
25-Up.....Each 1.00

TYPE RC-7758. Heavy-duty casters with very sturdy construction for heavy loads. Designed for use with Bud Series 60 cabinets. Ball bearings are hard tread composition for longer wear. Wheels are self-lubricating for convenience. Wheel diameter, 2½". Height, 3¼". Shpg. wt. 1½ lbs.

736-6001. 1-4..... Each 3.20
5-9.....Each 2.90 10-24..... Each 2.55
25-Up.....Each 2.40

Make Allied Electronics your headquarters for Bud Products. Prompt service, in-depth stocks, OEM prices and one-order handling are just a few of the many benefits you receive. Always use the services of the Allied Electronics facility nearest you for all your needs.



METAL UTILITY CABINETS

Large selection of general-purpose cabinets, well adapted for shieldi high-gain preamps, RF sections, and other circuits. Two removab panels provide easy access to inside of cabinets. Steel cabinets a offered in black wrinkle or gray hammertone finish; shpg. wts. a given in table below. Aluminum cabinets have natural aluminum gray hammertone finish; all have shpg. wts. of 1 lb.

STEEL

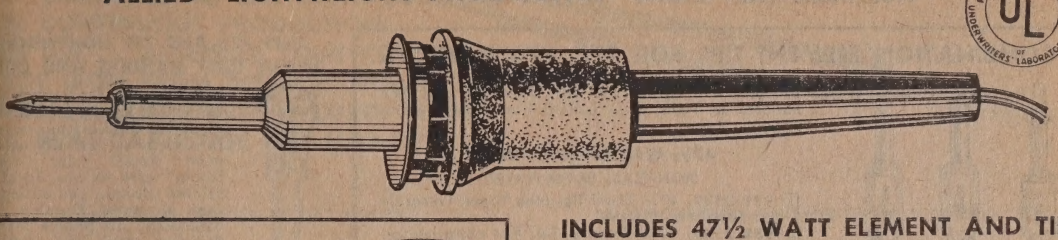
Size HxWxD	Black Wrinkle	Gray Hammertone	Mfr's Type	Wt., Lbs.	EACH 1-49	50-99	100-149	150-U
4x4x2"	736-3626	736-3625	CU 883	¾	1.45	1.30	1.15	1.10
4x5x3"	736-3615	736-3614	CU 728	⅞	1.75	1.60	1.40	1.30
6x5x4"	736-3617	736-3616	CU 729	1¼	2.00	1.80	1.60	1.50
6x6x6"	736-3628	736-3627	CU 1098	2½	3.10	2.80	2.50	2.35
9x6x5"	736-3629	736-3629	CU 1099	3	3.30	2.95	2.65	2.50
10x8x7"	736-3619	736-3618	CU 879	5	4.50	4.05	3.60	3.40
10x10x8"	736-3621	736-3620	CU 880	5½	5.45	4.90	4.35	4.10
12x7x6"	736-3632	736-3631	CU 1124	4	4.40	3.95	3.50	3.30
12x11x8"	736-3623	736-3622	CU 881	6	6.00	5.40	4.80	4.50
15x9x7"	.....	736-3624	CU 882	7½	6.10	5.50	4.90	5.60

ALUMINUM

Size HxWxD	Mfr's Type	Natural Finish	EACH 1-49	50-99	100-149	150-Up	Gray Ham'rtone	EACH 1-49	50-99	100-149	150-Up
4x4x2"	AU-1083	736-1008	2.00	1.80	1.60	1.50	736-1009	2.20	2.00	1.75	1.65
4x5x3"	AU-1028	736-1000	2.00	1.80	1.60	1.50	736-1001	2.55	2.30	2.05	1.90
6x5x4"	AU-1029	736-1002	2.20	2.00	1.75	1.65	736-1003	2.20	2.00	1.75	1.65
6x6x6"	AU-1039	736-1004	3.10	2.80	2.50	2.35	736-1005	3.10	2.80	2.50	2.35
9x6x5"	AU-1040	736-1006	3.65	3.30	2.90	2.75	736-1007	3.65	3.30	2.90	2.75

Allied and Ungar Soldering Equipment

ALLIED® LIGHTWEIGHT PRODUCTION-LINE SOLDERING IRON



INCLUDES 47½ WATT ELEMENT AND TIP

- Ideal for Printed Circuits and Subminiature Systems
- Durable for Heavy Use, but Lightweight for Reduced Fatigue
- Special Ceramic and Glass Insulator Resists Tip Heat
- Soft Touch Cork Grip • Octagon Washer Prevents Rolling

This precision quality soldering iron is made for us by a famous manufacturer. Solidly constructed for production line use, it's also perfect for prototype and quality-control departments and for use in servicing. Especially suited for printed circuits and subminiature systems. Has spring socket—tip can't wobble or give. Special ceramic and glass insulator resists tip heat. Stainless steel heat deflector reflects heat away from operator's hand. Octagon guard washer prevents handle roll, acts as built-in stand. Thermo-stabilized phenolic handle with cork grip for comfortable handling. Polyvinyl insulated cord. Includes 47½-watt thread-in element and long taper chisel, iron-clad silver-plated tip 117 VAC, for subminiature work. Handle is 5 inches long. U.L. Listed. Wt. 1 lb.

704-9999. 1-9 ..... Each 6.95
10-49 ..... Each 6.25 50-Up ..... Each 5.49

HANDLE AND CORD ASSEMBLY

The precision handle and cord featured in the soldering iron above. Durably constructed for production-line use. Lightweight for handling without fatigue. Comfortable cork grip. Stainless steel heat deflector. Octagon washer prevents roll. Vinyl insulated cord. 5″ long. U.L. Listed. 117 VAC. Shpg. wt. 4 oz.

704-3491. 1-9 ..... Each 1.95
10-49 ..... Each 1.60 50-Up ..... Each 1.35

47½-Watt Element. 800-850° F. 110 V AC or DC. Shpg. wt. 2 oz.

704-3529. 1-9 ..... Each 3.49
10-49 ..... Each 2.98 50-Up ..... Each 2.49

Chisel Tip. ⅛″ dia., 1″ long.

704-3427. 1-9 ..... Each .65
10-49 ..... Each .53 50-Up ..... Each .45

UAL-HEAT SOLDER GUN WITH 3 INTERCHANGEABLE TIPS

del 6760. Solid-state soldering gun for ofessional radio-TV service repairmen, o-it-yourself" home craftsmen, and lab chnicians actively working on projects in ctronic research and development. Offers otection against damaging sensitive ingrated circuits and delicate field effect nsistors while soldering connections beuse the soldering tip is electrically lated from the heating element providing electrically inert tip. Today's technician ll find this gun a must to complete his ol kit. Solid-state circuitry completely places old-fashioned heavy transformer to sure light weight (5 oz., less cord). With 3 fferent thread-on tips (order extra reacement tips at right) that handle high-nsity circuitry soldering and give superior at transfer for heavy-duty uses. Features neon "on" indicator light; Hi/Lo switch for selecting 900°F or 500°F. temperatures; fast 11-second trigger-activated warmup time. For 110-120 V, 60 Hz AC. Shpg. wt., 1 lb.

989-3655. 1-3 ..... Ea. 12.59
4-11 ..... Ea. 10.45 12-Up ..... Ea. 8.95

989-3643. 6763 Handle/Cord Set.
1-3 ..... Ea. 4.95
4-11 ..... Ea. 4.49 12-Up ..... Ea. 3.95

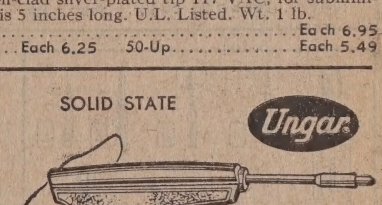
989-3645. 6751 Heat Cartridge. 1-3 Ea. 5.64
4-11 ..... Ea. 4.70 12-Up ..... Ea. 3.95

989-3647. 6753 Short Chisel Tip. 1-3 Ea. .46
4-11 ..... Ea. .40 12-Up ..... Ea. .33

989-3648. 6754 Pyramid Tip. 1-3 ..... Ea. .46
4-11 ..... Ea. .40 12-Up ..... Ea. .33

989-3649. 6755 Long Chisel Tip. 1-3 Ea. .46
4-11 ..... Ea. .40 12-Up ..... Ea. .33

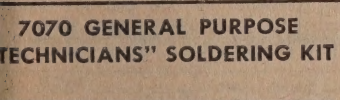
SOLID STATE



All basic parts available separately

- Handle & Cord; Heat Cartridge
- 3 Separate Thread-On Tips

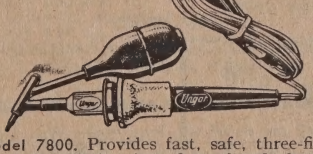
7070 GENERAL PURPOSE TECHNICIANS" SOLDERING KIT



omplete outfit for production line, or rvicing shop. Especially designed for work printed circuits and subminiature sysms. Consists of pastel-colored Type 777 ndle and cord; Type 1237 high-heating ement (37½ watts—750° to 800° F); three terchangeable, thread-on copper tips ncil, chisel, and pyramid) for high-speed eat soldering; spool of 60/40 non-corsive, rosin-core solder. Handle is durable d lightweight to reduce fatigue. Made of olypropylene that will not crumble or dust." Cork grip for comfortable handling. eat deflector keeps handle cool. Octagon asher prevents roll. Acts as stand. U.L. isted. 115 V, AC-DC. 1 lb.

89-3652. 1-5 ..... Each 6.33
11 ..... Each 5.45 12-Up ..... Each 4.40

HOT-VAC DESOLDERING TOOL



Model 7800. Provides fast, safe, three-fingered desoldering best for printed circuit work. Has lightweight Model 777 handle of heat resistant, fatigue-free plastic. Special non-slip grip stays cool, assure easy finger-touch control. Both miniature and standard desoldering are made easier by vacuum bulb. Special coating inside and out prevents solder from sticking and clogging. Unit can even be used on heat shrinkable tubing. U. L. Listed. For 110-120 V, AC or DC. Order additonal tips below.

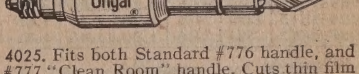
989-3715. Shpg. wt., 10 oz. 1-5 Each 14.89
6-11 ..... Each 11.72 12-Up ..... Each 9.70

989-3716. Type 7806. .057″ diameter tip for above. Shpg. wt., 2 oz. ..... Each .95

989-3720. Type 7812. .033″ diameter tip for above. Shpg. wt., 2 oz. ..... Each 1.35

989-3721. Type 7813. .069″ diameter tip for above. Shpg. wt., 2 oz. ..... Each .95

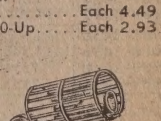
HOT KNIFE



4025. Fits both Standard #776 handle, and #777 "Clean Room" handle. Cuts thin film epoxy coating for component replacement, plastic films, and trims flash from rubber or plastic moldings. With Dacron, nylon or other synthetics, cuts and seals preventing ragged edges. 500° F blade temperature. Includes 47½-watt heating unit with collet closure, and one replaceable stainless steel blade. U.L. Listed. 3 oz.

989-3525. 1-9 ..... Each 4.49
10-49 ..... Each 3.53 50-Up ..... Each 2.93

SOLDERING IRON HOLDER



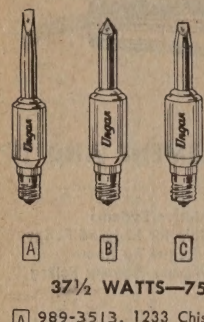
MODEL 8000. For use with Ungar "Standard Line" of soldering irons. Keeps iron handily convenient on the workbench. Shpg. wt. 8 oz.

989-3651. 1-9 ..... Each 2.44
10-49 ..... Each 1.91 50-Up ..... Each 1.59

"Standard Line" Soldering Components

ASSEMBLE THE "RIGHT" IRON FOR PRODUCTION, LAB OR SERVICING

COMBINATION ELEMENT-TIPS FOR 777, 776 HANDLES



Element and tip for use with Type 776 and 777 handles, at right. U.L. Listed. For 110-120 volts AC-DC. 2 oz.

47½ WATTS—850°-1000°F

IRON-CLAD, SILVER-PLATED

A **989-3527.** 4033 Chisel Tip, Long Taper. General-purpose. Tip, 1⅝x¼".

B **989-3530.** 4036 Pyramid Tip. For extra-heavy-duty work. Tip, 1⅛x⅜".

C **989-3533.** 4039 Chisel Tip, Short Taper. For production line. Tip, 1⅛x⅜".

1-9 ..... Each 3.17
10-49 ..... Each 2.60 50-Up ..... Each 2.38

37½ WATTS—750°-800°F

A **989-3513.** 1233 Chisel Tip, Long Taper. General service/light prod. Copper-alloy, unplated tip. 1⅝x¼".

B **989-3516.** 1236 Pyramid Tip. General service/light production. Solid Armco iron, silver plated tip, 1⅛x5/16".

C **989-3519.** 1239 Chisel Tip, Short Taper. For general-purpose work. Solid Armco iron, silver-plated tip, 1⅛x⅜".

1-9 ..... Each 2.70
10-49 .... Each 2.31 50-Up ... Each 1.85

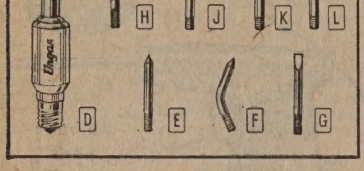
23½ WATTS—650°-700°F

A **989-3480.** 533 Chisel Tip, Long Taper. Made of copper alloy. For general repair. Tip, 1⅝x3/16".

B **989-3484.** 536 Pyramid Tip. For general maintenance. Tip, 1⅛x5/16".

C **989-3487.** 539 Chisel Tip, Short Taper For general repair on small-board surface joints. Tip, 1⅛x5/16".

1-9 ..... Each 1.86
10-49 .... Each 1.46 50-Up ... Each 1.21



THREAD-IN ELEMENTS AND ⅛" TIPLETS FOR SUBMINIATURE WORK

D ELEMENTS. Fit Types 776 and 777 handles, above. Type 4035, for 800-850°F; Type 1235, for 700-750°F; Type 535, for 600-650°F. Steel body treated to resist corrosion. U.L. Listed. For 110-120 volts AC or DC. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Watts	EACH 1-9	10-49	50-Up
989-3529	4035	47½	3.89	3.06	2.54
989-3515	1235	37½	2.70	2.31	1.85
989-3483	535	23½	1.86	1.46	1.21

⅛" TIPLETS. For subminiature work. 1" long, except *1¼", †⅝". §1/16" point; #3/64" point. Av. shpg. wt., 2 oz.

IRON-CLAD SILVER-PLATED COPPER ALLOY

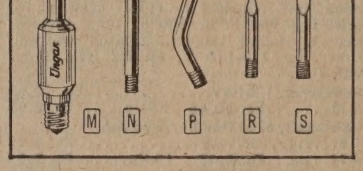
Stk. No.	Type	Fig.	Description
989-3425	PL331	E	Pencil
989-3426	*PL332	F	Pencil, Offset
989-3427	PL333	G	Chisel, Long Taper
989-3430	§PL338	H	Tapered Needle
988-3436	†#PL340	J	Micro-Spade
989-3410	7154	K	Pencil, Stepped
989-3411	7155	L	Chisel, Stepped

1-9 ..... Each .75
10-49 ..... Each .58 50-Up ..... Each .49

UNPLATED COPPER ALLOY

989-3460	331	E	Pencil
989-3461	332	F	Pencil, Offset
989-3462	333	G	Chisel, Long Taper

1-9 ..... Each .31
10-49 ..... Each .24 50-Up ..... Each .20



THREAD-IN ELEMENT AND 3/16" TIPLETS FOR GREATER HEAT TRANSFER

4045 ELEMENT

M 800-850°F, 56½ WATTS. Fits 776 and 777 handles, above. High-temperature steel body treated to resist corrosion. Fits Ungar desoldering tips. For 110-120 V, AC or DC. U.L. Listed. Shpg. wt., 2 oz.

989-3537. 1-9 ..... Each 3.89
10-49 ..... Each 3.06
50-Up ..... Each 2.54

3/16" TIPLETS

For extra-high heat transfer. Lengths given for unthreaded portions only. Wt., 2 oz.

IRON-CLAD SILVER PLATED COPPER ALLOY

Both are chisel tip, long taper. Wt., 2 oz.

Stock No.	Type	Fig.	Description
989-3440	PL833	N	1⅝" long
989-3441	PL834	P	1⅝" long, offset

1-9 ..... Each 1.23
10-49 ..... Each .97 50-Up .... Each .80

Stock No.	Type	Fig.	Description
989-3446	PL823	R	Pyramid, 1" long
989-3447	PL824	S	Chisel, 1" long taper

1-9 ..... Each .86
10-49 ..... Each .68 50-Up ..... Each .56

UNPLATED COPPER ALLOY

(R) 989-3500. 823 Pyramid. 1" long.
(S) 989-3501. 824 Chisel Long Taper. 1".

1-9 ..... Each .37
10-49 ..... Each .29 50-Up ..... Each .24

TYPE 776 AND 777 LIGHTWEIGHT HEAVY DUTY HANDLES AND COR

777. Assemble the iron you ne using this handle and any e ment/tip combination or se rate element and tip on t page. Pastel color "Cle Room" grip design. Ideal printed circuits and submin ture systems. Durable, l lightweight to reduce fatig Stainless steel heat deflect reflects heat away from ope tor's hand. In addition, inter ceramic and glass insulator sists tip heat. Octagon was prevents handle roll. Spring socket preve tip wobble. Convection-cooled. Vinyl-c ered cord. Handle 5" long. Order eleme and tip below. U.L. Listed. Shpg. wt. 4

989-3490. 1-9 ..... Each 2.
10-49 ..... Each 1.68 50-Up ..... Each 1.
776. As above, but red with cork grip.
989-3491. 1-9 ..... Each 2.
10-49 .... Each 1.68 50-Up ..... Each 1.

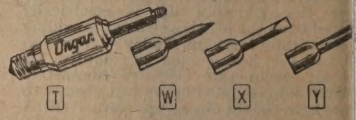
MICROMINIATURE TIPS FOR ⅛" ELEMENTS

- For Most Delicate Work
- Always Precision Perfect

989-3699. Type 7012 Copper .0 Precision Tip. Perfect for delic and intricate jobs. Shpg. wt. 1
1-9. ... Ea. .75 10-49. ... Ea. .
50-Up ..... Ea. .

989-3700. Type 7062 Iron-C Silver Plated Copper .010" T Long lasting. Shpg. wt. 1 oz.
1-9. ... Ea. 1.40 10-49. ... Ea. 1.
50-Up ..... Ea.

THREAD-IN ELEMENTS, ¼" THREA ON TIPS FOR HI-SPEED WORK



- Fit 776 and 777 Handles
- Heavy-duty Tips for Big Jobs
- Long-lasting, Easy to Put On

T ELEMENTS. Fit 776 and 777 handl above. Nickel-plated copper alloy. 403 750-900°F; 1237, 750-800°F; 537, 600-65 F. U.L. Listed. For 115V, AC-DC. 2 oz.

Stock No.	Mfr's Type	Watts	EACH 1-9	10-49	50-U
989-3531	4037	47½	3.89	3.06	2.5
989-3517	1237	37½	2.70	2.31	1.8
989-3585	537	23½	2.16	1.71	1.4

TIPS. *Iron-clad silver-plated copper. †U plated copper. ¾x⅛". 2 oz.

(W) 989-3410. PL-111† Pencil.
(X) 989-3411. PL-113† Chisel.
(J) 989-3412. PL-114† Micro-Spade.
(Y) 989-3413. PL-116† Pyramid.

1-9 ..... Each .5
10-49 .... Each .78 50-Up ..... Each .6

(W) 989-3450. 111† Pencil.
(X) 989-3453. 113† Chisel.
(Y) 989-3456. 116† Pyramid.

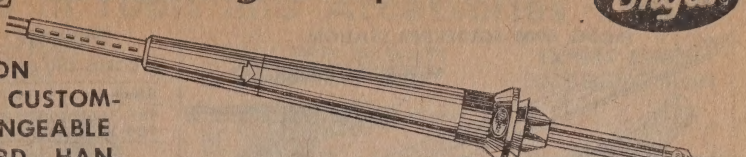
1-9 ..... Each .4
10-49 .... Each .40 50-Up ..... Each .3

Make Allied your "One-Stop" for all your industrial needs. Pay OEM factory prices, slash handling expenses and reduce paperwork in purchasing and receiving. You place one order, receive one shipment and make one disbursement.

Look to Allied Electronics for Everything in Soldering Component

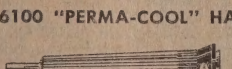
IMPERIAL Soldering Components

Ungar



OR CONTINUOUS PRODUCTION INE USE . . ASSEMBLE YOUR CUSTOM-MADE IRON FROM INTERCHANGEABLE MPERIAL COMPONENTS—CORD, HAN-DLE, HEAT CARTRIDGE AND MINI-TIP

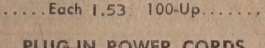
TYPE 6100 "PERMA-COOL" HANDLE



deal for continuous production-line usage especially sub-assembly nd systems work. Functional handle weighs only 1 oz. Fits heat artridges listed below. Double cushion of air and five heat-trans-nission surfaces for cool operation. Made of polycarbonate resin, vith die-cast aluminum heat sink. 4.7" long; 0.8" diameter at grip. Shpg. wt. 2 oz. Specify Color: beige, ivory, turquoise, black.

89C3552. 1-9 ..... Each 1.98
0-99 ..... Each 1.53 100-Up ..... Each 1.29

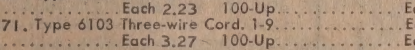
PLUG-IN POWER CORDS



Vinyl-covered 2 or 3-wire power cords for Imperial handles. Molded-in female connector, positive slip-on action, and snap-lock. Polyvinylchloride insulation on both wire and plug. 18-gauge wire; each conductor 65 strands .005" wire. U.L. Listed. For 115 V, AC or DC. 3 oz. Specify Color: beige, ivory, turquoise, black.

89 C3561. Type 6102 Two-wire Cord. 1-9 ..... Each 2.88
0-99 ..... Each 2.23 100-Up ..... Each 1.88
89 C3571. Type 6103 Three-wire Cord. 1-9 ..... Each 4.22
0-99 ..... Each 3.27 100-Up ..... Each 2.75

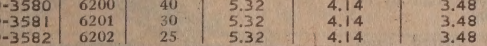
"LONG LIFE" HEAT CARTRIDGES



Stainless-steel cartridges for "Mini-Tips," at right. 7½" long except 8" long, †8½" long. 6203, 950-1050°F; 6200, 750-950°F; 6201, 650-850°F; 6202, 600-800°F; 6207, 850-1000°F. U.L. Listed. 2 oz.

Stock No.	Type	Watts	1-9, EA.	10-99, EA.	100-Up, EA.
989-3587	†6207	100	8.17	6.34	5.33
989-3583	*6203	60	6.12	4.74	3.99
989-3580	6200	40	5.32	4.14	3.48
989-3581	6201	30	5.32	4.14	3.48
989-3582	6202	25	5.32	4.14	3.48

"MICRO-TIPS"® AND 15-WATT CARTRIDGE FOR MICROMINIATURE ASSEMBLIES



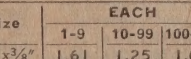
6206 15-WATT CARTRIDGE. Short length and small diameter for light, high-density circuitry requiring precise tip temperatures and extreme soldering care. Only 6⅞x⅜". Weighs only 0.89 oz. 614-743°F depending on tip. U.L. Listed. Shpg. wt., 2 oz.

989-3586. 1-9 ..... Each 5.32
10-99 ..... Each 4.14 100-Up ..... Each 3.48

"MICRO-TIPS." Use only with 6206 cartridge, left. Tips are iron clad, 24 kts. gold plated. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	Size	EACH 1-9	10-99	100-Up
989-3636	6550	Taper screwdriver	⅛x⅜"	1.61	1.25	1.05
989-3637	6551	Stepped spade	.040x⅜"	1.61	1.25	1.05
989-3639	6553	Stepped chisel	.040x⅜"	1.61	1.25	1.05
989-3640	6554	Stepped pencil	.040x⅜"	1.61	1.25	1.05

TIPS FOR MICROMINIATURE PRODUCTION-ASSEMBLY WORK



Ultra-fine points for Heat Cartridges above. Wt. 1 oz.
989-3617. 6391 .005" Copper Tip. 1-9 ..... Each .98
10-99 ..... Each .76 100-Up ..... Each .64
989-3618. 6392 .010" Iron-Clad Gold-Plated Copper Tip.
1-9 ..... Each 1.92
10-99 ..... Each 1.49 100-Up ..... Each 1.25

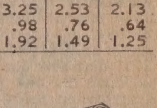
INTERCHANGEABLE MINI-TIP® SOLDERING TIPS

Interchangeable thread-on tips eliminate the expense of using several irons for every job. Tips have high thermal conductivity. *In Description column indicates a 24-kt. gold-plated, iron-clad tip; †tellurium copper composition. All may be used with 25, 30, 40, or 60-watt "Long-Life" cartridges, except 6500 and 6520, which are for use with 100-watt cartridge. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Description	Size	EACH 1-9	10-99	100-Up
989-3590	6304	*Micro-chisel	3/64x½"	1.38	1.07	.90
989-3593	6305	*Micro-spade	3/64x½"	1.38	1.07	.90
989-3595	6312	†Pencil	⅛x¾"	.61	.47	.40
989-3596	6313	*Pencil	⅛x¾"	1.38	1.07	.90
989-3600	6316	*Pencil, offset	⅛x¾"	1.38	1.07	.90
989-3601	6318	†Long taper chisel	⅛x¾"	.61	.47	.40
989-3602	6319	*Long taper chisel	⅛x¾"	1.38	1.07	.90
989-3604	6324	†Long taper pyramid	⅛x¾"	.61	.47	.40
989-3605	6325	*Long taper pyramid	⅛x¾"	1.38	1.07	.90
989-3607	6331	*Screwdriver	⅛x¾"	1.38	1.07	.90
989-3608	6333	*Needle	⅛x¾"	1.38	1.07	.90
989-3609	6336	*Spade	⅛x¾"	1.38	1.07	.90
989-3610	6366	*Long taper chisel	3/16x¾"	1.63	1.27	1.06
989-3614	6372	*Screwdriver	3/16x¾"	1.63	1.27	1.06
989-3616	6390	*Screwdriver	3/16x1½"	1.67	1.30	1.09
989-3620	6424	*Long taper chisel	¼x¾"	1.67	1.30	1.09
989-3624	6474	*Long taper chisel	⅜x¾"	1.92	1.49	1.25
989-3626	6481	*Tapered screwdriver	¾x3/32"	1.38	1.07	.90
989-3627	6482	Micro-spade	¾x1/16"	1.38	1.07	.90
989-3635	6520	†100-W. Cart. Chisel	½x1½"	1.67	1.30	1.09
989-3612	6368	†Long taper pyramid	⅛x¾"	.75	.58	.49
989-3633	6473	†Long taper chisel	¼x¾"	.75	.58	.49
989-3630	6500	*100-W. Cart. Chisel	1½x½"	3.25	2.53	2.13
989-3617	6391	*Precision Mini-Tip	.010"	.98	.76	.64
989-3618	6392	†Precision Mini-Tip	.005"	1.92	1.49	1.25

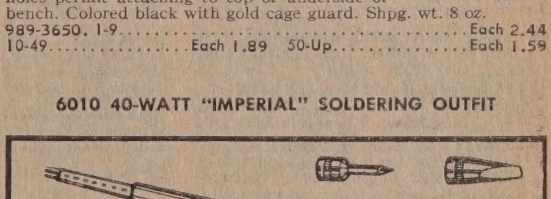
"IMPERIAL" IRON HOLDER

Protects Worker and Handle



6800 IRON HOLDER. For use with "Imperial" line of irons. Cage Guard framework protects against hot tip burns or handle damage. Two mounting holes permit attaching to top or underside of bench. Colored black with gold cage guard. Shpg. wt. 8 oz.
989-3650. 1-9 ..... Each 2.44
10-49 ..... Each 1.89 50-Up ..... Each 1.59

6010 40-WATT "IMPERIAL" SOLDERING OUTFIT

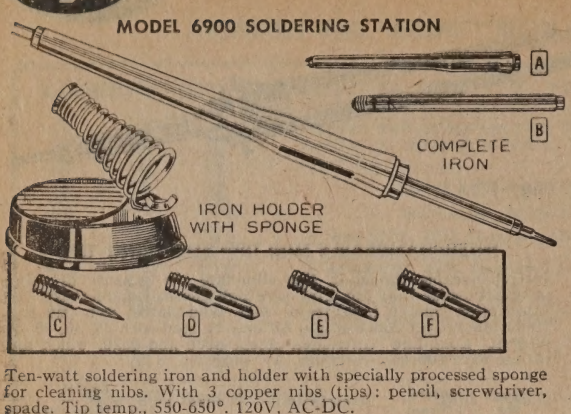


Complete Outfit for Subminiature Soldering
. . Includes Handle, Cord, Heat Cartridge, Tips

Features six of the most popular "Imperial" components. For use in production development and servicing. Ideal for printed circuit and solid-state devices. Kit includes: #6100 Perma-Cool Handle; #6200 stainless-steel, double-insulated 40-watt heat cartridge; #6102 two-wire cord; and three multi-purpose Mini-Tip® thread-on soldering tips. Delivers a tip temperature of 750° to 950° F. For 110-120 volts AC or DC operation. Solve all your soldering needs with this all-purpose handy soldering outfit. The choice of 3 tips allows you to work on a wide variety of jobs. Wt. 8 oz.
989-3550. 1-9 ..... Each 10.35
10-99 ..... Each 8.03 100-Up ..... Each 6.75

Ungar "Princess" Soldering and Desoldering Tools

MODEL 6900 SOLDERING STATION



Ten-watt soldering iron and holder with specially processed sponge for cleaning nibs. With 3 copper nibs (tips): pencil, screwdriver, spade. Tip temp., 550-650°. 120V, AC-DC.

989-3694. Type 6900. Shpg. wt. 10 oz. **13.74**
989-3695. Type 6965. Iron Less Holder. U.L. Listed. 6 oz. **9.72**
989-3691. Type 6990 Iron Holder, Sponge. Wt., 4 oz. **4.17**
989-3692. Type 6991 Sponge Refill. For holder. 1 oz. ..... **.63**

"PRINCESS" INTERCHANGEABLE COMPONENTS

A CORDS AND HANDLES. Handle, 5x½" dia.; vinyl cord. 5 oz.

Stock No.	Type	Description	1-9, EA.	10-49, EA.	50-Up, EA
989-3660	6902	2-wire	3.94	3.29	2.64
989-3661	6903	3-wire	5.26	4.37	3.57

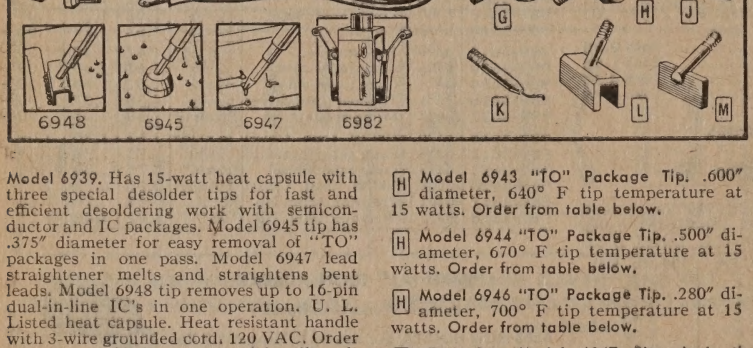
B HEAT CAPSULES. Stainless Steel. Wt., 2 oz.

989-3667	6910	10-watt	4.83	4.02	3.23
989-3670	6915	15-watt	4.83	4.02	3.23
989-3671	6918	18-watt	4.83	4.02	3.23

SOLDERING NIBS. (*Iron-Clad Gold-Plated Copper. †Plain Copp nib). Spade, screwdriver, pencil or precision point.

Stock No.	Mfr's Type	Fig.	Description	LxDia.xTip	EACH 1-9	10-49	50-L
989-3683	6952	C	†Spade	.61x⅛x.08"	.48	.40	.3
989-3688	6962	C	*Spade	.62x.13x.09"	.83	.68	.5
989-3682	6951	D	†Screwdriver	.60x⅛x.005"	.48	.40	.3
989-3687	6961	D	*Screwdriver	.62x.13x.06"	.83	.68	.5
989-3681	6950	E	†Pencil	.61x.125x.015"	.48	.40	.3
989-3686	6960	E	*Pencil	.62x.130x.015"	.83	.68	.5
989-3684	6953	F	†Precision	.61x⅛x.005"	.89	.74	.5
989-3689	6963	F	*Precision	.61x⅛x.010"	1.61	1.34	1.0

DESOLDERING KIT FOR IC AND SEMICONDUCTOR PACKAGE



Model 6939. Has 15-watt heat capsule with three special desolder tips for fast and efficient desoldering work with semiconductor and IC packages. Model 6945 tip has .375" diameter for easy removal of "TO" packages in one pass. Model 6947 lead straightener melts and straightens bent leads. Model 6948 tip removes up to 16-pin dual-in-line IC's in one operation. U. L. Listed heat capsule. Heat resistant handle with 3-wire grounded cord. 120 VAC. Order replacement heat capsule and handle, additional tips below and at right. 12 oz.
989-3685. 1-3. ..... Each **17.02**
4-11. ... Each **14.30** 12-Up. ... Each **11.30**

989-3670. Model 6915 Replacement Heat Capsule. Wt., 2 oz. 1-9. ..... Each **4.83**
10-49. ... Each **4.02** 50-Up. ..... Each **3.23**

989-3661. Model 6903 Replacement Handle. Wt., 5 oz. 1-9. ..... Each **5.26**
10-49. ... Each **3.66** 50-Up. ..... Each **3.51**

Model 6982 Dual In-Line IC Extractor. Push-button extractor for use with Model 6948 desoldering tip. Spring-loaded action—locks on to IC case, releases automatically. Fast release prevents board damage, eliminates lead damage and circuit destruction.
989-3690. Wt., 00 oz. 1-9. ..... Each **2.30**
10-49. ... Each **1.93** 50-Up. ..... Each **1.55**

G Model 6945 "TO" Package Desoldering Tip. Nickel-plated. .375" diameter, 680° tip temperature when used with 15-watt heat capsule. Order at right.

H Model 6943 "TO" Package Tip. .600" diameter, 640° F tip temperature at 15 watts. Order from table below.

H Model 6944 "TO" Package Tip. .500" diameter, 670° F tip temperature at 15 watts. Order from table below.

H Model 6946 "TO" Package Tip. .280" diameter, 700° F tip temperature at 15 watts. Order from table below.

J **989-3680.** Model 6947 Slotted Lead Straightener. Melts, straightens leads. 680° F tip temperature. 1-9. ..... Each **2.10**
10-49. ... Each **1.75** 50-Up. ..... Each **1.41**

K **989-3675.** Model 6940 Flat Pack Tip. For separate flat pack leads. Hooked tip. 650° F. 1-9. ..... Each **2.65**
10-49. ... Each **2.20** 50-Up. ..... Each **1.75**

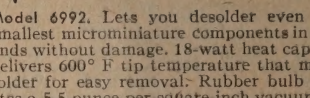
L Model 6948 Dual In-Line Tip. Removes to 16-pin IC's in one pass. 550° tip temperature. Order from table below.

M Model 6941 Flat Pack Tip. For all leads on one side of flat pack. 700° F tip temperature. Order from table below.

Stock No.	Type	Fig.	Stock No.	Type	Fig.
989-3679	6945	G	989-3697	6946	H
989-3677	6943	H	989-3698	6948	L
989-3678	6944	H	989-3674	6941	M

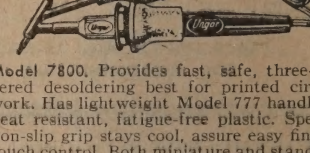
1-9. ..... Each **2.51**
10-49. ... Each **2.09** 50-Up. ..... Each **1.70**

MINIATURE DE-SOLDERETTE

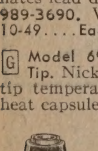


Model 6992. Lets you desolder even th smallest microminiature components in se onds without damage. 18-watt heat capsu delivers 600° F tip temperature that melt solder for easy removal. Rubber bulb cr ates a 5.5-ounce per-square-inch vacuum tip—"sucks up" molten solder. Speci coating inside and outside the collect body eliminates sticking and clogging. U. Listed. For 110-130 V, 60 Hz AC.
989-3693. Shpg. wt., 12 oz. **18.8**
989-3720. Replacement Tip. 2 oz. **1.2**

HOT-VAC DESOLDERING TOOL



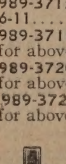
Model 7800. Provides fast, safe, three-fi gered desoldering best for printed circu work. Has lightweight Model 777 handle heat resistant, fatigue-free plastic. Speci non-slip grip stays cool, assure easy finge touch control. Both miniature and standar desoldering are made easier by vacuu bulb. Special coating inside and out pr vents solder from sticking and cloggin Unit can even be used on heat shrinkabl tubing. U.L. Listed. For 110-120 V, AC DC. Order additional tips below.
989-3715. Shpg. wt. 10 oz. 1-5 Each **14.0**
6-11. ..... Each **9.93** 12-Up. .. Each **9.0**
989-3716. Type 7806. .057" diameter t for above. Shpg. wt. 2 oz. ..... Each **.9**
989-3720. Type 7812. .033" diameter t for above. Shpg. wt. 2 oz. ..... Each **1.3**
989-3721. Type 7813. .069" diameter t for above. Shpg. wt. 2 oz. ..... Each **.9**



"PRINCESS" SOLDERING CUP "SCALED FOR THE JOB"

- Corrosion-Proof Cup Has 1 oz. Solder Capacity
- Also Perfect for Desoldering
- Stable Base Plate Prevents Spilling and Waste
- Selects 400° to 750° F

Model 7000. Deluxe miniature soldering cup, ideal for soldering microminiature components and leads. Also can be used for efficient desoldering. Corrosion-proof bronze melt cup has full 1 oz. solder capacity; built in dross ring; precision machine finish. Adjustable thermostatic control lets you select soldering temperatures from 400° to 750° F. Special design permits cool operation with minimal external heat radiation. Stable base plate prevents spilling and waste. Cup depth of only ⅜". 3 wire cord. Grounded NEMA plug. For 120 volts AC or DC. Shpg. wt. 4 lbs.
989-3696. 1-3. ..... Each **27.31**
4-11. ... Each **22.72** 12-Up. ... Each **18.25**

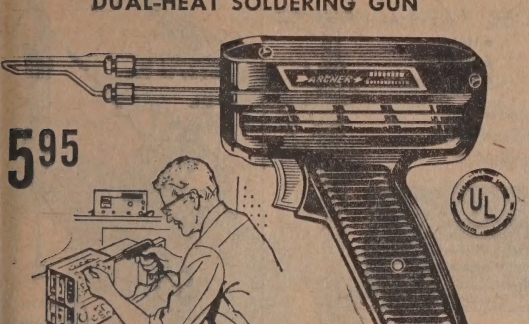


PRINCESS TO-5 EXTRACTOR

6983. Extracts most TO-5 en cased devices; use with Nos 6943, 6944, 6945, or 6946 T de-solder tips. Specifically de signed to easily extract most TO-5 encase devices encountered.
989-3676. 1-9. ..... Each **2.3**
10-49. ... Each **1.93** 50-Up. ... Each **1.5**

Best-Buys in Tools and Accessories

ARCHER® 100/140 WATT "EXPERT" DUAL-HEAT SOLDERING GUN



5.95

• "Instant Heat" and Spotlight • Fingertip Selection

'ingertip selection of 140 or 100 watts provides high or low heat s the job requires. Soldering copper tip. Balanced weight.
10-5935. Type 64-2190. Shpg. wt. 1 lb.....5.95

Replacement Soldering Tips (also for Weller guns)

Stock No.	Type No.	For Model	PRICE
910-5902	64-237	8200; D440	2 for .50
910-5901	64-234	D550	2 for .50

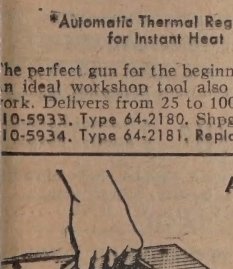
QUALITY SOLDERING PISTOL WITH ATR*

4.49

*Automatic Thermal Regulation for Instant Heat

'he perfect gun for the beginner or young hobbyist. n ideal workshop tool also for fast, lightweight ork. Delivers from 25 to 100 watts of heat power. Spotlight.
10-5933. Type 64-2180. Shpg. wt. 1¼ lbs.....4.49
10-5934. Type 64-2181. Replacement Tip. Wt. 2 oz.....1.00

ARCHER® 15-DRAWER PORTABLE CABINET



3.95 • For Home, or Shop • Ideal Way to Store Small Articles

"Unitized" 8x10x6" steel frame storage/organizer with 15 "see-thru" 2¾x11¼x5¾" drawers. Unbreakable tote handle. Adjustable drawer dividers and labels. Attractive baked enamel finish. 4 lbs.
910-5927. Type 64-2026....3.95

ARCHER® HOBBYIST KNIFE KIT

1.98 10 Multipurpose Interchangeable Steel Blades

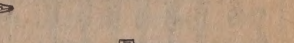
erform such delicate operations as correcting printed circuit oards, scraping, carving, engraving—all with precision and afety. Set includes left and right hand etchers, stencil cutters, riber, carver, scraper and all purpose steel blades. All blades re precision-ground.
10-5905. Type 74-1801. Shpg. wt. ½ lb.....1.98

COOL-GRIP 30-WATT SOLDERING GUN

1.95

120-volt all-purpose soldering gun with U.L. cord. The easy-grip handle stays cool. Lightweight, heats instantly. Repairs hundreds of home, office, and shop items. Perfect for home electrical repairs on radios, TV, hi-fi. Shpg. wt. ¾ lb.
910-5939. Type 64-2224...1.95

EXPERT PENCIL SOLDERING IRON



1.49 Reaches Tight Wiring Spots

Only Allied Electronics could offer you this 30-watt, 120 volt soldering iron, with U.L. cord at such a low, low price. Lightweight, easy to use. Heats instantly but handle stays cool. Perfect for printed circuits. ½ lb.
910-5940. Type 64-2225...1.49

9-PIECE ELECTRONIC TOOL KIT BARGAIN

For Science Fair Builders

5.99

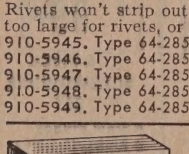
The "electronic" tools you need the most. 30-watt soldering iron solder, solder aid, 2 pliers, 3 screwdrivers, heat sink.
910-5944. Type 64-2800. Shpg. wt. 1 lb.....5.99

HANDYMAN'S POP RIVET GUN

• Replace Metal Screws! • Replace Soldering, Brazing! • Replace Nuts, Bolts and Adhesives!

2.99

Rivets won't strip out or loosen. Use backup plates where hole is too large for rivets, or as reinforcement with soft material.
910-5945. Type 64-2852. Shpg. wt. 1¼ lbs.....2.99
910-5946. Type 64-2853. 25 Short Rivets. For work to ⅛" thick..49
910-5947. Type 64-2854. 20 Medium Rivets. For work to ¼" thick.49
910-5948. Type 64-2855. 15 Long Rivets. For work to ½" thick...49
910-5949. Type 64-2856. 40 Backup Plates.....49

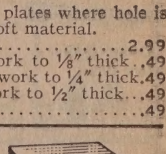


18-DRAWER CABINET

Sturdy steel-frame cabinet ideal for organizing and storing small articles. Only 9x10x6" overall. 18 drawers 2¾x1¼x5¾"; adjustable dividers. Type 64-2030. 4 lbs.
910-5928.....4.95

12-DRAWER CABINET

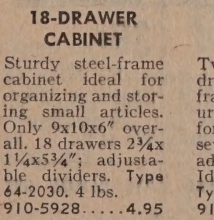
Twelve 2¾x2x5¾" drawers in a steel frame cabinet measuring 9x10x6". Ideal for workbench, or sewing room. With adjustable dividers. Ideal for all storage. Type 64-2031. 4 lbs.
910-5929.....4.95



4-DRAWER "CATCH-ALL"

Strong steel-frame cabinet has four drawers with sliding compartments. Compact 6x8¼x5¾" frame fits neatly anywhere—desk workbench, etc. Type 64-2050. 3 lbs.
910-5930.....1.95

HAND NIBBLING TOOL



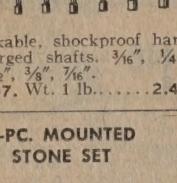
• Cuts Complex Designs • Cuts Sheet Metal • Cuts 8-Gauge Steel

Cuts holes, slots, and openings in metal and plastic. Easy to use; leaves edges smooth after being cut. Shpg. wt. 1 lb.
910-5904. Type 64-822.....4.99

Buy Here for the "Right" Tool for Every Job

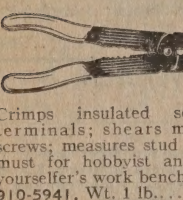
6-PC. NUTDRIVER SET

2.49



Unbreakable, shockproof handles, forged shafts. 3/16", 1/4", 5/16", 11/32", 3/8", 7/16".
910-5907. Wt. 1 lb.....2.49

5-PC. MOUNTED STONE SET



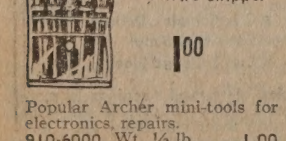
1.09

Stones for grinding, polishing burnishing. Includes tree, 2 cones, ball, cylindrical shapes.
910-5914. Wt. 1 lb.....1.09

ELECTRICAL CRIMPING TOOL

4.95

Crimps insulated solderless terminals; shears machine screws; measures stud sizes. A must for hobbyist and do-it-yourselfer's work bench.
910-5941. Wt. 1 lb.....4.95



Compare Our Low Price!

89¢

10-Piece Socket Set. With 1/4" drive reversible ratchet.
910-5922. Wt. 1/2 lb.....89

13-PIECE DRILL SET

79¢

Metal indexed case. Sizes from 1/16" to 1/4". All but large jobs.
910-5953. Wt. 1/2 lb.....79

6-in-1 MINI-TOOL KIT

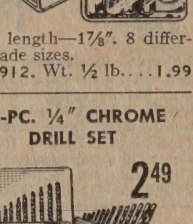
- Awl Gimlet
- 3 Screwdrivers
- Wire Stripper

1.00

Popular Archer mini-tools for electronics, repairs.
910-6000. Wt. 1/2 lb.....1.00

8-PC. SCREWDRIVER SET ARCHER®

1.99



Blade length—1 7/8". 8 different blade sizes.
910-5912. Wt. 1/2 lb....1.99

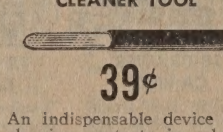
13-PC. 1/4" CHROME DRILL SET

2.49

Industrial high-speed types for rough jobs. 1/16" thru 1/4" x 64ths.
910-5913. Wt. 1/2 lb....2.49

THE ALL-PURPOSE 8" CRIMPING TOOL

1.29



- With Terminals
- Cuts and Strips Wires

Hundreds of uses. Easy to use.
910-5903. Wt. 1 1/2 lbs..1.29

99¢

6-PIECE SCREWDRIVER SET

- Steel Blades
- Amber Handles

Rugged multi-purpose set.
910-5906. Wt. 1 lb.....99

CONTACT BURNISHING CLEANER TOOL

39¢

An indispensable device for cleaning contacts in relays, switches. "File finish" removes oxide and corrosion.
910-5943. Wt. 1/2 lb.....39

SABRE SAW BLADE SET

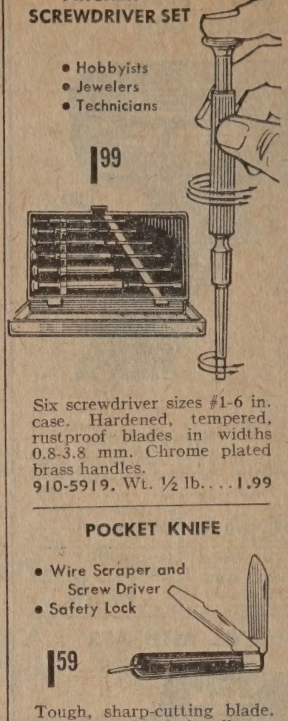
49¢

A top hobbyist value. 4 wood cutting blades; 1 metal cutting blade.
910-5921. Wt. 1/4 lb.....49

ARCHER® SCREWDRIVER SET

- Hobbyists
- Jewelers
- Technicians

1.99



Six screwdriver sizes #1-6 in. case. Hardened, tempered, rustproof blades in widths 0.8-3.8 mm. Chrome plated brass handles.
910-5919. Wt. 1/2 lb....1.99

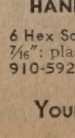
POCKET KNIFE

- Wire Scraper and Screw Driver
- Safety Lock

1.59

Tough, sharp-cutting blade. Non-slip sure grip handle.
910-5932. Wt. 1/4 lb....1.59

PATTERN MAKER/ CONTOUR GAUGE



- Match & Out-Line Irregular shapes

1.29

Use for around the house fixing; fitting tile, laying linoleum, matching, etc.
910-5916. Wt. 1/4 lb 1.29

HEX & SPLINE WRENCH KIT

1.49

Set of 12

A complete wrench kit for hexagon and spline type screws. 12 wrenches in leatherette case. Fit #2 to 3/8" screws.
910-5942. Wt. 1 lb. 1.49

NUT-DRIVER SET WITH HANDLES

99¢

6 Hex Sockets. From 3/16" up to 7/16": plastic chuck handle.
910-5923. Wt. 1/4 lb.....99

ONE-TON POCKET HOIST

- Completely Assembled—Ready to Use

5.99

An unusual light weight and compact block and tackle. Portable yet powerful for heavy liftin Easy to use. 7 to 1 rati Weighs less than a pound. 6 nylon rope. Rustproof.
910-5900. Wt. 1 1/4 lbs....5.9

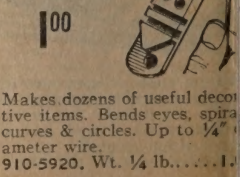
WIRE STRIPPER/CUTTER

- Spring Loaded

1.39

For all commonly used standa wire sizes. 5" blades.
910-5931. Wt. 1/2 lb.....1.3

WARDING FILE SET



79¢

- Precision Hardene
- Assorted Shapes

4 most popular shape files. Fi est quality. Storage pouch.
910-5915. Wt. 3 lbs.....7

PROFESSIONAL QUALITY HANDLE SCREWDRIVERS

- Precision Tips—Perfect Fit
- Rustproof Tempered Steel
- Extra-large Amber Handle

910-5908 4" Cabinet Type...
910-5909. 6" Electrician.....
910-5910. 3" #1 Recessed...
910-5911. 4" #2 Recessed....

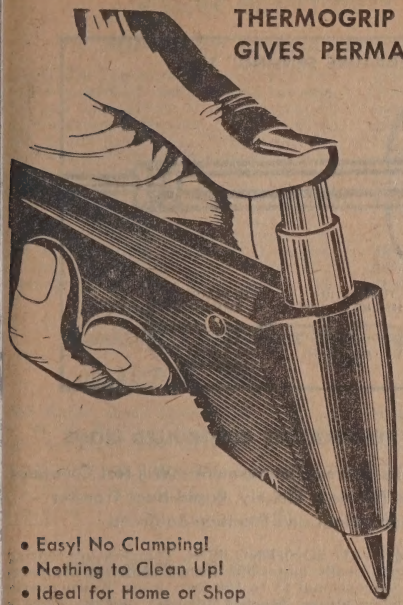
WIRE BENDING JIG

1.00

Makes dozens of useful decorative items. Bends eyes, spira curves & circles. Up to 1/4" ameter wire.
910-5920. Wt. 1/4 lb.....1.

Solve Your Fix-it Needs Here . . for Less Money

THERMOGRIP ELECTRIC GLUE GUN GIVES PERMANENT SECURE BOND



Convenient 60-second Bonding Plus Instant-set Quality Caulking

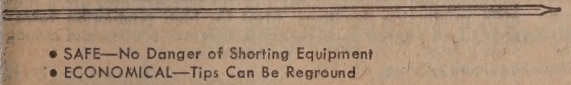
5.99

- Easy! No Clamping!
- Nothing to Clean Up!
- Ideal for Home or Shop
- Good for Many Make-or-Mend Jobs

Makes all other forms of gluing obsolete. Uses new, hot-melt glue sticks; melted glue bonds permanently in 60 seconds, providing a solid bond that is perfect for furntiure, pottery, metal, leather, plastic or fabric. Use with white sealer sticks for waterproof caulking. Caulking and glue are included. Very easy to use. A must for repairs around home and shop. Sure-grip comfortable handle. 2 lbs.

910-5950. Glue Gun. 2 lbs. 5.99
910-5951. 14 Glue Sticks. . . .98
910-5952. 14 Sealer Sticks. . .98

3-PIECE NON-METALLIC ALIGNMENT STICK KIT



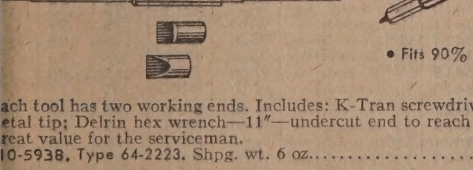
- SAFE—No Danger of Shorting Equipment
- ECONOMICAL—Tips Can Be Reground

1.69

deal for hard-to-reach places. Fits standard IF coils in your amplifier, hi-fi tuner, tape corder or TV. Contains 3 screwdrivers: one 12" fiber glass with 1/8" dia.; one 12" fiber-ass with 5/32" dia.; one 7" white delrin. 1/8" dia.

10-5937. Type 64-2222. Shpg. wt. ½ lb. 1.69

HANDY TV ALIGNMENT TOOL KIT



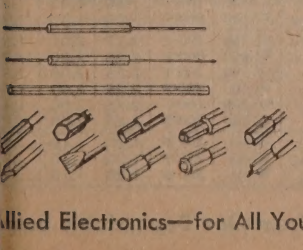
99c

- Fits 90% of IF and RF Transformers

ach tool has two working ends. Includes: K-Tran screwdriver with 5/32" Delrin tip, 1/8" etal tip; Delrin hex wrench—11"—undercut end to reach bottom slugs in iron coils. reat value for the serviceman.

10-5938. Type 64-2223. Shpg. wt. 6 oz. 99

COLOR TV ALIGNMENT TOOL KIT



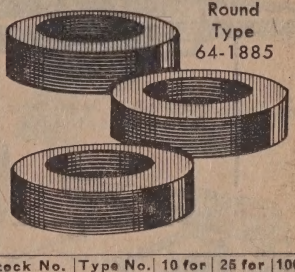
2.59

- Non-Metallic and Safe
- 5 Most-Wanted Tools

Why pay high prices for minor adjusments on your color TV? Tools contain 8 hex ends to cover most iron-core transformer adjustments. Two screwdriver tips plus an extender for "long reach" needs. Handy pocket pouch. An excellent set for the amateur or professional serviceman. Shpg. wt. ½ lb.

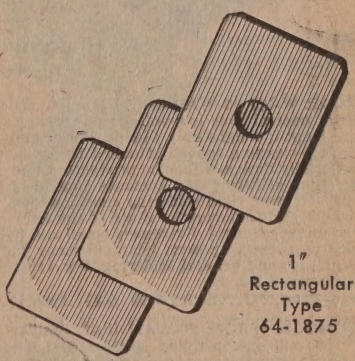
910-5936. Type 64-2220. . . . . 2.59

POWERFUL, MULTI-PURPOSE CERAMIC MAGNETS HAVE 1001 USES IN OFFICE, SCHOOL, AUTO, HOME, SHOP



1 1/8" Round Type 64-1885

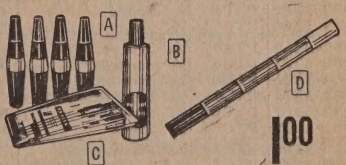
Stock No.	Type No.	10 for	25 for	100 for
910-5918	64-1885	1.00	2.25	8.00
910-5917	64-1875	1.00	2.25	8.00



1" Rectangular Type 64-1875

10 for	25 for	100 for
1.00	2.25	8.00

INSTANT-DRY MARKING PENS



1.00

A **4-piece Heavy-duty Marker Set.** Completely waterproof. Write on anything. Includes red, blue, black, and green pens. Excellent for marking all types of articles around the home or shop. Shpg. wt. ¼ lb.
910-5924. Type 64-1998. 59

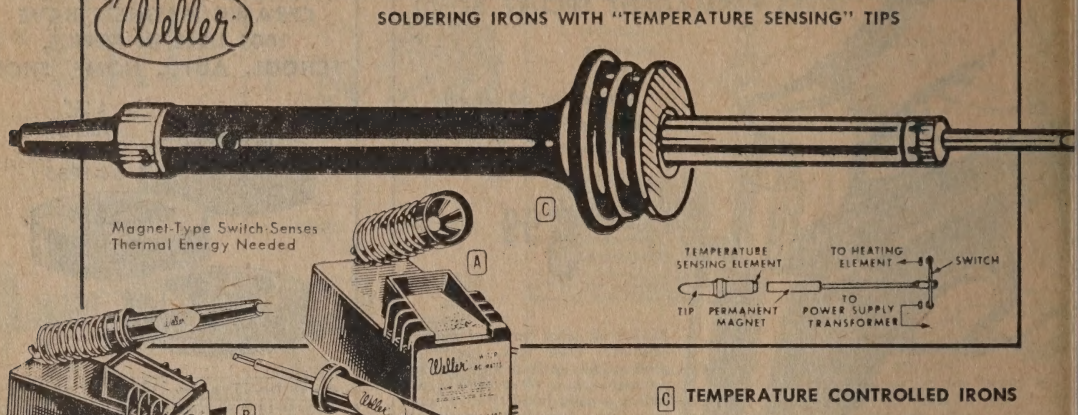
B **Giant Black Marker.** Quick drying and absolutely no smudging. Wt. ¼ lb.
910-5925. Type 64-1999. 39

C **Six Water-Color Markers.** Fine or broad line. Six different colors. Wt. ¼ lb.
910-5926. Type 64-2020. 98

D **4-Color Stack Pen.** Individual red, blue, green, black pens in 1 handy unit. Fit the color to the job. Shpg. wt. ¼ lb.
910-6001. Type 68-1008. . . . . 1.00

Low-Voltage, Temperature-Controlled Irons

PRECISION TOOLS FOR PRECISION SOLDERING



[A] CONTROLLED-TEMPERATURE LOW-VOLTAGE PENCILS

MODEL W-TCP 60-WATT UNIT. Features accurate, automatic temperature control plus low-voltage power unit (24-volts). 7½" pencil-size length; weighs only 1¾ oz. Power unit, 2x3x6". With 3/16" 700° tip; tip-cleaning sponge attached to power unit. Other tips below. Especially designed for the production line and research lab where precision soldering and accurate control of tip temperatures are a must to meet rigid soldering specifications. Also designed to meet today's and tomorrow's "State of the Art" and to insure reliability and quality control. Extremely small and light weight. Packed with plenty of reserve power. High efficiency and recovery. Suitable for miniature and general soldering. For 110-120 volts, 50-60 Hz. AC. Shpg. wt. 4 lbs.

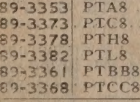
989-3390. 1-5...Each 19.50 6-23..Each 17.30 24-Up..Each 15.60

[B] MODEL W-TCP2 20-WATT UNIT. Similar to W-TCP above, but has silicon-controlled rectifier and thermistor control circuit. Adjusts temperature range continuously from 200° F to 450° F. For use only with solder that has melting point lower than 300° F. For 110-130 volts, 50-60 Hz AC. Shpg. wt. 3 lbs.

989-3392. 1-3...Each 50.00 4-11..Each 45.00 12-Up..Each 40.50

PREMIUM-PLATED REPLACEMENT TIPS FOR W-TCP SERIES

Stock No.	Mfr's Type	Description	Temp.	EACH 1-14	15-49	50-Up
989-3350	PTA5	1/16" Screwdriver	500°F	.95	.85	.75
989-3370	PTC5	1/8" Screwdriver	500°F	.95	.85	.75
989-3375	PTH5	1/32" Screwdriver	500°F	.95	.85	.75
989-3380	PTL5	5/64" Long Screwdriver	500°F	.95	.85	.75
989-3356	PTBB5	3/32" Spade	500°F	.95	.85	.75
989-3365	PTCC5	1/8" Spade	500°F	.95	.85	.75
989-3351	PTA6	1/16" Screwdriver	600°F	.95	.85	.75
989-3371	PTC6	1/8" Screwdriver	600°F	.95	.85	.75
989-3376	PTH6	1/32" Screwdriver	600°F	.95	.85	.75
989-3381	PTL6	5/64" Long Screwdriver	600°F	.95	.85	.75
989-3357	PTBB6	3/32" Spade	600°F	.95	.85	.75
989-3366	PTCC6	1/8" Spade	600°F	.95	.85	.75
989-3352	PTA7	1/16" Screwdriver	700°F	.95	.85	.75
989-3372	PTC7	1/8" Screwdriver	700°F	.95	.85	.75
989-3377	PTH7	1/32" Screwdriver	700°F	.95	.85	.75
989-3382	PTL7	5/64" Long Screwdriver	700°F	.95	.85	.75
989-3360	PTBB7	3/32" Spade	700°F	.95	.85	.75
989-3367	PTCC7	1/8" Spade	700°F	.95	.85	.75
989-3353	PTA8	1/16" Screwdriver	800°F	.95	.85	.75
989-3373	PTC8	1/8" Screwdriver	800°F	.95	.85	.75
989-3378	PTH8	1/32" Screwdriver	800°F	.95	.85	.75
989-3382	PTL8	5/64" Long Screwdriver	800°F	.95	.85	.75
989-3361	PTBB8	3/32" Spade	800°F	.95	.85	.75
989-3368	PTCC8	1/8" Spade	800°F	.95	.85	.75



SOLDERING IRON STANDS

MODEL PH60. For Model W-60. Includes tip cleaning sponge. Shpg. wt., 2 lbs.

989-3345. 1-14.....Each 4.15
15-49.....Each 3.67 50-Up....Each 3.30

MODEL PH100. For Model W-100. 2 lbs.

989-3348. 1-14.....Each 4.85
15-49.....Each 4.33 50-Up....Each 3.90

[C] TEMPERATURE CONTROLLED IRONS

- Maintains Correct Temperature—Will Not Overheat
- Reaches Full Heat Quickly, Rapid Heat Transfer
- Very Lightweight and Precision Balanced

MODEL W-60 60-WATT SOLDERING IRON. Temperature-sensing vice in tip automatically maintains correct soldering temperat Does work of conventional 15 to 100-watt irons. Never overhe saves current when idling. Reaches full heat quickly, gives r heat transfer. Much less tip redressing is required. Tips are e removed and replaced by loosening tip nut. Only 2½ oz. Len 7¼". 700° F ¼" screwdriver tip. 120 VAC.

989-3395. Shpg. wt. 10 oz.....

MODEL W-100-WATT IRON. As above, 100 watts. Does the wor 75 to 150-watt irons. Length, 8¼"; weighs only 3½ oz. With F, 3/8" screwdriver tip. For 120 volts, 60 Hz AC.

989-3398. Shpg. wt. 12 oz.....

MODEL W-200 200-WATT IRON. Weighs 10 oz., replaces most iror 130-250 watt range. Good for the production line where preci soldering and accurate control of tip temperatures are a mus meet production deadlines. Ideal for high production rates heavy load applications. Excellent operator control and maneu ability. 9½". With 700° F, ½" chisel tip.

989-3402. Shpg. wt. 1 lb.....

REPLACEMENT HEATING ELEMENTS

989-3402. HE-W60. For W-60 iron. Wt. 2 oz.....
989-3340. HE-W100. For W-100 iron. Wt. 3 oz.....
989-3342. HE-W200. For W-200 iron. Wt. 6 oz.....

PREMIUM-PLATED REPLACEMENT TIPS FOR IRONS

Stock No.	Description	Fits Model	Temp.	EACH 1-14	15-49	50-
989-3410	1/16" Screwdriver	W-60	600°F	.95	.85	
989-3411	1/16" Screwdriver	W-60	700°F	.95	.85	
989-3413	1/16" Screwdriver	W-60	800°F	.95	.85	
989-3416	3/32" Screwdriver	W-60	600°F	.95	.85	
989-3418	3/32" Screwdriver	W-60	700°F	.95	.85	
989-3420	3/32" Screwdriver	W-60	800°F	.95	.85	
989-3422	1/8" Screwdriver	W-60	600°F	.95	.85	
989-3424	1/8" Screwdriver	W-60	700°F	.95	.85	
989-3426	1/8" Screwdriver	W-60	800°F	.95	.85	
989-3428	3/16" Screwdriver	W-60	600°F	.95	.85	
989-3431	3/16" Screwdriver	W-60	700°F	.95	.85	
989-3432	3/16" Screwdriver	W-60	800°F	.95	.85	
989-3434	1/8" Screwdriver	W-100	700°F	1.50	1.35	1.
989-3436	1/8" Screwdriver	W-100	800°F	1.50	1.35	1.
989-3438	3/16" Screwdriver	W-100	700°F	1.50	1.35	1.
989-3440	3/16" Screwdriver	W-100	800°F	1.50	1.35	1.
989-3442	1/4" Screwdriver	W-100	700°F	1.50	1.35	1.
989-3444	1/4" Screwdriver	W-100	800°F	1.50	1.35	1.
989-3447	1/4" Screwdriver	W-200	700°F	2.25	2.00	1.
989-3448	1/4" Screwdriver	W-200	800°F	2.25	2.00	1.
989-3450	3/8" Chisel	W-200	700°F	2.25	2.00	1.
989-3451	3/8" Chisel	W-200	800°F	2.25	2.00	1.
989-3452	7/16" Chisel	W-200	700°F	2.25	2.00	1.
989-3453	7/16" Chisel	W-200	800°F	2.25	2.00	1.
989-3414	Stripping	W-60	500°F	1.20	1.10	
989-3420	Eyelet Cleaning	W-60	750°F	1.20	1.10	
989-3430	Wire Stripping	W-60	500°F	1.20	1.10	

Weller and American Beauty Soldering Tools

WELLER HEAVY-DUTY SOLDERING GUNS

TEMPMATIC® TEMPERATURE-CONTROLLED SOLDERING GUN

ıdel GT-7A. Combines the benefits of tem-rature-controlled operation with the ease, eed and convenience of a pistol-shaped, gger-operated soldering gun with small ıme pencil type iron. Puts up-to-the-nute state-of-the-art technology to work you whenever today's advanced elec-ınics demands it. Quick-heating, patented werhead gives you control of maximum nperature to assure damage-free solder-g of delicate integrated circuits and ısitive field effect transistors. Complete th #7A long-life 700°F. 3/16" chisel point werhead. Optional #6B, 600°F, 1/8" conical point powerhead is available (order below). Convenient ejection button makes changing powerheads quick and easy. Just discharge one head and slip in the other. 110-120, 60 Hz AC. Shpg. wt. 1 lb.

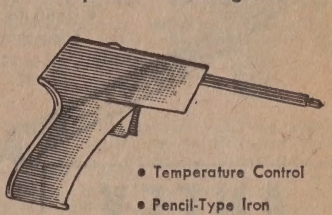
989-3324. 1-2.....Ea. 9.95
3-11.....Ea. 8.95 12-Up.....Ea. 7.95

989-3321. Tool, 600°F Powerhead.
1-2.....Ea. 9.95
3-11.....Ea. 8.95 12-Up.....Ea. 7.95

989-3319. Tool, less powerhead...Ea. 3.00
989-3345. 700°F Powerhead.....Ea. 6.95
989-3346. 600°F Powerhead.....Ea. 6.95

Weller

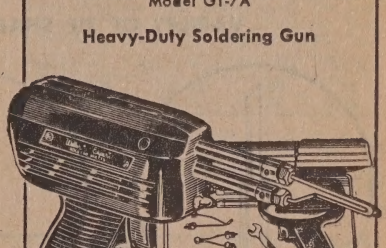
Tempmatic® Soldering Gun



- Temperature Control
- Pencil-Type Iron

Model GT-7A

Heavy-Duty Soldering Gun



Model D-550PK

DUAL-HEAT SOLDERING GUNS AND REPLACEMENT PARTS

REPLACEMENT TIPS

lied Radio Shack replacement soldering s for all Weller soldering guns. Finest ality for dependable service.

tock No.	For Model	PKG. OF 2
)10-5902	8200, D440	.50
)10-5901	D550	.50

REPLACEMENT PARTS

r maintaining Weller soldering guns. ip nut; †switch. Av. shpg. wt. 3 oz.

ock No.	Type	Use With Models	EACH
9-3474	7325*	D-440, S-440, 8100, 8200, 8100B	.20
9-3476	7417*	D-550, S-500, 8250A	.20
9-3470	7323†	All Single-heat type Soldering Guns	1.20
9-3472	7324†	All Dual-heat type Soldering Guns	1.20

HEAVY-DUTY SOLDERING GUN

Model D-550PK. For professional heavy-duty applications in the home workshop, research and development lab or on the production line. High-performance soldering gun provides instant heat for the big jobs. Gives you finger tip trigger control of high or low heat as job requires.

Outfit includes Weller Model D-550 heavy-duty 240/325-watt soldering gun with copper soldering tip, one smoothing tip and one cutting tip; nickel-plated tip-changing wrench, coil of solder, instruction booklet, unbreakable plastic utility case.

Heavy copper soldering tip provides for greater heat transfer. Prefocused twin spotlights illuminate work area. Gun is compact, lightweight and balanced. For 115 VAC. U.L. Listed. Shpg. wt. 5 lbs.
989-3315. 1-2..Ea. 11.60 3-Up..Ea. 10.45

D-550P. Soldering Gun Alone. Wt. 3½ lbs.
989-3314. 1-2...Ea. 9.95 3-Up...Ea. 8.95

AMERICAN BEAUTY SOLDERING IRONS FOR INDUSTRY

REPLACEMENT ELEMENTS

Stock No.	Mfr's Type	For Iron	EACH
709-0074	9270	3114	3.40
709-0077	9272	3128	3.60
709-0080	9273	3138	4.10
709-0083	9275	3158	5.75
709-0086	9277	3178	7.65

COPPER-NICKEL PLATED TIPS

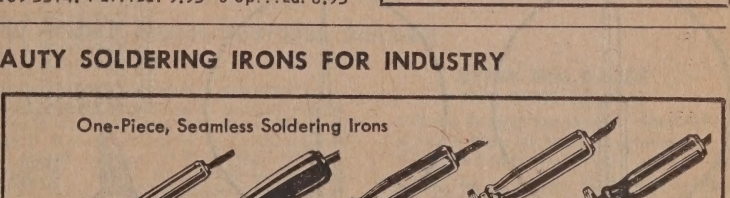
)iamond; †Chisel; ‡Screwdriver. 3 oz.

Stock No.	Mfr's Type	Shape	For Iron	EACH
)9-0057	3728	*	3114, −25, −28	.36
)9-0055	3728S	†	3114, −25, −28	.36
)9-0058	3738	*	3138	.50
)9-0056	3738S	‡	3138	.50
)9-0059	3758	*	3158	1.25
)9-0053	3758C	†	3158	1.25
)9-0054	3778D	*	3178	2.45
)9-0060	3778	†	3178	2.45

"PARAGON" IRON-CLAD TIPS

)9-0021	67D	*	3114, −25, −28	1.50
)9-0024	67S	†	3114, −25, −28	1.50
)9-0003	43D	*	3138	1.85
)9-0018	56	‡	3138	1.90
)9-0009	44D	*	3158	2.80
)9-0006	44C	†	3158	2.80
)9-0015	45D	*	3178	5.00
)9-0012	45C	†	3178	5.00

One-Piece, Seamless Soldering Irons



Designed for any soldering applications. Special iron-plated tips, available for all models greatly reduce pitting. Casing and body are of one-piece seamless steel. Rubberoid-coated handles remain cool after hours of use. With 6-ft. cords. U.L. Listed.

A MODEL 3128—60 WATTS

For light work. ¼" copper tip. With stand. Length, 12¼". For 110-120 volts. AC-DC. Shpg. wt. 1 lb.
709-0042. 1-5.....Each 7.20
6-Up.....Each 6.84

B MODEL 3114—60 WATTS

For light-medium work. ¼" copper tip. With stand. Chrome-plated metal parts. 9" long. For 110-120 V, AC-DC, 1 lb.
709-0039. 1-5.....Each 8.00
6-Up.....Each 7.60

C MODEL 3138—100 WATTS

General-purpose ⅜" dia. copper tip. Chrome-plated. Cooling baffle; stand. 12⅞" long. For 110-120V, AC-DC. 2¼ lbs.
709-0045. 1-5.....Each 10.35
6-Up.....Each 9.83

D MODEL 3158—200 WATTS

For medium-heavy work. ⅝" copper tip. With stand. Overall length, 13⅜". For 110-120 V AC-DC. Wt. 3 lbs.
709-0048. 1-5.....Each 12.75
6-Up.....Each 9.83

E MODEL 3178—300 WATTS

Designed to handle special production-line applications. Has ⅞" copper tip. 14⅜" long. With stand. For 110-120 volts, AC-DC. Shpg. wt. 4 lbs.
709-0051. 1-5.....Each 16.75
6-Up.....Each 15.91

Precision Industrial Soldering Equipment

ANTEX SOLDERING IRONS FOR MICRO-ELECTRONIC CIRCUITS

- Precision Miniature Production-Line Irons
- Element Is Located Inside Tip for Greatest Efficiency
- Heats to Full Operating Temperature in 45 Seconds
- NASA Approved

Constant 720° F Heat

ANTEX

Model C, 15-Watt
Model G, 18-Watt

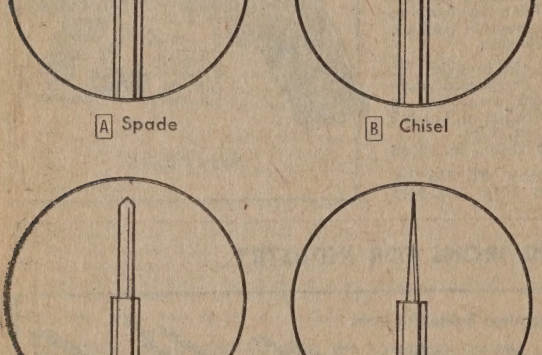
Antex is vastly superior in design. The iron gives you more efficie use of power because the tips slide *over* the heating element; all t heat paid for is delivered at the tip. Heats up in just 45 second The handle always stays cool and the iron weighs just one ounc The iron is only 6½" long and shaped like a pen, so there is no visu obstruction of the work.

Elements are the longest lasting in the industry, under either inte mittent or constant use. The irons are ruggedly built for productio lines. The slide-on tips can be changed in seconds, even while t iron is hot. Antex offers the ideal tip for any miniature solderi job. There are tips ranging from .012" (needle) to 3/16", and fit t Model C or G iron. Antex is safe on the most delicate transist and other heat and voltage-sensitive components.

The electrical resistance between the element and the tip is esse tially infinite. Maintains constant tip temperatures, even duri production speed operations. The small amount of metal in the t assures very fast recovery time. Depending on the tip used, t temperature of Model C is between 650° and 750° F; the temper ture of Model G is between 750° and 850° F. Model C has yell handle, Model G, red. The plastic handles will not char on conta with other irons. Flexible cord for easy handling. For 110-120 50-60 Hz AC. Less tip. Wt. 3 oz.

729-2109. Model C, 2-prong Plug. 1-5...Ea. 5.80 6-Up...Ea. 5.
729-2112. Model C, 3-prong Plug. 1-5...Ea. 6.10 6-Up...Ea. 5.
729-2115. Model G, 2-prong Plug. 1-5...Ea. 6.30 6-Up...Ea. 5.
729-2118. Model G, 3-prong Plug. 1-5...Ea. 6.60 6-Up...Ea. 6.

VARIETY OF TIP SHAPES



A Spade B Chisel

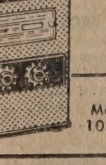
C Pyramid D Needle

IRON-PLATED TIPS

Size In.	Stock No.	Fig.	Type	Stock No.	Fig.	Type	EACH 1-49	EACH 50 U
3/64	729-2142	A	Spade 6-IS	729-2141	B	Chisel 6-IC	1.20	1.
1/16	729-2147	A	Spade 46-IS	729-2146	B	Chisel 46-IC	1.20	1.
3/32	729-2130	A	Spade 2-IS	729-2129	B	Chisel 2-IC	1.20	1.
1/8	729-2155	A	Spade 86-IS	729-2154	B	Chisel 86-IC	1.20	1.
5/32	729-2135	A	Spade 3-IS	729-2134	B	Chisel 3-IC	1.20	1.
				729-2138	B	Chisel 4-IC	1.20	1.
012	729-2145	D	Needle 8-I				1.65	1.

NICKEL-PLATED TIPS

3/64	729-2144	A	Spade 6-NS	729-2143	B	Chisel 6-NC	.55
1/16	729-2149	A	Spade 46-NS	729-2148	B	Chisel 46-NC	.55
5/64	729-2153	A	Spade 56-NS	729-2152	B	Chisel 56-NC	.55
3/32	729-2133	A	Spade 2-NS	729-2131	B	Chisel 2-NC	.55
1/8	729-2157	A	Spade 86-NS	729-2156	B	Chisel 86-NC	.55
5/32	729-2137	A	Spade 3-NS	729-2136	B	Chisel 3-NC	.55
3/16	729-2140	A	Spade 4-NS	729-2139	B	Chisel 4-NC	.55
3/32	729-2132	C	Pyramid2-NP				.55



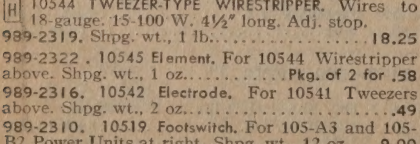
MODEL ST-1 IRON STAND

Holds Antex soldering iron and solder spool. 8¼" hig
729-2121. Shpg. wt., 2 lbs.....2.

REPLACEMENT ELEMENTS

For Antex soldering irons, right. Shpg. wt., 2 oz.
729-2103. For Model C.....Each 2.
729-2106. For Model G.....Each 2.

WASSCO CONTROLLED-TEMPERATURE SOLDERING DEVICES



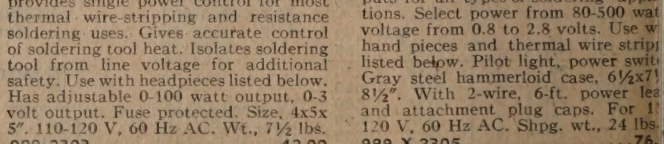
E 105131 WIRE STRIPPER. 15-100 W. For 24-gauge wire or finer. 6½" long. Heatproof cord.
989-2325. Shpg. wt., ½ lb.....15.90

F 105133 MICRO-TWEEZER. Solders wires 22-gauge or finer. 15-100 W. 6½" long. .040" electrode.
989-2328. Shpg. wt., ½ lb.....15.90

G 10541 TWEEZERS. Resistance soldering. .078" electrode dia. 0-3/8" space. 5" long, 4' lead.
989-2313. Shpg. wt., 1 lb.....18.25

H 10544 TWEEZER-TYPE WIRESTRIPPER. Wires to 18-gauge. 15-100 W. 4½" long. Adj. stop.
989-2319. Shpg. wt., 1 lb.....18.25

989-2322. 10545 Element. For 10544 Wirestripper above. Shpg. wt., 1 oz.....Pkg. of 2 for .58
989-2316. 10542 Electrode. For 10541 Tweezers above. Shpg. wt., 2 oz.....49
989-2310. 10519 Footswitch. For 105-A3 and 105-B2 Power Units at right. Shpg. wt., 12 oz....9.00



MODEL 105-A3 POWER UNIT

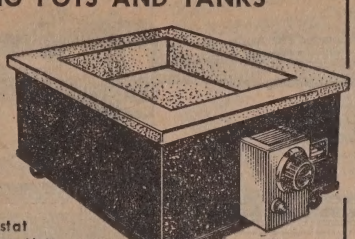
Infinitely variable power control unit provides single power control for most thermal wire-stripping and resistance soldering uses. Gives accurate control of soldering tool heat. Isolates soldering tool from line voltage for additional safety. Use with headpieces listed below. Has adjustable 0-100 watt output, 0-3 volt output. Fuse protected. Size, 4x5x 5". 110-120 V, 60 Hz AC. Wt., 7½ lbs.
989-2303.....42.00

MODEL 105-B2 POWER UNIT

Precision power unit offers 22 o puts for all types of soldering appli tions. Select power from 80-500 wat voltage from 0.8 to 2.8 volts. Use w hand pieces and thermal wire strip listed below. Pilot light, power swit Gray steel hammerloid case, 6½x7 8½". With 2-wire, 6-ft. power lea and attachment plug caps. For 1 120 V, 60 Hz AC. Shpg. wt., 24 lbs.
989 X 2305.....76.

Soldering Accessories and Solder

WAAGE SOLDER MELTING POTS AND TANKS



- Adjustable Thermostat
- Replaceable Heating Unit
- Compact, Fully Insulated

ROUND SOLDER MELTING POTS

For melting solder, tin, low-temperature alloys. Automatic thermostat provides temperature to 550° F. Rugged construction of fabricated steel. Fiberglass and air insulation reduces heat loss. With 6-ft. cord. For 115 VAC.

MP1A. Capacity, 1 lb. Outside size, 4" dia. x 4" deep. 200 watts. Wt., 5 lbs.
989-0200 ..... 27.00

MP4A. Capacity, 4 lbs. Outside size, 5" dia. x 4" deep. 300 watts. Wt., 6 lbs.
989-0203 ..... 31.00

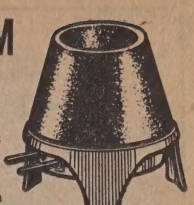
RECTANGULAR MELTING TANKS

Specially designed for printed circuit fabrication, with wide top area and shallow depth. Rugged construction, fiberglass insulation. Automatic thermostat provides temperature from 150° to 550° F. With 6-ft. cord. For 115 VAC.

RSP1. Capacity, 10 lbs. Size, 9x9x5". 600 watts. Shpg. wt., 15 lbs.
989X0210 ..... 47.50

RSP2. Capacity, 20 lbs. Size, 9x13x5". 1200 watts. Shpg. wt., 23 lbs.
989X0211 ..... 65.00

LECTROHM SOLDER POTS



- For Dip-Solder Jobs
- Heating Elements are Replaceable
- Ideal for Production Line use

Rugged low-cost pots for small dip-soldering jobs. Ideal for use on production lines and in shops. Helpful aids in stepping up production—perfect for tinning wires and component leads. Rugged construction with replaceable heating elements (order below). Choice of two sizes, 200 or 250 watts, with up to 2 lb. capacity for extended use without refilling. Sizes: SP-200, 2¾x2⅜x⅞" deep; SP-250, 3¾x2x1¾" deep. Supplied complete with power cord. Pot capacity: SP-200, 1¼ lbs.; SP-250, 2 lbs. For 110-120 V, AC or DC. Shpg. wt., 3½ lbs.

Stock No.	Mfr's Type	Watts	EACH
849-3505	SP-200	200	6.95
849-3510	SP-250	250	6.95

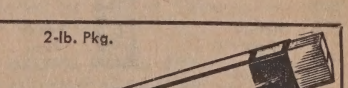
REPLACEMENT ELEMENTS. Composed of nickel-chrome wire. Wt., 4 oz.
849-3500. Type A. For SP-200 ..... 2.35
849-3502. Type B. For SP-250 ..... 2.35

ERSIN SN60B MULTICORE EXTRUSOL® SOLID BAR SOLDER

High-purity Ersin solder in a smooth-finished, extruded bar. Type HP, high-purity, conforms to QQS-571-D. Type LA, commercial, for dots and wave soldering equipment. 8" long, trapesium shaped. 1x ¼". Two 1-lb. bars per pkg. Wt., 2½ lbs.

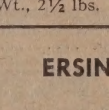
Stock No.	Alloy Tin/Lead	Type	2 LB. PKG. 1-9	2 LB. PKG. 10-Up
789-7203	60/40	HP	6.38	5.36
789-7210	60/40	LA	5.38	4.36

2-lb. Pkg.



ERSIN MULTICORE MULTI-PURPOSE SOLDER

All Ersin solders conform to Federal Specification QQ-S-571.



60 "MULTICORE." Positive action solder. Incorporates highly efficient, non-corrosive Ersin flux in a 5-core pattern running throughout entire length of solder. This unique feature assures uninterrupted flux flow from even the smallest piece of solder—insures instant heading and gripping. 60% tin and 40% lead. 1-pound spools. From Great Britain. Shpg. wt., 1¾ lbs.

Gauge	Stock No.	PER SPOOL 1-27	PER SPOOL 28-Up
5 (.064")	789-7232	3.74	2.81
8 (.048")	789-7242	3.81	2.84
0 (.036")	789-7250	4.11	3.08
1 (.032")	789-7256	4.24	3.18
2 (.028")	789-7262	4.42	3.31
4 (.022")	789-7268	6.32	4.85

40 LEAD/TIN "MULTICORE" SOLDER. Same above, but 40% tin and 60% lead. Non-corrosive flux. Shpg. wt., 1½ lbs.

5 (.064")	789-7230	2.99	2.24
8 (.048")	789-7238	3.02	2.27

SPECIAL ALLOY INDUSTRIAL SOLDERS. Low-melting-point type (L.M.P. in table below) is 62% tin, 36% lead, 2% silver. Melts at 354°F. Recommended for ceramics, printed or etched circuits. H.M.P. high-melting-point type is 5% tin, 93.5% lead, 1.5% silver. Melts at 565°F. Eutectic 63/37 alloy has no plastic range. Melts at 361°F. 1-lb. spools. Shpg. wt., 1¾ lbs.

Gauge	SN63 EUTECTIC Stock No.	SN63 EUTECTIC EACH	SN62 L.M.P. Stock No.	SN62 L.M.P. EACH
16	789-7236	3.96	789-7235	5.67
18	789-7246	4.03	789-7245	6.56
20	789-7252	4.19	.....	.....
22	789-7260	4.36	789-7261	8.12

TYPE H.M.P. (5/93.5/1.5)

16	789-7234	4.78	.....	.....
18	789-7244	4.85	.....	.....

"SAVBIT" COPPER-LOADED. High-strength copper-tin-lead alloy solder. 1-lb. spools. Shpg. wt., 1¾ lbs.

Gauge	Stock No.	EACH 1-27	EACH 28-Up
16 (.064")	789-7228	3.61	2.72
18 (.048")	789-7240	3.74	2.81
20 (.036")	789-7248	4.07	3.08
22 (.028")	789-7258	4.37	3.28

EXTRA FINE GAUGE FIVE CORE SOLDERS

- Meets Federal Specification QQ-S-571
- For All Micro-Miniature Applications
- Multicore and Eutectic Types

Precision manufactured for perfect results in all micro-miniature applications. Multicore is 60% tin and 40% lead; Eutectic is 63% tin and 37% lead. Both types conform to Federal Specification number QQ-S-571. Each package contains four half-pound spools. Shpg. wt. per package, 3 lbs.

SN60XF MULTICORE—60% TIN, 40% LEAD

Gauge	Stock No.	Type	2 LB. PKG.
24 (.022")	789-7264	Multicore	11.84
28 (.014")	789-7270	Multicore	15.60
32 (.0108")	789-7276	Multicore	20.36
34 (.009")	789-7280	Multicore	24.72

SN63XF EUTECTIC—63% TIN, 37% LEAD

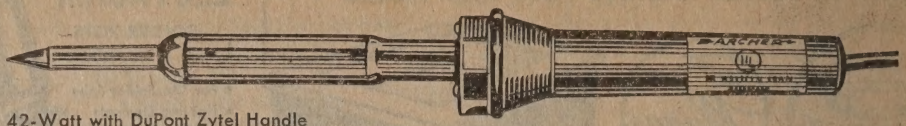
Gauge	Stock No.	Type	2 LB. PKG.
20 (.036")	789-7254	Eutectic	8.22
24 (.022")	789-7266	Eutectic	12.36
28 (.014")	789-7272	Eutectic	15.84
32 (.0108")	789-7274	Eutectic	20.56

ALLIED GIVES YOU HUGE SELECTION, FAST SERVICE, QUANTITY DISCOUNTS

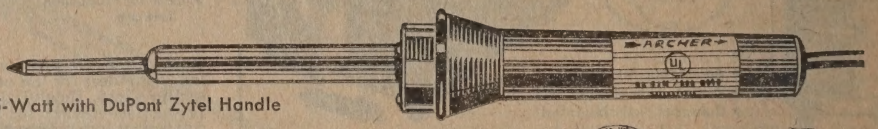
Depend on Allied for all your industrial needs. Allied offers best percentage of order handling in the country. When you order from Allied you get one-order service—you buy all you need from a single source; fast delivery—merchandise is ready for shipment; and lowest cost—you get OEM prices and quantity discounts. Contact your nearest Allied representative.

Special Values in Soldering Tools, Power Outlets

ARCHER® PENCIL-TYPE SOLDERING IRONS



42-Watt with DuPont Zytel Handle



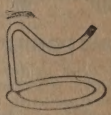
25-Watt with DuPont Zytel Handle

MODEL 64-2071 42-WATT SOLDERING IRON. Easy-to-handle iron weighs only 3 ounces. Slim design for hard-to-reach corners—8¼" long overall. Long-life nichrome mica insulated element with ¼" screw-in tip; reaches 600° to 640° F.
910-5958. Shpg. wt. ½ lb. 3.29
910-5959. 64-2072. Replacement Tip. Wt. 2 oz. ..... .79

MODEL 64-2070 25-WATT SOLDERING IRON. Extra-strength, easy to manipulate, trouble-free. All the features above, but with 5/32" screw-in tip. Heats delicate work gently and evenly after 90 seconds. Ideal for printed circuit work.
910-5957. Shpg. wt. ½ lb. 2.59
910-5960. 64-2073. Replacement Tip. Wt. 2 oz. ..... .59

U.L. Listed

Both Include Handy Stand



- Tough, Breakproof Zytel Handle Stays Cool
- Compact and Lightweight for Easy Handling
- Easily Replaceable Screw-in Tip
- Long-Life Nichrome Mica Insulated Element

ARCHER ROSIN CORE SOLDER

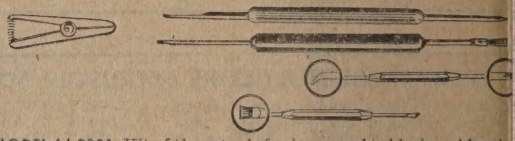
Handy Pack

Bench Pack

1-lb. Spool

Rosin core solder is made in U.S.A. to conform to Fed. Spec. 00-S-571d. 16-gauge size; 60% tin, 40% lead. Radio engineer recommended. Choice of three sizes.
910-5954. Type 64-0001. Handy Pack. Shpg. wt. 14 oz. ..... .39
910-5955. Type 64-0002. Bench Pack. Shpg. wt. 1 lb. ..... .69
910-5956. Type 64-0003. 1-lb. Spool. Shpg. wt. 1¼ lbs. 2.79

ARCHER 3-PC. "SOLDER EASE" KIT



MODEL 64-2221. Kit of three tools for improved soldering. Alumin heat sink protects transistors and diodes when soldering, give firm grip. Fine-point probe aids soldering on printed circuits. St less steel hardened probe, steel brush and scraper helps keep cir clean as you solder. Shpg. wt. ½ lb.
910-5937 1

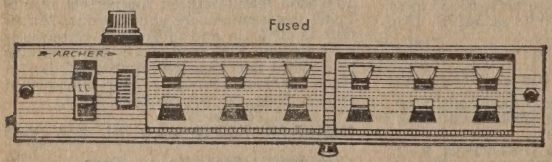
SPRING-LOADED HEAT SINKS

MODEL 276-001. Set of five spring-loaded heat sinks. Includes 2½" sink with magnetic base; 1⅜" and 2½" sinks with straight and bent jaws. Shpg. wt. ¼ lb.
910-6703 ..... 1.29

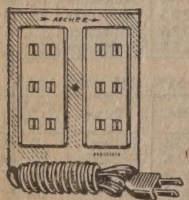
ARCHER 6-OUTLET AC POWER CENTERS

SAFE FOR HOME, SHOP, OFFICE OR LAB

Fused



Extension Cord



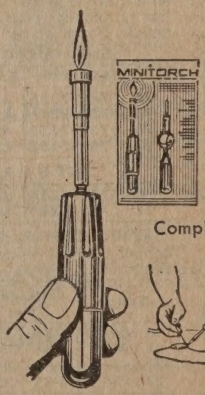
Plug-In

MODEL 61-2630 6-OUTLET FUSED POWER CENTER. Gives 15-amp fuse protection as well as the convenience of six power outlets. Built-in fuse holder, 15-amp power on-off switch, pilot light. Safe grooved-wire connection. Ideal for use in the home, office or shop area. For 110-120 volts AC/DC. With mounting screws for quick and easy installation, horizontally or vertically. Shpg. wt. 1 lb.
910-5610 ..... 3.99

MODEL 61-2631 6-OUTLET EXTENSION CORD TYPE POWER CENTER. Extension cord plugs into standard socket. Provides convenient power for up to six appliances, tools, instruments, etc. Shpg. wt. ½ lb.
910-5611 ..... 1.99

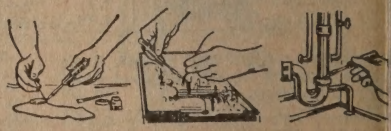
MODEL 61-2632 6-OUTLET PLUG-IN POWER CENTER. Plugs into standard household outlet; provides six safe power sources in one location. Shpg. wt. ½ lb.
910-5612 ..... 1.59

POCKET-SIZE MINI BUTANE BLOWTORCH AND SOLDERING KIT



- Develops a 3500° Pinpoint Flame Using Butane Char
- Each Butane Charge Gives Full Half Hour of Use
- Cartridge Screws Into Torch Handle and Turns On and at Any Time

Complete with Two Butane Cartridges

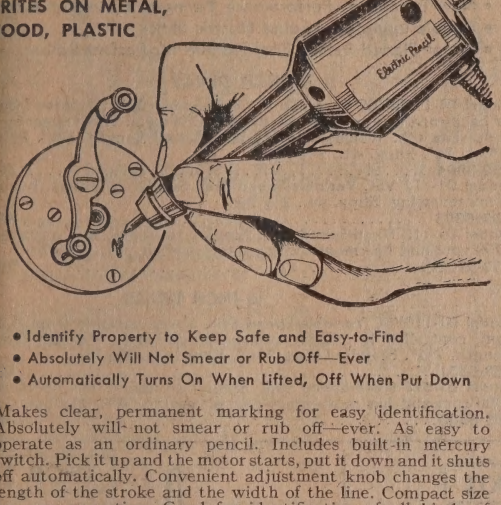


MODEL 64-2155. Pocket-size multi-purpose torch has "big j capability, plus the advantage of small size to get into tight pla Specially suited for delicate and intricate soldering work. Hand hundreds of jobs, including: brazing small metal parts; repair appliances, lamps, toys, screens; making or repairing copper, silv gold or platinum earrings, pins, etc.; repair of peeling paint; loos ing rusted nuts and bolts. Complete with two butane cartridg Shpg. wt. 4 lbs.
910-5961 ..... 3.
Extra Pack of Four Butane Cartridges. Shpg. wt. 1 lb.
910-5962. Type 64-2156 ..... Pack of Four 1.

Depend on Allied Electronics for Tools and Suppli

Tools for Shop and Laboratory

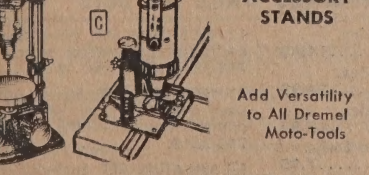
ARCHER®
EASY-TO-USE ELECTRIC PENCIL WRITES ON METAL, WOOD, PLASTIC



- Identify Property to Keep Safe and Easy-to-Find
- Absolutely Will Not Smear or Rub Off—Ever
- Automatically Turns On When Lifted, Off When Put Down

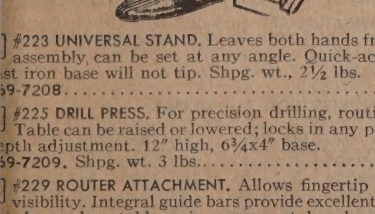
Makes clear, permanent marking for easy identification. Absolutely will not smear or rub off—ever. As easy to operate as an ordinary pencil. Includes built-in mercury switch. Pick it up and the motor starts, put it down and it shuts off automatically. Convenient adjustment knob changes the length of the stroke and the width of the line. Compact size for easy operation. Good for identification of all kinds of items. Use it to write on fishing reels, tool boxes, luggage, toys, golf clubs, baseball bats, tennis rackets, much more. Safe to operate. Only 5½" long. For standard 110 VAC.
910-5805. Type 64-2172. Shpg. wt. 1 lb. **6.95**

MODEL 261 MOTO-TOOL SET WITH 34 ACCESSORIES FOR CUTTING, GRINDING, POLISHING AND SANDING



Compact—Only 6½ x1½" Diameter
30,000-rpm Motor
Weighs Only 11 Oz.
Vibration-Free
34 Accessories

rforms with pin-point accuracy. Delivers 30,000 rpm; draws 0.5-np with almost stall-proof drop-off. Large vents, high velocity fan. anger hook, finger grip extension. Includes: steel cutters, grinding heels, wire, bristle brushes, rubber polishing tip, sanding discs, um sander with bands, mandrels, dressing stone, wrench, 4 collets 8", 3/32", 1/16", 1/32"), case. U.L. Listed. 117 VAC.
69-7214. Shpg. wt. 3 lbs. 34.95
69-7212. 260 Tool Alone. Shpg. wt. 2 lbs. 24.95



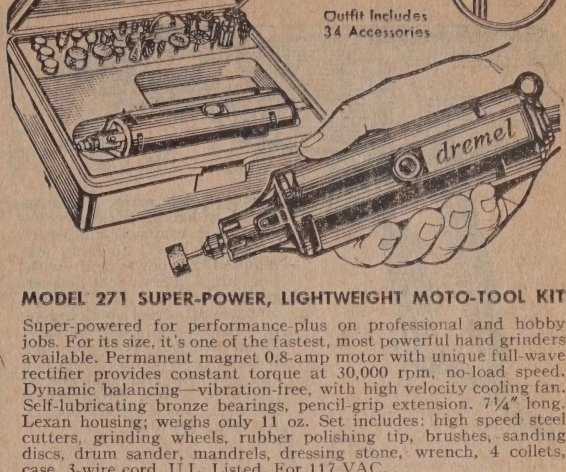
DREMEL MOTO-TOOL ACCESSORY STANDS

Add Versatility to All Dremel Moto-Tools

] #223 UNIVERSAL STAND. Leaves both hands free. Ball and socket assembly can be set at any angle. Quick-action clamp. Heavy st iron base will not tip. Shpg. wt., 2½ lbs.
69-7208 ..... 8.50

] #225 DRILL PRESS. For precision drilling, routing, model making. Table can be raised or lowered; locks in any position for accurate pth adjustment. 12" high, 6¾x4" base.
69-7209. Shpg. wt. 3 lbs. 15.00

] #229 ROUTER ATTACHMENT. Allows fingertip guidance, superior visibility. Integral guide bars provide excellent depth adjustment. an be used portably or in permanent bench-mounted position.
69-7200. Shpg. wt. 1 lb. 9.95



MODEL 271 SUPER-POWER, LIGHTWEIGHT MOTO-TOOL KIT

Super-powered for performance-plus on professional and hobby jobs. For its size, it's one of the fastest, most powerful hand grinders available. Permanent magnet 0.8-amp motor with unique full-wave rectifier provides constant torque at 30,000 rpm, no-load speed. Dynamic balancing—vibration-free, with high velocity cooling fan. Self-lubricating bronze bearings, pencil-grip extension. 7¼" long. Lexan housing; weighs only 11 oz. Set includes: high speed steel cutters, grinding wheels, rubber polishing tip, brushes, sanding discs, drum sander, mandrels, dressing stone, wrench, 4 collets, case, 3-wire cord. U.L. Listed. For 117 VAC.
769-7221. Complete Moto-Tool Set. Shpg. wt. 3 lbs. **39.95**
769-7218. 270 Moto-Tool Alone. Shpg. wt. 2 lbs. **29.95**

MODEL 281 HEAVY-DUTY MOTO-TOOL SET

Same as above, but manufactured with extra-rugged ball bearing 0.9-amp motor for top performance.
769-7225. Complete Moto-Tool Set. Shpg. wt. 3 lbs. **49.95**
769-7223. 280 Moto-Tool Alone. Shpg. wt. 2 lbs. **39.95**

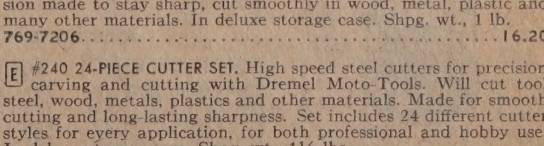
DREMEL MODEL 290 ELECTRIC ENGRAVER

- Permanently Marks Most Materials
- Easy to Use Without Special Skill
- High-Speed Reciprocating Motor
- Five-Position Stroke Adjustment

Heavy-duty engraver for fast, permanent marking on all types of materials, from hardened steel to glass. Provides positive identification on shop tools, production parts, sporting goods, jewelry, other valuables. Makes precision engraving as easy as writing; rugged enough for industrial use. Calibrated 5-position stroke adjustment regulates length of stroke, depth of engraving—from delicate fine lines to deep marks. Withstands heavy use, yet is comfortable enough for operation over extended periods. High-speed reciprocating motor delivers 7200 strokes per minute. Sturdy, high-impact nylon housing has handy hanger ring and easy-to-hold pencil grip. Solid carbide point is practically wearproof, stays sharp for fine-quality engraving. Molded plastic storage case with hinged cover. 117 VAC. Shpg. wt., 1½ lbs.
769-7230 ..... **14.95**

HIGH-SPEED CUTTER SETS

For Precision Carving with Any Dremel Moto-Tool



D #220 12-PIECE CUTTER SET. Economy set includes 12 of the most popular high speed steel cutters for Dremel Moto-Tools. Precision made to stay sharp, cut smoothly in wood, metal, plastic and many other materials. In deluxe storage case. Shpg. wt., 1 lb.
769-7206 ..... **16.20**

E #240 24-PIECE CUTTER SET. High speed steel cutters for precision carving and cutting with Dremel Moto-Tools. Will cut tool steel, wood, metals, plastics and other materials. Made for smooth cutting and long-lasting sharpness. Set includes 24 different cutter styles for every application, for both professional and hobby use. In deluxe storage case. Shpg. wt., 1¼ lbs.
769-7211 ..... **32.40**

Electric Drills and Precision Drill-Bit Sets

THOR "DOUBLE INSULATED" REVERSING, VARIABLE AND FIXED-SPEED DRILLS

D1-112R-VSC

Designed for perfect balance and easy handling, these powerful, but compact and lightweight drills will do every job required of a power drill—with less effort. Permanent-magnet motor has been placed above and behind the tool handle to give it a new feel and ease of handling. Rugged polycarbonate housing gives double insulation against shock. Three-jaw geared chuck with key. Bronze-alloy bearings. Seven-foot 2-conductor cord. 115 VAC.

- Features 50% Reduction in Weight plus Compact Size
- New-Type High-Performance Permanent Magnet Motor
- Double Insulated Against Electric Shock
- Motor Placed Behind Tool Handle for Perfect Balance

⅜-INCH DRILLS

Model D1-112R-VSC Reversing Variable-Speed Drill. Operates forwa or backward at any speed between 0-1200 rpm. Has trigger spee control switch. Weighs only 1⅞ lbs. Overall Length, 7⅞". Spind Offset, ⅝". Shpg. wt., 2⅞ lbs.
959-5304.....42.

Model D1-112 VSC Variable-Speed Drill. Similar to above, but dr is nonreversing. Shpg. wt., 2⅞ lbs.
959-5303.....36.

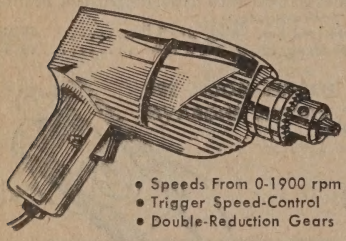
Model D1-112 Fixed-Speed Drill. Similar to above, but operates 1200 rpm and has momentary-contact switch. Wt., 2⅞ lbs.
959-5302.....29.

¼-INCH DRILLS

Model D1-110VSC Variable-Speed Drill. Speed variable from 0-20 rpm, controlled by trigger switch. Weighs only 1¾ lbs. Over Length, 7¾". Spindle Offset, 1⁹⁄₃₂". Shpg. wt., 2¾ lbs.
959-5301.....32.

Model D1-110 Fixed-Speed Drill. Similar to above, but operates 2000 rpm and has momentary-contact switch. Wt., 2¾ lbs.
959-5300.....24.

THOR Power, Versatility and Handling Ease

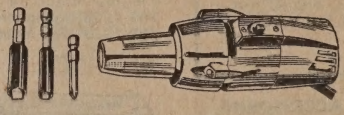


- Speeds From 0-1900 rpm
- Trigger Speed-Control
- Double-Reduction Gears

VARIABLE-SPEED DRILL WITH BALL-BEARINGS

MODEL 913VSC. Has the power, versatility, and handling ease for the most difficult jobs in home or shop. Continuously-variable fingertip speed-control from 0-1900 rpm. Operates with only a slight pressure on trigger. ¾"-diameter cutting capacity in steel, ¾" in wood. Ball-bearing construction and double-reduction gears provide maximum torque and smoothness. Powerful 3-amp Therm-O-Weld motor resists burnout. Overall Length, 8½". With 6-ft. 3-wire power cord and plug. Less drill bit. U.L. Listed, C.S.A. Approved. For 105-125 V, 25-60 Hz AC.
959-5305. Shpg. wt., 4¾ lbs.....25.50

SHOPMATE

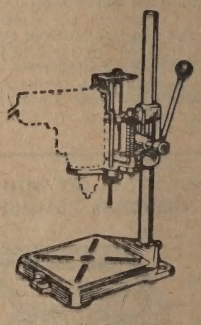


- Powerful, Compact and Lightweight
- Perfect for Light Assembly, Building
- .100:1 Gearing for High Torque

POWERFUL, REVERSIBLE ELECTRIC SCREWDRIVER

Model 1895. Designed for perfect balance and easy handling. Drives and removes #4 through #12 slotted-head and Phillips screws, quickly and easily. Has fan-cooled "Lifeweld" 3-amp motor with positive clutch for full control. 100:1 gear reduction provides high torque. Ball-thrust and self-lubricated bronze bearing. No-load speed 325 rpm. Instant release on-off, reversing switches. 8½" long. Two slotted head-finder screwdriver tips and Phillips bit. 3-wire cord. UL Listed. 117 VAC.
889-5750. Shpg. wt. 3¼ lbs.....29.95

THOR

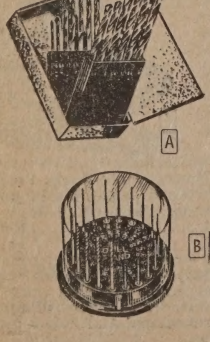


- Gear Feed and Spring Return
- Holes for Bench Mounting
- Accepts Vise or V-block
- Permits Precise Drilling

DRILL PRESS STAND FOR PORTABLE DRILLS

Model 1895. Converts your portable electric drill to a powerful, lever-operated drill press. Has pinion-gear feed and spring return. Accepts ¼", ⅜" and compact ½" drills. Slotted work surface accepts drill vise or V-block. Base is drilled for mounting on bench or truck quickly and easily. Overall height, 18". Maximum feed, 3". Chuck to column distance, 3". Base 6x6". A "must" for the shop. Your drill mounts easily. Allows you to do precision drilling with speed and accuracy without the expense of buying a costly drill press.
959-5306. Shpg. wt. 7 lbs.....11.9

[A] HIGH-SPEED DRILL BIT SETS



[A]

[B]

15-DRILL SET. 1/16" to ½" in 32nds. Index.
759-3316. Shpg. wt., 2¼ lbs.....14.50

29-DRILL SET. 1/16" to ½" in 64ths. Index.
759-3317. Shpg. wt., 3¾ lbs.....24.99

60-NUMBER SIZE DRILL SET. 1 to 60. Index.
759-3312. Shpg. wt., 1¼ lbs.....17.99

HIGH-SPEED 5-DRILL SET. ¼" to ½" in 16ths.
759-3307. Shpg. wt., 5 oz.....7.95

17-DRILL SET. 1/16" to ¼" in 64ths; 5/16, ⅜, 7/16", ½. ¼" shank. Steel index.
759-3321. Shpg. wt., 2 lbs.....11.95

12-PIECE DRILL SET. Sizes from 1/16" to ¼" in 64ths. Includes center punch. Pouch.
759-3315. Shpg. wt., 9 oz.....5.35

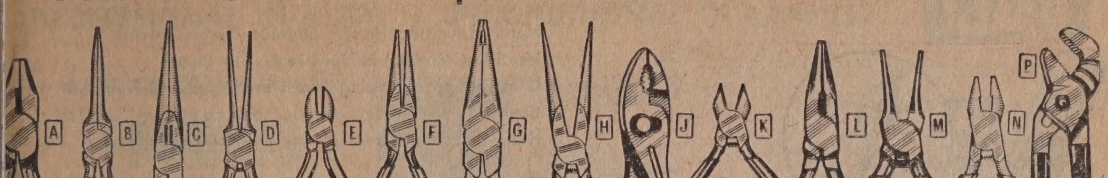
13-PIECE DRILL SET. 1/16" to ½" in 32nds. Drill sizes over ¼" have ¼" shank. With roll-up pouch. Shpg. wt., 3 lbs.
759-3318.....13.50

[B] MINIATURE SET. Includes twenty drills from No. 61 (.039") to No. 80 (.0135"). With index. Shpg. wt., 6 oz.
759-3312.....7.95

JOBBER'S-LENGTH HIGH-SPEED DRILL BITS FOR ¼" DRILLS

Stk. No.	Size	EA.	Stk. No.	Size	EA.	Stk. No.	Size	EA.	Stk. No.	Size	EA.
759-3313	1/16"	.18	759-3322	1/8"	.29	759-3303	3/16"	.42	759-3308	5/16"	1.05
759-3319	5/64"	.19	759-3323	9/64"	.30	759-3304	7/32"	.51	759-3309	3/8"	1.49
759-3320	3/32"	.20	759-3324	5/32"	.35	759-3305	15/64"	.55	759-3310	7/16"	2.05
759-3321	1/64"	.22	759-3325	11/64"	.37	759-3306	1/4"	.55	759-3311	1/2"	2.49

Allied® Cushion-Grip Pliers and Pliers/Cutters



ALLIED TOOLS PRECISION CRAFTED FOR THE ELECTRONICS INDUSTRY

- Forged from Finest Tool Steel
- Bonded Vinyl Cushion Grip for Comfort, Electrical Insulation
- Heat-Treated Cutting Edges

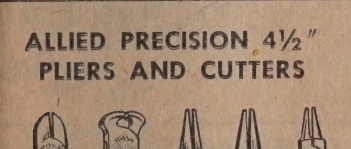
ir own fine-quality electronics tools offer tra value! All have highly polished heads d shoulders. Accurately machined and ound for smooth action. Hammer forged om finest tool steel.

ecision heat-treated cutting edges provide optimum temper, fast and easy cutting tion, and extremely long wear. Vinyl shion grips isolate worker from danger of ectrical shocks. Offer nonslip grip and mfortable, smooth feel.

xtremely resilient grip is bonded to tool it won't chip or peel. Resists the effects chemicals, acid and grease. These tools rry a full one year guarantee. Pliers with have cross-coil spring. Made in U.S.A.

Stock No.	Fig.	Lgth.	Description	Wt., Oz.	Asst'd 1-4	EACH 5-Up
704-0238	A	6½"	Electrician's Side Cutting Pliers	8	3.28	2.99
704-0240	A	8"	Electrician's Side Cutting Pliers	16	3.98	3.65
704-0253	B	6"	Long Needle or Snip-Nose Pliers	6	3.10	2.84
704-0236	C	7"	Extra-Long Chain-Nose Cutting Pliers	6	4.08	3.74
704-0256	D	6"	*Long-Nose Pliers	3	3.91	3.59
704-0225	E	4½"	Diagonal "Oblique" Cutting Pliers	2	2.94	2.69
704-0226	E	5"	Diagonal "Oblique" Cutting Pliers	3	2.90	2.66
704-0227	E	6"	Diagonal "Oblique" Cutting Pliers	3	3.28	2.99
704-0247	F	6"	Long Chain Needle-Nose Pliers	3	2.58	2.37
704-0237	F	6"	Long Chain Needle-Nose Pliers, Cutter	3	3.14	2.88
704-0241	G	5"	*Radio, Ignition Long-Nose Cutting Pliers	3	4.49	4.12
704-0249	H	7"	*Extra-Fine Long-Nose Pliers	3	3.06	2.80
704-0206	J	6"	Satin-Finish Combination Pliers	5	1.09	1.00
704-0209	J	8"	Satin-Finish Combination Pliers	9	1.32	1.20
704-0213	J	6"	Satin-Finish Thin-Nose Combination Pliers	5	1.95	1.79
704-0232	K	4½"	*Diagonal Needle-Point Cutting Pliers	2	3.80	3.48
704-0233	K	5"	*Diagonal Needle-Point Cutting Pliers	3	4.92	4.50
704-0234	L	5"	Short Chain Needle-Nose Cutting Pliers	3	3.15	2.89
704-0251	M	5"	*Slim Nose Pliers	3	3.48	3.18
704-0229	N	4½"	*Needle Point Diagonal Flush Cut Pliers	6	4.08	3.74
704-0220	P	10"	Tongue-N-Groove Utility Pliers	16	3.42	3.14

ALLIED PRECISION 4½" PLIERS AND CUTTERS

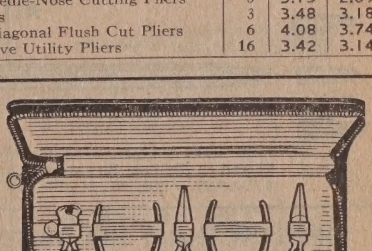


Forged tool steel construction. Highly polished heads and shoulders. Peel-proof vinyl cushion grips. Fig. R is for close cutting; S, end cutting; T, W and X, smooth jaws. Each, 5 oz.

Stock No.	Fig.	Description	Asst'd. EA. 1-4	5-Up
704-0228	R	Diag. Cutter	2.75	2.51
704-0243	S	End-Cut Nipper	3.30	3.12
704-0246	T	Chain Nose	2.95	2.70
704-0250	W	Flat Nose	2.71	2.48
704-0254	X	Round Nose	2.81	2.58

ALLIED 5-PIECE 4½" PLIERS SET

- Hammer Forged Tool Steel
- Heat-Treated Cutting Edges for Fast Cutting, Long Wear
- Polished Heads and Handles
- Comfortable Vinyl Cushion Grips Provide Insulation
- Zippered Leatherette Case



Set of five most-needed pliers in a case that's handy to take on servicing calls. Case also keeps tools in neat order in the shop. Made of drop-forged fine-grain tool steel. Have highly polished heads and shoulders. Machined and ground for smooth action. Heat-treated cutting edges provide optimum temper, easy cutting action, and very long wear. Vinyl cushion grips provide insulation from possible shock and offer a comfortable grip. Grips are crack and peel-proof. Includes diagonal cutter, end-cut nipper, chain-nose pliers, flat-nose pliers, and round-nose pliers. Shpg. wt. 1¼ lbs.

704-0257. 1-4 Sets.....Each 15.95 5-Up Sets.....Each 15.25

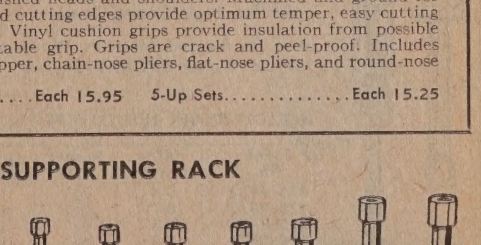
7-PIECE NUTDRIVER SET IN SELF-SUPPORTING RACK

- Color Keyed for Size Identification
- Extra-Large Handles for Sure Grip
- Light in Weight, Perfectly Balanced
- Seven Popular Hex Sizes
- Hard, Long-Wearing Sockets
- Metal Stand for Bench or Wall

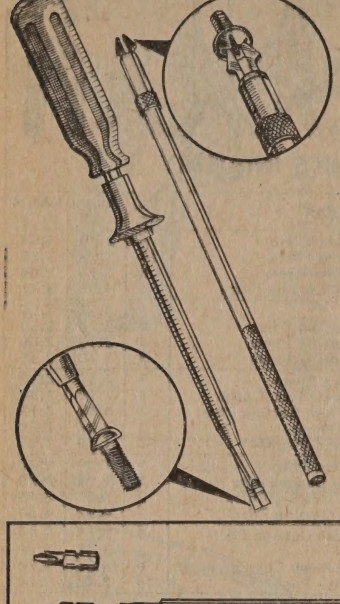
Lightweight, easy-to-use, hollow-shaft nut drivers are designed for maximum usefulness to assembly line workers and service men. Set of popular sizes handles most nut tightening and loosening jobs. Made for Allied by a nationally known manufacturer. Guaranteed for one year. Kit includes 7 nutdrivers: 3/16", ¼", 5/16", 11/32", ⅜", 7/16" and ½". Feature molded, color-coded "Amberyl" plastic handles. Nickel-chrome plated drivers. Shafts are 6¾", except 6⅞" on 7/16" and ½" drivers.

Feature hollow shafts for fitting nutdrivers over long screws. Extra-large handles provide a sure grip for powerful turning. The extra-hard hex sockets assure perfect fit and long life. Drop-forged from tool steel and heat-treated for hardness. Accurately machined. The convenient all-metal stand has nutdriver sizes labeled. Stand can be permanently attached to your workbench or to the wall. Shpg. wt. 1¾ lbs.

704-0201. 1-4.....Each 7.95 5-Up.....Each 7.60



VACO® Drivers Speed Up Production



- Handy Launchers Handle Stubborn Screws Easily
- Ideal for Working in Hard-to-Get-At Places
- Offer Superb Gripping Power and Nonslip Driving Action
- Comfordome Amberyl Handle Adds Power and Comfort
- Handles Color-Coded for Convenience and Speed

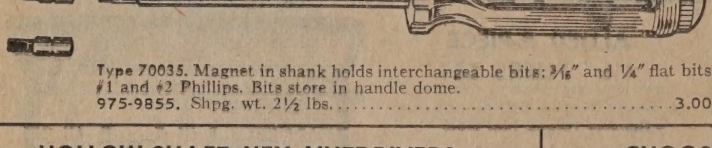
FLAT-BIT SCREW LAUNCHERS Shpg. wt. 4 oz.

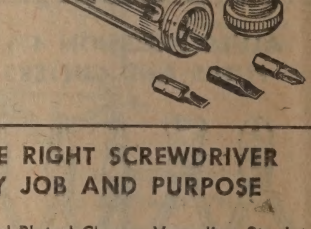
Stock No.	Mfr's Type	Shaft Size		EACH
		Diameter	Length	
975-9818	K-23	1/8"	3"	1.16
975-9819	K-28	1/8"	8"	1.40
975-9820	K-34	3/16"	4"	1.68
975-9821	K-36	3/16"	6"	1.72
975-9822	K-38	3/16"	8"	1.76
975-9823	K-44	1/4"	4"	1.76
975-9824	K-46	1/4"	6"	1.84
975-9825	K-48	1/4"	8"	1.88

PHILLIPS SCREW LAUNCHERS Shpg. wt. 6 oz.

Stock No.	Mfr's Type	Shaft Length	EACH
975-9814	K-13	3"	1.58
975-9815	K-15	5"	1.84
975-9816	K-16	7"	1.93
975-9817	K-19	9"	2.01

ALL-MAGNETIC SCREW LAUNCHER





Type 70035. Magnet in shank holds interchangeable bits: 3/16" and 1/4" flat bits #1 and #2 Phillips. Bits store in handle dome.
975-9855. Shpg. wt. 2½ lbs. 3.00

HOLLOW-SHAFT HEX NUTDRIVERS BUILT FOR POWER AND DURABILITY

- Shockproof Handle for Maximum Safety Around Electrical Equipment
- Tempered Steel Blades • Forged Hollow Shafts for Greater Versatility
- Easily Tightens Nuts on Long Screws
- Blades Solidly Fixed in Handles for Maximum Turning Power
- Ideal for Rugged Assembly Work or for Repair and Maintenance

HOLLOW-SHAFT NUTDRIVERS Wt. 4 oz.

Stock No.	Mfr's Type	Socket Size	EACH
975-9832	S-6	3/16"	1.01
975-9833	S-7	7/32"	1.01
975-9834	S-8	1/4"	1.01
975-9835	S-9	9/32"	1.01
975-9836	S-10	5/16"	1.01
975-9837	S-11	11/32"	1.01
975-9838	S-12	3/8"	1.01
975-9839	S-14	7/16"	1.23
975-9840	S-16	1/2"	1.23
975-9841	S-18	9/16"	1.19
975-9842	S-20	5/8"	1.80

STUBBY NUTDRIVER Shpg. wt. 7⅜ oz.

Stock No.	Mfr's Type	Socket Size	EACH
975-9844	SS-8	1/4"	.89

CHOOSE THE RIGHT SCREWDRIVER FOR EVERY JOB AND PURPOSE

- Nickel-Plated Chrome Vanadium Steel
- Shockproof Comfordome Amberyl Hand for Greatest Safety and Comfort
- Blades Solidly Fixed in Handles
- Precision Points Fit Screws Properly
- Ideal for Production and Repair Work

FLAT-BIT SCREWDRIVERS Shpg. wt. 7 oz.

Stock No.	Mfr's Type	Shaft Size		EACH
		Dia.	Lgth.	
975-9801	A-216-4	1/8"	4"	.68
975-9802	A-216-6	1/8"	6"	.70
975-9803	A-216-8	1/8"	8"	.75
975-9804	A-316-4	3/16"	4"	.89
975-9805	A-316-6	3/16"	6"	.99
975-9806	A-316-8	3/16"	8"	1.05
975-9807	A-416-4	1/4"	4"	1.08
975-9808	A-416-6	1/4"	6"	1.14
975-9809	A-416-8	1/4"	8"	1.20

PHILLIPS SCREWDRIVERS Shpg. Wt. 6 oz.

Stock No.	Mfr's Type	Size	EACH
975-9830	PO-1	#0	.72
975-9826	P-1	#1	.97
975-9827	P-2	#2	1.22

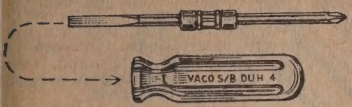
STUBBY PHILLIPS SCREWDRIVERS Wt., 5 o

Stock No.	Mfr's Type	Size	EACH
975-9828	P-5	#2	1.06
975-9829	P-6	#1	.97

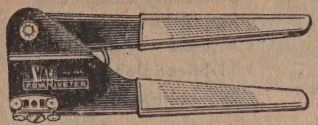
Hand Tools for Faster, Easier Work

• PROFESSIONAL QUALITY • UNCONDITIONAL GUARANTEE

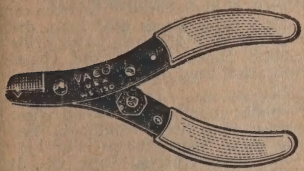
VACO®



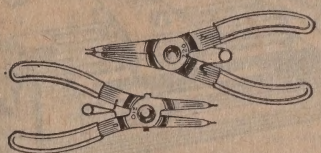
REVERSING SCREWDRIVER. DU2 contains 3/16" dia. #1 Phillips screwdriver. A convenient tool.
975-9811. Shpg. wt. ½ lb.....1.40



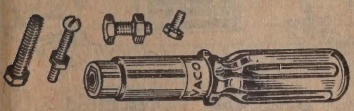
MODEL 495 POW'RIVETER. Features special 3-way head for 1/8", 5/32", and 3/16" rivets. For easy riveting.
975-9852. Shpg. wt. 1 lb.....4.95



MODEL WSC 150 DIAL-A-GAUGE WIRE STRIPPER. For all wire-stripping uses. Removes insulation easily, neatly.
975-9848. Shpg. wt. 4 oz.....1.36



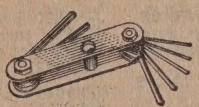
MODELS 210, 220 SNAP RING PLIERS. 210 handles internal rings; 220, external. Spring return and cushion-grip handle.
975-9850. Model 210. 4 oz.....2.48
975-9851. Model 220. 4 oz.....2.48



MODEL SA 711 NUTDRIVER. Adjusts automatically to all size hex nuts from ¼" to 7/16". Requires no manual adjustment.
975-9843. Shpg. wt. 8 oz.....3.32

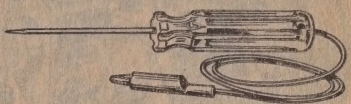
MODEL TT 31 3-IN-1 TAPPING TOOL. One tool provides three different size taps: 6-32, 8-32, and 10-32. Easy to use.
975-9847. Shpg. wt. 8 oz.....2.35

MODEL A116-2. POCKET SCREWDRIVER. A thousand uses in home and shop. Has 3/32" blade. 3" long.
975-9800. Shpg. wt. 4 oz.....42

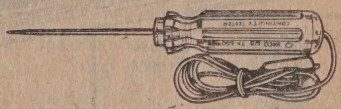


MODEL HK 17 POCKET HEX KEY WRENCH SET. Handy wrench set has seven hex blades that fold like pocket knife.
975-812. Shpg. wt. 4 oz.....1.26

HANDY VOLTAGE TESTERS



MODEL TK 550 6/12-VOLT TESTER AND PROBE. Handy tester for checking automotive and industrial equipment.
975-9846. Shpg. wt. 2 lbs.....88



MODEL 70008 CONTINUITY TESTER. Checks for open circuits and broken wires in electrical appliances and other equipment.
975-9854 Shpg. wt 2 lbs.....2.35

MODEL TK 500 CIRCUIT TESTER. Handy tester is also a pocket screwdriver. Neon tube indicates "hot" side of electric outlet.
975-9845. Shpg. wt 2 lbs.....2.20

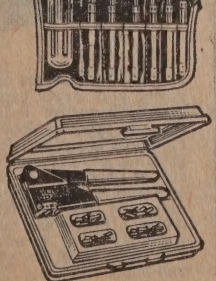
MODEL AN 2 HIGH-VOLTAGE TESTER. Ideal for tracing high voltage in TV sets. Can also be used as pocket screwdriver.
975-9810. Shpg. wt 2 lbs.....1.05

TOOL AND SUPPLY KITS FEATURE VERSATILITY AND CONVENIENCE

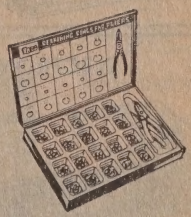
MODEL K 7 STAND-UP-HANG-UP KIT. An ideal kit for toolroom or toolbox. Contains the sizes of hollow-shaft nutdrivers you will use most often. Have them handy when you need them; don't waste time looking for a nutdriver. Contains 3/16", ¼", 5/16", 11/32", 3/8", 7/16", ½" sizes.
975-9813. Shpg. wt. 3 lbs.....8.84

MODEL ZA 70 HEX KEY INTERCHANGEABLE BLADE KIT. This is perhaps the handiest tool kit you may ever own. Has patented handle with special clutch for holding keys. Hex sizes include 1/16", 5/64", 3/32", 1/8", 5/32", and 3/16".
975-9849. Shpg. wt. 3 lbs.....4.94

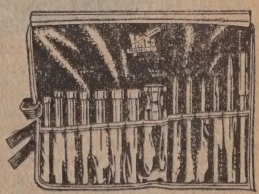
MODEL 575100 POW'RIVETER KIT. Beautifully made tool designed to install rivets quickly with a minimum of effort. Intended for the user who is looking for quality fastening at an economical cost. Kit contains #495 Rivet Tool plus an assortment of 55 Pow'Rivets—the rivet that works in oversize holes, all the time, every time. Easy to operate.
975-9856. Shpg. wt. 3 lbs.....6.81



MODEL 1550 SNAP-RING KIT. Handy kit at an economical price. You will appreciate the wide assortment and the convenience—designed to save you time and money. Includes 20 of the most popular, most used retaining ring sizes. Compartmentalized metal box with hinged cover contains 221 assorted internal and external rings, plus two snap-ring pliers.
975-9853. Wt. 6 lbs...13.20

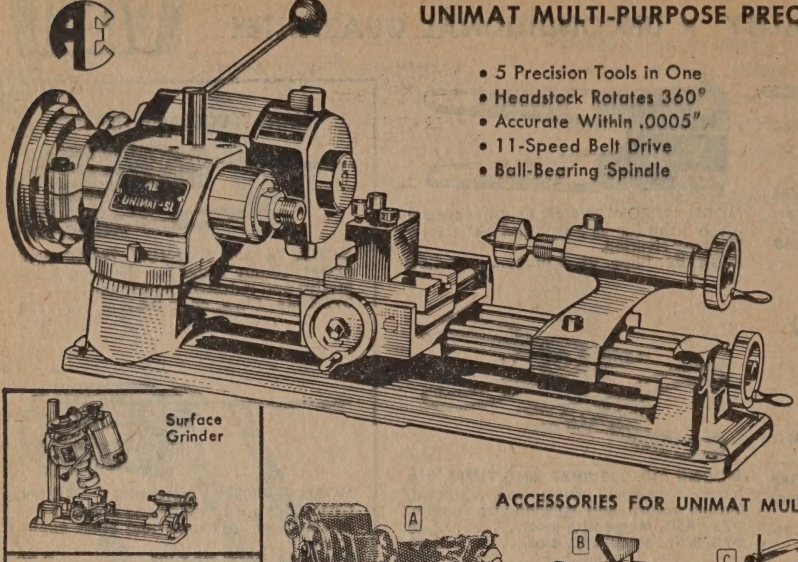


RT 14 COMBINATION KIT. Screwdrivers and nutdrivers in kit form to give you an assortment of drivers that lets you work faster and more efficiently. You can stop using a substitute tool because the correct size isn't available. Handles every conceivable application. Contains 1/8", 3/16", ¼" regular blades; 3/16", ¼", 5/16", 11/32", 3/8", 7/16", ½" nutdrivers; #1, #2 Phillips screwdrivers; plus a 6" extension piece. Handle with clutch lets blades snap in and out.
975-9813. Shpg. wt. 8 lbs.....11.58



Precision 5-in-1 Metal-Working Lathe

UNIMAT MULTI-PURPOSE PRECISION 3-INCH LATHE

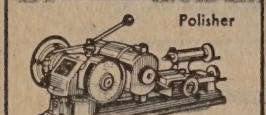


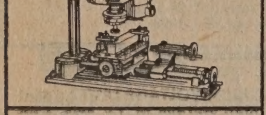
- 5 Precision Tools in One
- Headstock Rotates 360°
- Accurate Within .0005"
- 11-Speed Belt Drive
- Ball-Bearing Spindle

It's a lathe, drill press, milling machi polisher and grinder . . . all in one co pact, precision unit. Ideal for use factory model shops. You can tu face, grind, buff, saw, sand, thre mill, drill . . . converts from one ope tion to another in seconds.

Headstock rotates and revolves 36 locks at any angle, removes from bed vertical set-ups. Has ball-bearing sp dle accurate to .0005",—Ball bear idler assembly provides 11-speed dr system, powered by self-contained 1/ hp, 115 VAC motor. Lathe takes pie up to 3" diameter, 6.9" between cent Drill takes pieces 6¼" high, drills i center of 6¼" circle. Also drills i large panels, plates and chassis rotating head over end of bed.

Overall size, 14½x5x5". With d chuck, roughing bit, wood chest, page illustrated handbook. See f accessory listing below. For 115 vo AC. From Austria. Shpg. wt., 37 l
969U4710.....139.





ACCESSORIES FOR UNIMAT MULTI-PURPOSE LATHE

A 1290 POWER FEED ATTACHMENT. Feeds carriage automatically for accurate, precision finishing. Wt., 6 lbs.
969-4720.....24.95

B 1240 CIRCULAR SAW ATTACHMENT. For straight, accurate cutting. With 6x8" table; rip fence; blade guard; arbor. Takes 2½" to 3½" blades. Shpg. wt., 4 lbs.
969-4717.....14.95

C 1080 JIG SAW. Has 6x8" table. With 12 assorted blades. Wt., 6 lbs.
969-4715.....19.90

D 2820 HI-SPEED ¼" BIT SET. For turning, facing, bore, cut-off. Set of six. Wt., 8 oz.
969-4725.....Set 10,90

E 1040 STEADY REST. Supports 1½" bars and tubing for machining, end drilling. 1 lb.
969-4714.....9.95

F 1260 INDEX HEAD. Divides, spaces for making gears, etc. Wt., 1 lb.
969-4718.....14.95

G 1002 4-JAW INDEPENDENT LATHE CHUCK. Takes pieces to 2¼". Key, mtg. adapter.
969-4712. Wt. 1 lb.....23,90

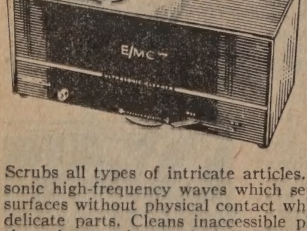
1001 3-JAW UNIVERSAL CHUC Takes pieces to 2¼".
969-4711. Wt. 1 lb.....24.9

H 1261 WORK PLATE. Hol work in lathe. Capacit 2¾". With clamps. Wt., 1 l
969-4719.....6.5

J 1210 MILLING TABLE, 3x5 Mounts on cross slid clamps work for milling. 2 lb
969-4716.....12.5

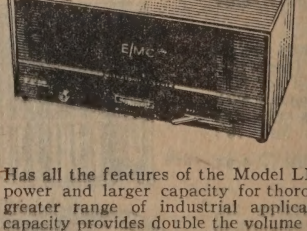
K 1010 MACHINE VISE. Fi cross slide or mill tabl 1⅛" V-jaws. Wt., 13 oz.
969-4713.....9.5

ELECTROMATION COMPONENTS CORPORATION ULTRASONIC CLEANERS



MODEL LP-1HD INDUSTRIAL ULTRASONIC CLEANER

Scrubs all types of intricate articles. Cleaner generates ultrasonic high-frequency waves which separate clinging dirt from surfaces without physical contact which may cause damage to delicate parts. Cleans inaccessible places impossible to clean through any other method. For removing grease, tar, wax and other substances from components, miniature mechanisms, and small instruments. Automatic 5-minute industrial time switch turns unit off when cleaning cycle is over. Compact console, 9½x5x4⅝". Stainless steel top, sides and tank. Tank, 3½x3½x 2½". Has 1-pint capacity. Power dial for low and high power. No tuning required. 90 kHz nominal, 40-watt RF input. 115V, 50-60 Hz AC. Shpg. wt. 6 lbs.
789-0910.....74,95

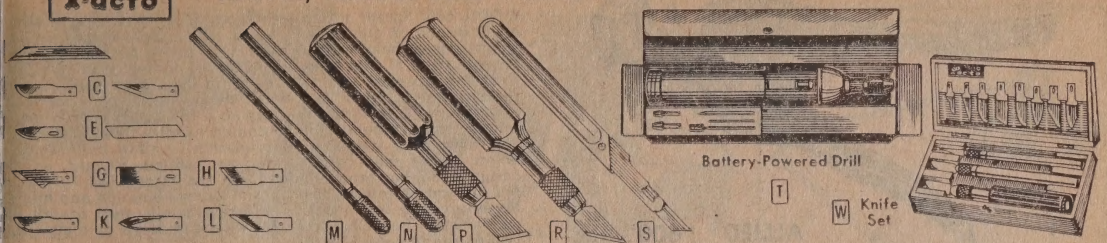


MODEL BP-1 INDUSTRIAL ULTRASONIC CLEANER

Has all the features of the Model LP-1HD at left, plus extra power and larger capacity for thorough, rapid cleaning in a greater range of industrial applications. Big 1-quart tank capacity provides double the volume of smaller model to clean more and larger articles in the same period of time. Ultrasonic principle provides quick and thorough cleaning to articles difficult or impossible to clean through conventional methods. For continuous use in production lines and labs. Automatic 5-minute industrial time switch prevents heat damage to delicate components. Power dial control. Operates at 90 kHz nominal, 50-watts RF input. Console size, 11¾x6½x5". Tank, 8x3½x2½". For 115V, 50-60 Hz AC. Shpg. wt, 7 lbs.
789-0900.....94.95

Quality Knives, Blades and Tools

X-acto KNIVES, BLADES AND TOOLS DESIGNED FOR ELECTRONICS USE



REPLACEMENT KNIFE BLADES

os. 10 to 13, 16 fit No. 1 knife at right; No. 8 fits o. 8 knife; others fit No. 2, 5, and 6. 2 oz.

Stock No. Pkg. of 5	Fig.	No.	Description	Pkg. 5	Stock No. Pkg. of 100	Pkg. 100
94-1203	A	8	Reversible Blade	.27	944-1242	5.20
94-1209	B	10	Eraser Blade	.53	944-1245	9.00
94-1212	C	11	Fine Angle Blade	.53	944-1248	9.00
94-1215	D	12	Correction Blade	.53	944-1251	9.00
94-1218	E	13	Precision Saw	.53	944-1254	9.00
94-1221	F	16	Etching Blade	.53	944-1257	9.00
94-1224	G	18	½" Chisel Blade	.53	944-1260	9.00
94-1227	H	19	Deburring Blade	.53	944-1263	9.00
94-1230	J	22	Trimming Blade	.53	944-1266	9.00
94-1233	K	23X	Double-Edge Blade	.67	944-1269	11.40
94-1239	L	24	Close Corner	.53	944-1272	9.00

INTERCHANGEABLE-BLADE KNIVES

M NO. 1 KNIFE. For light to medium work. 5" long, 5/16" dia. With #11 blade. Shpg. wt., 3 oz.
994-1275.....59

N NO.2 KNIFE. Medium to heavy use. 5" long, 7/16" dia. With #22 blade.
994-1278. Shpg. wt., 3 oz.....72

P NO. 5 KNIFE. For heavy work. 4¾" long. With #19 blade.
994-1281. Shpg. wt., 3 oz.....1.13

R NO. 6 KNIFE. For heavy work. 4¾" long. With #24 blade.
994-1284. Shpg. wt., 3 oz.....1.80

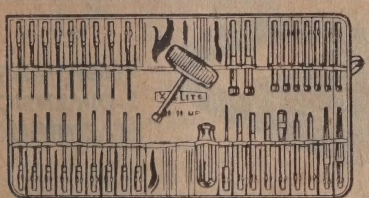
S NO. 8 KNIFE. Reversible blade. 5⅜" long. With #8 blade.
994-1287. Shpg. wt., 3 oz.....27

T CORDLESS POWER DRILL SET

Battery-powered drill for plastic, wood, light metal. Grinds, drills, polishes, deburs, carves. Three collets hold #80 to 3/32" bits. Uses 2 "C" batteries. With case, grinder, bit, punch.
994-1293. Shpg. wt., 1 lb.....4.49
000-0000. Batteries. 10 oz.....2 for .33

W TYPE 82 KNIFE SET

Includes Nos. 1, 2, and 5 knives plus nine assorted extra blades. For a variety of production-line applications, including wire-stripping, deburring, trimming potting compounds, prototype construction, and engraving. Handy wood chest. Shpg. wt., 12 oz.
994-1290.....4.25



XCELITE 99MP MULTI-PURPOSE TOOL SET

- Includes Both Regular and "T" Handles
- 39-Piece Set in Compact, Canvas Case

Includes most-needed tools in plastic-coated canvas case. Regular handle, tee handle, 10 regular nutdrivers 5/32" through ½"; 9 Allen hex-type screwdrivers .050" through 3/16"; 9 Bristol multiple-spline screwdrivers .048" through .183"; ¼", 5/16", and 3/16" slotted screwdrivers; #1 and #2 Phillips; 1/8-3/8" and ¼-½" reamers, awl scriber.
994-2102. Shpg. wt. 4 lbs.....28.35

Complete 23-piece set of tools meets almost every servicing need for radio, TV, other equipment. Provides a variety of quick-change tools and tool combinations to speed up work.

Includes: 6" long-nose pliers; 5" diagonal pliers; 6" adjustable wrench; 9 regular nutdrivers from 3/16" through ½" in 1/16" steps; ¼" stubby nutdriver; 5/16" stubby nutdriver; 3/8" stubby nutdriver; 3/16" slotted screwdriver; ¼" slotted screwdriver; No. 1 Phillips screwdriver; 1/8-3/8" reamer; ¼"-½" reamer; 8" extension blade; regular handle; stubby handle.

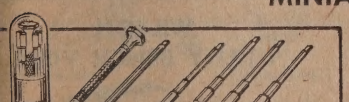
High-quality hardened-steel tools. Amber plastic handles are break-proof and shockproof. In handy, durable, plastic-coated canvas roll-up pouch with individual pockets for each piece.
994-2106. Wt. 2¾ lbs.....26.85

99SM SERVICE MASTER SET

- Versatile 23-Piece Servicing Tool Set
- Plastic Roll-Up Pouch with Pockets

MINIATURE PRECISION HAND TOOL SETS

Moody

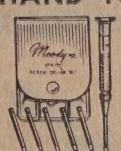


W-5 MAGNETIC SOCKET WRENCH SET. Includes 5 interchangeable steel hex wrenches and a magnetized, swivel-top handle with screw-type chuck. Sizes: 5/64", 3/32", 7/64", 1/8", 9/32". Shpg. wt., 5 oz.
859-6203.....Each 2.59
12 Sets or More.....Each 2.39

OE-5 OPEN-END WRENCH SET. Five off-set open-end steel wrenches, chuck-type handle and plastic case. Wrench sizes: 5/64", 3/32", 7/64", 1/8", and 5/32". Shpg. wt., 5 oz.
859-6209.....Each 1.64
12 Sets or More.....Each 1.47

SC-5 SCREWDRIVER/AWL SET. Five interchangeable blades that fit universal, swivel-type handle with screw-type chuck. Blades include: 4 screwdriver types in sizes .055", .070", .080", and .100"; plus a 1" awl. Plastic container. Shpg. wt., 5 oz.
859-6212.....Each 1.29
12 Sets or More.....Each 1.16

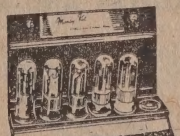
#52 UTILITY SCREWDRIVER SET. Consists of a precision screwdriver with six interchangeable blades from .025" to .100". Knurled handle for firm grip. Blades are nickel-plated, heat treated steel.
859-6221. 4 lbs.....1.90



TS-5 TINY TAP SET. Heat-treated 6-piece set in plastic case. 5 steel taps in sizes 0-80, 1-72, 2-56, 3-48, 4-40. Knurled chuck handle, torque hole for leverage.
859-6218. Shpg. wt., 5 oz.....Each 4.95
12 Sets or More.....Each 4.45

JS-6 JEWELER'S SCREWDRIVER SET. Six jeweler's drivers with precision steel blades (.025", .040", .055", .070", .080", and .1"), knurled handles, grooved chuck. Made to Federal specifications GGG-S-121. Case, 3¼x4½x3¾".
859-6206. Shpg. wt., ½ lb.....Each 2.89
12 Sets or More.....Each 2.69

MOODY TOOL OUTFIT



Consists of six individual Tiny Tool Sets—enclosed in separate plastic containers with chuck-type handle.

Includes all of the following sets:

SC-5 Screwdriver and Awl Set, Sizes: .055", .070", .080", .100"; and .1" Awl.

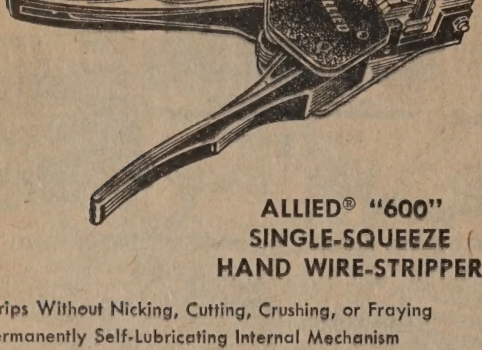
PA-5 Phillips Driver and Allen Wrench Set, Phillips Sizes: #0, #1; Allen Sizes, #4, #6, #8.

SW-5 Socket Wrench Set, Hex Socket Sizes: 5/64", 3/32", 7/64", 1/8", 9/32".

OE-5 Open-End Wrench Set, 5 Sizes: 5/64", 3/32", 7/64", 1/8", 9/32".

TS-5 Tap Set: 0-80, 1-72, 2-56, 3-48, 4-40 taps. #70 Tap Drill Set with 3/64", #53, #50, #47, and #43 taps.
859-6215. Shpg. wt., 1 lb.....14.95

Handy Tools for the Electrical Worker



ALLIED® "600" SINGLE-SQUEEZE HAND WIRE-STRIPPER

- Strips Without Nicking, Cutting, Crushing, or Fraying
- Permanently Self-Lubricating Internal Mechanism
- Strips Wire to 7/8" with Single Light Squeeze on Handle
- Jaws Automatically Stay Open to Allow Removal of Wire
- Handle Designed to Fit Any Size Hand Comfortably
- Smoothly Performing Mechanism Prevents Operating Fatigue
- Super-Hardened Blades Easily and Quickly Replaceable
- Handles 16 To 26 Gauge Wire

MODEL 600. Speeds up any work requiring that wire be strip of its insulation quickly and cleanly. Extremely rugged autom single-squeeze hand wire-stripper is so easy to use that anyone become adept at wire stripping in almost no time at all. Strips t solid and stranded wire with equal facility. Practically elimin nicking and cutting of wire, won't crush wire, or won't fray end insulation left on wire. Strips up to a full 7/8 inch with one squeeze on the comfortably contoured handles. Jaws automatic stay open after stripping off insulation to allow removal of before blades snap back to starting position. Rugged, advan design is tool-box proof. Built to take the hardest use. Permane self-lubricating internal mechansim assures long life and minim finger pressure for operation. Narrow handle span fits all ha comfortably. Super-hardened blades are replaced by removing two reatining nuts. 7" long.

704-1001, For 16-26 Gauge Wire, Shpg. wt. 10 oz.....6
704-1002, Replacement Blades, Type AL-8826.....2

WIRE STRIPPER AND CUTTER

Smooth-cutting 5" blades

Spring-loaded, easy operatin tool for use with standard wir sizes. Smooth-cutting 5" blade make stripping or cutting quic and clean. Comfortable handl reduces fatigue with long pe riods of use. Ruggedly built fo long life.

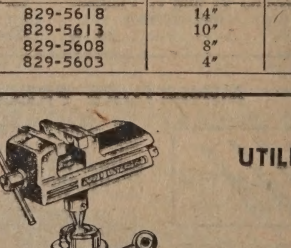
910-5803. Shpg. wt. ½ lb. 1.4

MICRONTA FLIP-UP HANDS-FREE MAGNIFIER

- Fine Ground and Polished Lenses
- Adjusts to Any Head
- Frees Hands for Crafts, Hobbies

Don't strain your eyes trying to see small pieces that require magnification. Handle them easily and surely without tension or strain. Precision-made glasses magnify objects 2½ times. Do not distort or decrease the accuracy of your depth perception. No false hand movements to destroy your confidence in your ability to safely handle small objects. Glasses flip up and down and stay put, leaving your hands free for any job. Virtually unbreakable for rugged service. Guard protects your eyes against glare. Comfortable to wear—can be worn for long periods without fatigue. Ideal for technicians, hobbyists, etc.

910-5745. Shpg. wt. 1 lb.....3.95

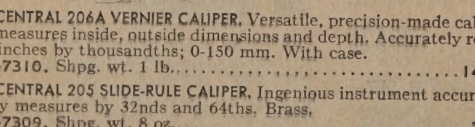


"SIGHTMASTER" 3-DIMENSIONA MAGNIFIERS

These eye-savers will pay for themselves over-and-over in freed from eyestrain and in improved ability to see fine detail. Let y handle small objects with confidence and accuracy—improv your ability to do work with precison, small components. A wo derful help for anyone who must handle fine parts. Offer thr dimensional magnification up to 3½ times. Have precision-grou and polished prismatic lens. Adjustable headband. You choo from four magnification powers. Av. shpg. wt. 1 lb.

Stock No.	Distance	Magnifies	EACH
829-5618	14"	1¾X	4.95
829-5613	10"	2¼X	4.95
829-5608	8"	2¾X	5.95
829-5603	4"	3½X	5.95

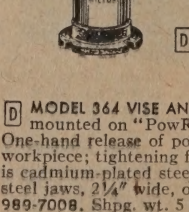
CENTRAL CALIPERS AND MICROMETERS



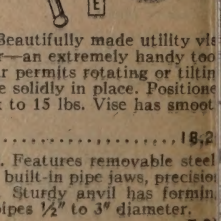
A CENTRAL 206A VERNIER CALIPER. Versatile, precision-made caliper measures inside, outside dimensions and depth. Accurately reads 0-6 inches by thousandths; 0-150 mm. With case.
889-7310. Shpg. wt. 1 lb.....14.95

B CENTRAL 205 SLIDE-RULE CALIPER. Ingenious instrument accurately measures by 32nds and 64ths. Brass.
889-7309. Shpg. wt. 8 oz.....3.59

C CENTRAL 12RL 0-1" MICROMETER. Precision instrument provides accurate measurement of small parts. Has 0.001" graduations. Positive lock, friction stop, clamp-ring locknut, zero adjustment. Enameled, forged-steel frame. Satin-chrome finish. Meets Federal Specification GGG-C-1 05.
889-7307. Shpg. wt. 8 oz.....14.95
889-7308. TYPE 22RL. Same as above, but 1-2". Frame stamped with decimal equivalents to 1/64ths. With 1" standard. Wt. 8 oz....16.95



WILTON UTILITY BENCH VISES



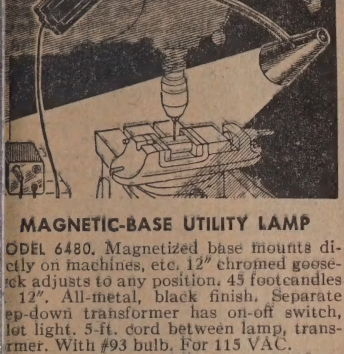
D MODEL 364 VISE AND POSITIONER. Beautifully made utility vi mounted on "PowRarm" positioner—an extremely handy too One-hand release of positioner level-bar permits rotating or tiltin workpiece; tightening freezes workpieee solidly in place. Positione is cadmium-plated steel, Handles work to 15 lbs. Vise has smoot steel jaws, 2¼" wide, open to 2¼".
989-7008. Shpg. wt. 5 lbs.....18.2

E MODEL C55 LOW-COST BENCH VISE. Features removable steel insert 4½" jaws with serrated faces, built-in pipe jaws, precisio screw drive. Swivel base locks firmly. Sturdy anvil has formin horn. Maximum opening 4¼". Takes pipes ½" to 3" diameter.
989X7001. Shpg. wt. 19 lbs.....7.9
989X7002. MODEL CS3½. Above, but has 3½" jaw. Max. opening 3". Takes pipes ½-2". Shpg. wt. 11 lbs.....6.3

Depend on Allied Electronics for Quality Tools at Low Price

Smart Buys in Desk Lamps and Hand Tools

ROXTER HI-INTENSITY MINIATURE LAMPS "AIM" THE LIGHTS WHERE YOU NEED IT



MAGNETIC-BASE UTILITY LAMP

ODEL 6480. Magnetized base mounts di-ctly on machines, etc. 12" chromed goose-ck adjusts to any position. 45 footcandles 12". All-metal, black finish. Separate ep-down transformer has on-off switch, lot light. 5-ft. cord between lamp, trans-rmer. With #93 bulb. For 115 VAC.
09-6205. Shpg. wt. 3 lbs.....19.95

Glare-Free Low Voltage Light Where You Want It

SUBMINIATURE HI-INTENSITY LAMP

ODEL 5979. Our smallest lamp. For use here space is extremely limited. Gives 80 intensity at 6"; up to 2000 fc when used ith microscopes. Arm and reflector each ivel 180°; arm extends 10". Only 6½x 3¼", folded. Weighted magnet-base. ith three #55 6-V bulbs. Step-down trans-rmer. For 105-130 VAC.
09-6204. Shpg. wt. 2 lbs.....13.95

AS WELL AS ILLUMINATES

HIGH-INTENSITY LAMP/MAGNIFIER

MODEL 7175. Concentrated glare-free light, almost the equivalent of daylight. Features 2½" magnifier with 7" focal length for close detail work. Magnifier arm swivels vertically and magnifier rotates on its axis. Independent movement of lamp head and magnifier. Hi-Lo switch for 500 or 250 footcandles. 2½x2½x10" folded. All-metal construction; nylon feet. With one 6-V #1133 bulbs. Built-in stepdown transformer. For 110-120 V, 60 Hz AC. Shpg. wt., 3 lbs.
909-6206.....26.95

HIGH-INTENSITY LAMP WITH 4½" MAGNIFIER

MODEL 7176. As above, with big 4½" dia. lens. Equivalent to 200 watts in high range. With one #1133 6-volt bulbs. For 110-120 volts, 60 Hz AC.
909-6207. Shpg. wt. 3 lbs.....29.95

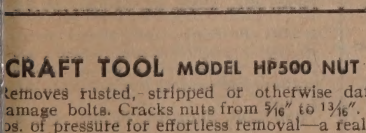
PROFESSIONAL HI-INTENSITY LAMP

MODEL 5900. Offers the ultimate in intensity, color, temperature and mechanical positioning. Five intensities—up to 7000 foot-candles. Plug-in lamp arm swivels 360° vertically and horizontally. AC convenience outlet on base. All-metal with neutral wrinkle finish; non-scratch nylon feet. Designed for safe, cool low-voltage operation. With one #1133 bulb. Built-in transformer. 110-120 V, 60 Hz AC.
909-6203. Shpg. wt., 3 lbs.....52.95

NEW! ENGINEER'S LAMP

MODEL 7500.1 The most versatile lamp ever designed for office and industrial use. Has 24" long plug-in arm with a full 4¼"-diameter reflector for extra reach and wide-area illumination. Built-in H-Lo intensity switch. Has 110-volt AC "convenience" outlet for plugging in other electrical devices. Built-in step-down transformer for efficient 12-volt operation. With bulb. Includes screws for wall mtg. Shpg. wt. 8 lbs.
909-6210.....26.50

TRAN-SEM ELECTRONIC HAND TOOL FOR TRANSISTORS, IC's

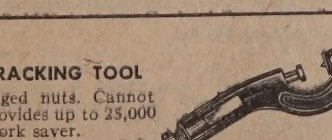


Insert Leads — Pulling Head

- Handles Up to 10-Lead Integrated Circuits
- Doubles As Heat Sink During Soldering
- Indispensable, Like Having A "Third Hand"

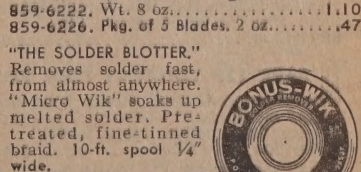
Makes cutting any transistor or IC leads uick, simple. For anything from a two-lead iode to a ten-lead integrated circuit. eads insert into apertures for clipping. mploys a pulling head for removal from mited access positions. Head of tool erves as a heat sink when soldering, pro-ects delicate solid-state components.
75-0004. Shpg. wt. 8 oz.....14.75

ADEL METAL "NIBBLING" TOOL



- Cuts Holes, Slots or Openings in Seconds
- Use It With Up to 18-Gauge Metal
- Leaves Smooth, Edges • Replaceable Punch

One of the handiest "time-savingest" tools around. Nibbles through steel or aluminum of up to 18-gauge, or soft metals up to 1/16" thick. Makes square or rectangular holes. Leaves safe, smooth, fat edges. Minimum hole size, 7/16".
975-0002. Shpg. wt. 8 oz.....4.95
975-0003. Replacement Punch. Easy to install. Shpg. wt. 2 oz.....2.49



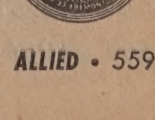
A CLAUSS 925 ELECTRICIAN'S SCISSORS. Quality electrician's scissors, 5" long, 1¾" cut length.
759-2519. Wt., 3 oz.....3.50

B CLAUSS 925C ELECTRICIAN'S SCISSORS. Like 925 above left, but with wire-stripping notches on back of blade.
759-2520. Shpg. wt. 3 oz.....3.60

C ELECTRICIANS' KNIFE. Tempered tool-steel 2½" blades: combination screw-driver-wire scraper, and spear shape type. Length, 3¾".
859-6208. Wt. 5 oz.....1.49

D MILLERS FALLS TYPE 333 UTILITY KNIFE. Reversible blade. 5" long. 5 blades.
859-6222. Wt. 8 oz.....1.10
859-6226. Pkg. of 5 Blades. 2 oz.....47

"THE SOLDER BLOTTER." Removes solder fast, from almost anywhere. "Micro Wik" soaks up melted solder. Pre-treated, fine-tinned braid. 10-ft. spool ¼" wide.
975-0005.....1.80
975-0006. 20-ft. Spool, ⅛" wide.....3.50



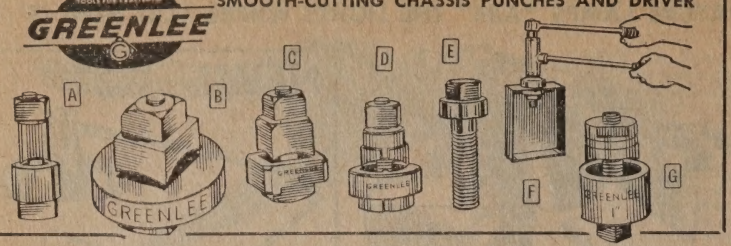
CRAFT TOOL MODEL HP500 NUT CRACKING TOOL

Removes rusted, stripped or otherwise damaged nuts. Cannot amage bolts. Cracks nuts from 5/16" to 13/16". Provides up to 25,000 os. of pressure for effortless removal—a real work saver.
75-3206. Shpg. wt., 1¼ lbs.....6.95

Allied Electronics Has Everything in Soldering Equipment

Chassis Punches, Storage Boxes and Cabinets

SMOOTH-CUTTING CHASSIS PUNCHES AND DRIVER



A TYPE 733 "D" PUNCHES. For cutting "D" shape hole with ordinary wrench in chassis up to 16-gauge. Wt., 2 lbs.

799-3270. For ½" hole.....5.60

799-3268. For ⅝" hole.....5.95

B 731R MINIATURE RELAY-SOCKET PUNCH. Cuts clean, smooth holes for mounting miniature relay sockets. Needs only an ordinary wrench to do the job. Simply insert punch into a 9/16" drilled hole, and turn it with wrench. Cuts holes in metals with up to 16-gauge thickness. Hole dimensions: .861"x1.018". Shpg. wt., 10 oz.

799-3262.....15.00

C TYPE 731 SQUARE PUNCHES. Cut square hole in up to 16-gauge metal with wrench. Drive screw requires ½" hole. Hardened tool steel. Wt., 2 lbs.

799-3256. For ½" hole.....7.45

799-3258. For ¾" hole.....8.10

799-3260. For 1" hole.....9.80

D TYPE 732 "KEYED" PUNCHES. Insert punch in drilled hole, turn with wrench. Require ½" hole except *¼" hole. 1½ lbs.

Stock No.	Size	EA.	Stock No.	Size	EA.
799-3264	*15/32"	6.90	799-0000	1 11/64"	7.80
799-3266	15/16"	7.25	799-0000	1 11/64"	9.20

E BALL-BEARING DRIVE SCREWS. 799-3201. AV112-BB. For 1" and 1½" punches. Wt., 1 lb.....1.35

799-3203. AV249-BB. For 1 7/16", 1 5/8" and 1¾" punches. Wt., 1 lb.....3.25

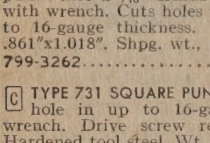
F TYPE 1804 RATCHET KNOCKOUT PUNCH-DRIVER. Anti-friction lead-thread gives 6 to 8 times faster cutting action. For use with standard punches ½ to 3" and Greenlee 730 chassis punches, 1 1/16" and larger (see list at right). For 10-gauge maximum material. Comes with driver assembly, leverage, ratchet handles, 3 adapter screws. Metal case. Act. wt. 6½ lbs.

799-3272. Shpg. wt. 13 lbs.....63.50

G TYPE 730 ROUND PUNCHES. Permit e rapid cutting of round holes in me chassis for sockets, switches, controls, pl meters, transformers, panel lights, other components. Punches cut smo openings in sheet metal, bakelite, hard r ber and composition. Cut through me up to 16-gauge thick. Extremely easy to just turn cap screw to cut hole—can operated with only an ordinary wrench. reaming or filing necessary. *Indicates ter cutout. Av. shpg. wt., 1½ lbs.

Stock No.	Hole Size	Lead Size	EACH
799-3212	1/2"	1/4"	2.85
799-3214	5/8"	1/4"	2.85
799-3216	3/16"	1/4"	2.85
799-3218	11/16"	3/8"	2.85
799-3220	3/4"	3/8"	2.85
799-3222	13/16"	3/8"	2.85
799-3224	7/8"	3/8"	2.85
799-3226	15/16"	3/8"	3.20
799-3228	1"	3/8"*	3.20
799-3230	1 1/16"	3/8"	3.35
799-3232	1 1/8"	3/8"	3.35
799-3234	1 1/32"	3/8"	3.35
799-3236	1 3/16"	3/8"	3.35
799-3238	1 1/4"	3/8"	3.35
799-3240	1 3/8"	3/8"	4.15
799-3242	1 1/2"	3/8"	4.55
799-3244	1 5/8"	3/4"	5.50
799-3246	1 3/4"	3/4"	6.30
799-3248	2"	3/4"	8.35
799-3250	2 1/4"	3/4"	9.30
799-3252	2 1/2"	3/4"	15.10
799-3254	2 25/32"*	3/4"	13.75

VLCHEK PLASTIC PARTS STORAGE BOXES



Rugged, all-plastic boxes with hinged tops. Lightweight, scratch-resistant, easy to clean. One to 36 compartments. Molded of clear polystyrene—"see-thru" feature lets you find what you're looking for. Strong hinge. P250 has removable cover. *Total compartments.

Stock No.	Type	*No.	Comp. Sizes	Overall Size	Lbs.	EA.
979-7135	P250	1	5 7/8x3 5/8"	6 1/4x4x1 1/16"	1	.52
979-7125	P203	6	1 1/4x3 15/16"	8 1/4x4 1/2x1 3/8"	1½	.66
979-7130	P210	9	8—1 3/8x1 5/8"; 1—1 1/8x3 1/4"	7x3 3/4x1 1/4"	1	.50
979-7150	P812	12	2x4 3/16x2 1/16"	13 1/8x9x2 5/16"	1	2.48
979-7120	P201	12	6—1 1/4x1 1/4"; 4—1 1/4x2"; 2—1 1/2x3 15/16"	8 1/4x4 1/2x1 3/8"	1½	.66
979-7140	P612	12	6—1 5/8x1 15/16"; 6—1 5/8x4"	11x6 3/4x1 3/4"	2½	1.62
979-7115	P200	18	1 1/4x1 1/4"	8 1/4x4 1/2x1 3/8"	1½	.66
979-7145	P618	18	1 5/8x1 15/16"	11x6 3/4x1 3/4"	2½	1.62
979-7153	P818	18	12—2x2"; 6—2x4 3/16"	13 1/8x9x2 5/16"	3	2.52
979-7155	P824	24	2x2"	13 1/8x9x2 5/16"	3½	2.62
979-7110	P166	36	1 1/2x1 1/16x1 9/16"	10x7x1 13/16"	3½	1.70

TOOL AND PARTS STORAGE BOXES

H PARK 15" STEEL UTILITY BOX

MODEL 151T. Handy case for small hand tools. Has lift-out tote-tray. Full-length, electrically welded hinges. Deep drawn seamless construction. Rust-fighting enamel finish. 5⅜x15x6½". Shpg. wt., 5 lbs.

889X1308.....4.98

J PARK 132 TWO-TRAY TOOL BOX

General-purpose steel utility box with rugged nickel-plated hardware. Trays have full cantilever action. 13½x5¾x6½".

889X1304. Wt., 5 lbs.....4.49

889X1303. Model 131 Single Tray Tool Box. As above, but with single tray. Size, 13½x4½x6½". Shpg. wt., 3 lbs.....2.95

K VLCHEK PLASTIC BOXES

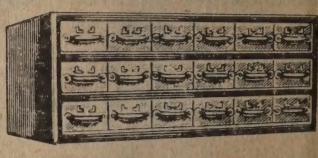
MODEL 1212 TWO-TRAY PARTS BOX. Lightweight, all-purpose small-parts caddy. Boxes and trays are almost indestructible, won't shatter or crack. Impervious to gasoline, oil and salt water. Box opens flat, can't tip. Full-length trays have full cantilever action. Top tray has 9 compartments, bottom has 6. Features retractable handle. Heavy-duty "snap ease" latch. Green case, 12⅜x7x6". Shpg. wt., 2½ lbs.

979X7161.....4.74

MODEL 1211 SINGLE-TRAY PARTS BOX. Similar to above, but with single 9-compartment tray. 12⅜x7x4⅝".

979X7160. Wt., 2¼ lbs.....2.95

EQUIPTO HEAVY-DUTY STORAGE CABINETS



Model 11 18-Drawer Cabinet

MODEL 11. Ideal for systematic small parts storage. Can be used individually or as an insert under counters and in shelving. Contains eighteen jam-proof, all-steel drawers. Each drawer has two cross dividers that adjust to any 1-in. interval making three compartments per box. This makes a total of 54 adjustable compartments. Large, easy-grip handles. Label holders on every drawer and divider. Drawer size, 11x5⅝x3⅛-inches. Cabinet, 13¾x34x12-in. Shipped set up and complete. Heavy-duty steel construction; olive-green baked enamel finish.

789U7001. Shpg. wt. 62 lbs...31.95

MODEL 22. Same as Model 11 above, except drawer length is 17-in.; cabinet depth, 18-inches.

789Z7002. Shpg. wt. 84 lbs...39.95

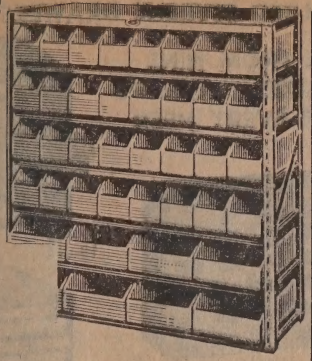
MODEL 8. Sames easy-access parts storage arrangement and rugged construction as Model 11, except has 8 drawers and cabinet size is 9½x23¼x12-in.

789U7000. Shpg. wt. 28 lbs...19.50

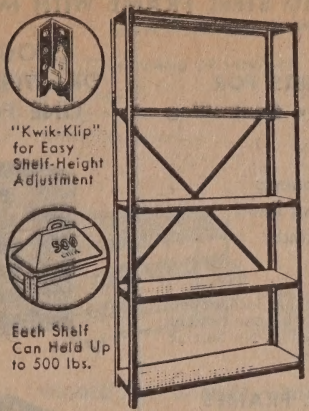
Shelving, Cabinets, Workbench, Carts

EDSAL

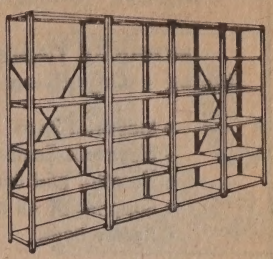
- Provide the Most Storage Space at Least Cost
- 40 Drawers in All
- 32 Big 4x11" Drawers and 8 Jumbo 8x11" Drawers
- Heavy-Duty All-Steel Frame
- Drawers Are 4½" High
- Rear Stop Tab



MODEL CC-40. One of the handiest parts storage cabinets on the market today. Features a total of 40 drawers—32 big 4x11" and 8 jumbo-size 8x11" drawers in a single, portable frame. All drawers are 4½" high. Great for keeping all kinds of small parts, tools, and hardware in one central location. Holds everything from nuts and bolts to electronic components. Several of these compact cabinets used side-by-side will give you unlimited storage space. Drawers are one-piece, sturdy corrugated-board construction. A special stop-tab built into the rear of the cabinet keeps drawers from being pushed in too far or pulled out until drawer spills. Rugged steel frame, 37x36x12".
789Z2402. Shpg. wt. 37 lbs.....21.43



STEEL STORAGE RACKS



Use these Compact Racks Singly or in Space-Saving Rows

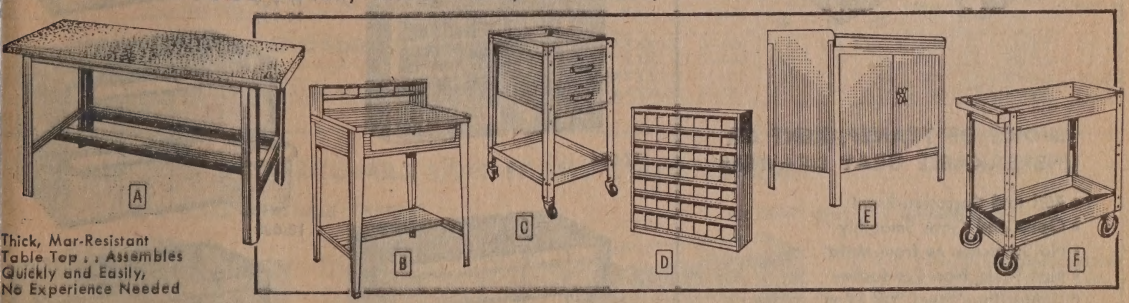
- Very Easy to Assemble
- Rust-Resistant Finish
- Extra Shelves Available

DELUXE HEAVY-DUTY STEEL STORAGE RACKS

Provide compact storage facilities. Units are complete and independent. Easy to assemble—just bolt the tops and bottoms; shelves are held by unique "Kwik-Klip" fasteners. With 5 shelves; extra shelves, listed below. Posts are punched at intervals for easy shelf height adjustment. 75" high, 36" wide; choice of depth. Gray enamel finish. Deluxe shelves hold up to 500 lbs. each. *Four to carton.

789U2408. Type 2912-5. With 12"-Deep Shelves. 47 lbs.....15.50
789Z2409. Type 2918-5. With 18"-Deep Shelves. 60 lbs.....19.82
789U2407. Type *S-12. 12" Extra Shelf. 24 lbs.....7.52
789U2406. Type *S-18. 18" Extra Shelf. 32 lbs.....10.20

TOOL TOTER, SHOP DESK, CABINETS, BENCHES AND CART



Thick, Mar-Resistant Table Top . . . Assembles Quickly and Easily, No Experience Needed

A WORKBENCHES

MODEL UP-500. 5' wide. 1" mar-resistant table-top, Cross-braced and self-supporting. 1-piece heavy-gauge steel legs. Gray, baked-enamel finish is rust-resistant. 34½" high, 60" wide, 24" deep. Order drawers, below. Shipped knocked down. Can be assembled by anyone—no experience needed. Goes together quickly with only simple hand tools. Wt., 76 lbs.
789Z2405......29.40

B SHOP DESK

MODEL 620. Provides writing surface and storage space that may be used in a wide variety of applications—receiving and shipping clerks, watchmen, checkers, etc. Has built-in pencil and paper compartments. Sloping top is 43 inches high at front; drawer measures 24x28x3½". Comes complete with tamper-proof lock.
789FZ2415. Shpg. wt. 105 lbs.....60.98

C TOOL TOTER

MODEL TT1824-2. Handy tool storage rack on wheels. Stores virtually any kind of tool, and brings them to where you need them. Spacious drawers operate from rigidly constructed drawer case to assure easy operation under all conditions. Drawers have curved handles designed for comfortable grip and easy opening. Handsome design is as good looking as it is efficient. Finished in gray baked enamel. Toter size, 18x24x 34½". Drawer size, 15x23x4⅝".
789FZ2420. Shpg. wt. 55 lbs.....39.39

D 56-COMPARTMENT STAND OR WALL MOUNT SORTING CABINET

MODEL 849. Versatile cabinet solves the sorting problems of offices, mail rooms and shops. Feature 56 separate compartments that are adjustable on 1" centers with snap fasteners. Dividers can be moved to left or right in 1" increments to handle changes in work flow, or can even be removed entirely for wider spacing. Front of each shelf has 1" lip to prevent overflow. Convenient, full-width label holders for compartment identification. Gray, baked-enamel finish. Each compartment is 5¼x4x8¾" deep. Overall, 37½x34¾x9" deep.
789FZ2400. Shpg. wt. 60 lbs.....42.37

E METAL STORAGE CABINET/WORK TABLE COMBINATION

MODEL 59243. Storage cabinet/work table combination serves a wide variety of uses in shops or offices. Provides a handy metal storage cabinet ensuring safe, secure, locked-in storage of valuable tools, materials or papers. Extra-quality chrome-plated door handle features a built-in cylinder lock. Large double doors swing open for easy access to cabinet. Features strength and rigidity without the sacrifice of simplicity in erection and long-lasting serviceability. Phosphatized to protect and preserve the finish; durable finish prevents rust and protects the appearance.

Smooth, sturdy top may be utilized as an all-around work table. Has back and side edge guards to prevent tools and parts from sliding off. Vises, grinders, office machines and small power tools can be easily mounted on top. Constructed of durable, heavy-gauge steel with gray baked-enamel finish. Overall size, 34" high, 36" wide, 24" deep. Cabinet has 18 cu. ft. of storage space. One center shelf, adjustable 1½". Shipped knocked down, assembles easily with ordinary tools.
789FZ2410. Shpg. wt. 110 lbs.....61.00

MODEL 630 STORAGE CABINET/WORK TABLE. Space-saving steel cabinet features 3 adjustable shelves. Door with lock in handle. 34" high, 21" wide, 15½" deep.
789FZ2412. Shpg. wt. 46 lbs.....30.00

F TYPE SC-2024 HEAVY-DUTY SERVICE CART

Rugged, material-handling cart saves steps, time and money in stock rooms, offices. Has 5" heavy-duty, hard-rubber casters—two stationary and two that swivel. Two reversible pan-type trays have rolled edges. Comfortable, formed-steel tubular handle. Finished in gray, phosphatized, baked-on enamel, 32" high. Trays are each 3½" high, 24" wide, and 36" long. 56 lbs.
789FZ2404......35.06
789FZ2403. Type SC 2016. As above, but trays are each 3½x16x30". 32 lbs.....29.05

Akro-Mils Parts Storage Cabinets

ELDED STEEL FRAME WITH MOLDED STYRENE DRAWERS

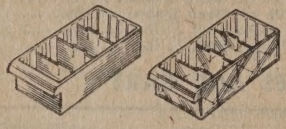
MODULAR CABINETS FOR Storing • Organizing • Controlling

- Industrial Parts
- Electronic Components
- Hospital and Drug Items
- Supplies of All Kinds
- Resale Items

A-M Modular Cabinets can be built into a complete system of storage. Start with one cabinet —add and stack others as needed. No bolting or shelving required.

HEAVY-DUTY STEEL FRAMES

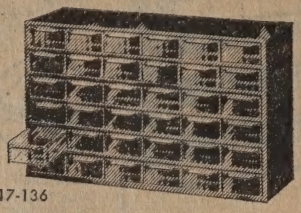
All A-M Cabinet frames are 18" across the front and fit into standard shelving. May also be stacked together or hung from walls. Heavy-duty steel frame has attractive baked-enamel, chip-proof, hammertone charcoal finish.



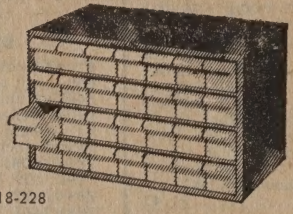
CHOICE OF TRANSPARENT OR UNBREAKABLE GRAY DRAWERS

- Rust and Corrosion-Proof
- Open and Close Smoothly
- No Scratches As from Metal
- Non-Toxic, Non-Conductive
- Lighter than Steel, Yet Won't Warp
- Patented Lock-Tight Dividers Prevent Drawers from Spreading . . May be Moved to Make Sub-compartments . . Parts Can't Creep from Compartment

CHOOSE FROM NINE DRAWER SIZES . . THERE'S ONE FOR EVERY NEED



17-136



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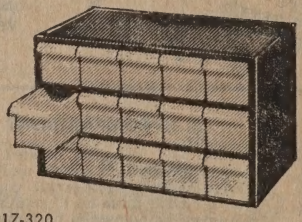
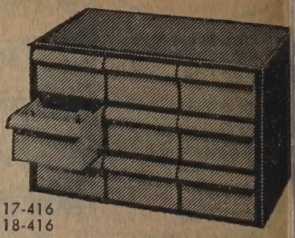
17-024



17-320
18-320



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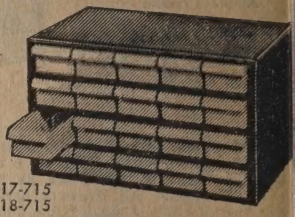

17-715
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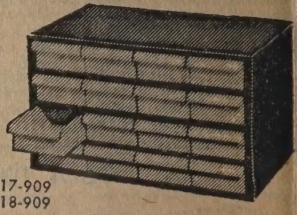

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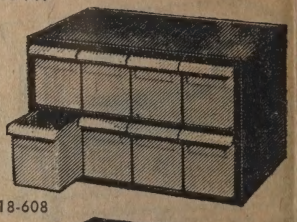
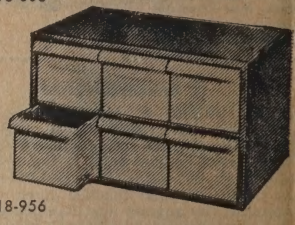
18-909



18-608



18-956

Transparent Drawers		Heavy-Duty Drawers		Drawers Per	Drawer Size Inches			Cabinet Size Inches			Dividers Furnished		Shpg. wt., Lbs.	EACH
Stock No.	Mfr's Type	Stock No.	Mfr's Type	Cabinet	W	H	D	W	H	D	Cross	Long		
729X3310	17-136	.....	.....	36	2¾	1 7/16	5⅞	18	11⅛	6	36	1	13	14.99
.....	.....	729X3315	18-228	28	2⅛	2⅛	11	18	11	11	28	.....	22	25.70
729X3309	17-024	.....	.....	24	2¾	2	5⅞	18	9⅞	6	24	.....	11	14.99
729X3311	17-320	729X3316	18-320	20	3⅛	2⅛	11	18	11	11	20	1	21	22.99
729X3312	17-416	729X3317	18-416	16	4	2⅛	11	18	11	11	16	1	20	22.99
729X3313	17-715	729X3319	18-715	15	3⅛	3 1/32	11	18	11	11	15	1	20	22.99
729X3314	17-909	729X3320	18-909	9	5¼	3 1/32	11	18	11	11	9	1	18	22.99
.....	.....	729X3318	18-608	8	4	4¾	11	18	11	11	8	...	22	22.99
.....	.....	729X3321	18-956	6	5¼	4¾	11	18	11	11	6	.....	22	22.99

DIVIDERS FOR MODULAR CABINETS

Stock No.	Mfr's Type	Description	Fits Cabinet	Pkg. Qty.	PRICE
729-3322	40-401	Cross	17-024	25	1.20
729-3323	42-101	Cross	17-136	50	1.70
729-3324	42-121	Long	17-136	25	1.70
729-3325	42-201	Cross	18-228	25	2.20
729-3326	42-301	Cross	17-320, 18-320	25	1.40
729-3327	42-401	Cross	17-416, 18-416	25	1.70
729-3328	42-431	Long	17-320, 18-320 17-416, 18-416	10	1.40

Stock No.	Mfr's Type	Description	Fits Cabinet	Pkg. Qty.	PRICE
729-3329	43-101	Cross	17-715, 18-715	25	2.10
729-3330	43-301	Cross	17-909, 18-909	25	2.25
729-3331	43-331	Long	17-715, 18-715 17-909, 18-909	10	2.10
729-3327	44-401	Cross	18-608	25	2.70
729-3333	44-501	Cross	18-956	25	2.95
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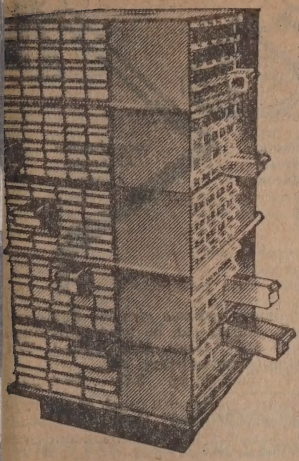
Akro-Mils Utility Cabinets and Accessories

ROTARY PARTS WAREHOUSE



Storage Go-Round, a unique storage control concept. 20 A-M cabinets mounted on a turntable providing immediate access to 300 individual storage drawers. Stores up to ½ ton of parts.

- Easy Assembly—Stacks Together, Rotates 360°
- Saves Up to 50% Space
- 300 Drawers
- Immediate Access

Qty. of Drawers Per Size	Drawer Size W	H	L
100	3⅛"	2⅛"	11"
80	4"	2⅛"	11"
75	3⅛"	3 1/32"	11"
45	5¼"	3 1/32"	11"

Two standard cabinet assortments available, or tailor your own system with an A-M base and any assortment of A-M cabinets (8, 12, 16, 20 units).

20 CABINETS WITH TURNTABLE BASE AND STABILIZERS

Stock No.	Mfr's Type	Description	Dimensions W	H	D	Wt., Lbs.	EACH
729X3334	98-444	With Gray Unbreakable Drawers	29"	60"	29"	425	546.00
729X3336	98-555	With Transparent Drawers	29"	60"	29"	425	546.00

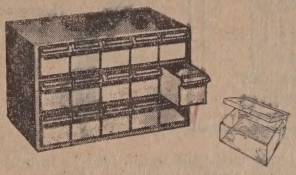
TURNTABLE BASE AND STABILIZERS ONLY

729X3335	98-520	Tailor Your Own Assortment of Cabinets	65	86.00

DRAWER-BOX STORAGE SYSTEM

FOR STORAGE AND ORGANIZING

- N/C Tapes
- Small Parts
- High Value Items



WELDED STEEL CABINET—UNBREAKABLE STYRENE DRAWERS

Protect, store and index valuable N/C Tapes, small parts, and articles. Dustproof, clear styrene boxes with positive locking lids prevent damage and breakage.

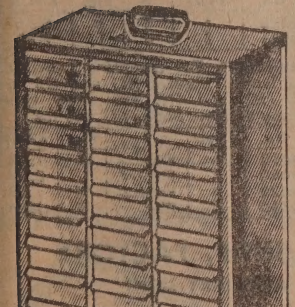
Eight boxes fit into each drawer of a steel framed A-M cabinet. Dividers are furnished to partition drawer into four compartments for indexing. A-M modular cabinets stack together to form a complete storage system. Perfect for storing and organizing small parts and high value items in a convenient and safe place.

Drawer-Boxes ordering information: Order drawer-boxes and corresponding cabinet (opposite page). Each carton contains enough drawer-boxes to fill one cabinet (8 boxes per drawer).

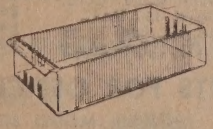
Stock No.	Mfr's Type	Drawer-Box Size-Inches W	H	D	Qty.	Wt., Lbs.	Fits Cabinet	EACH
729X3300	05-920	2	1⅛	2	224	11	18-228	24.50
729X3301	05-900	2⅞	1⅛	2¾	120	12	18-715	22.80
729X3302	05-950	4½	1⅛	3¾	64	12	18-608	18.00
729X3303	05-960	8	1⅛	4½	48	12	18-956	18.00

AKRO-MILS STEEL FRAME UTILITY CABINETS

30 DRAWER PORTABLE CABINET

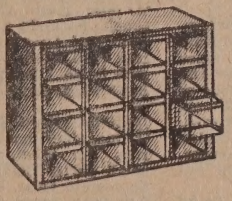


11-680. 30 drawers—compact 1¼x2¼x5¾" drawers. Welded steel 9¾x17x6" frame. Baked enamel charcoal hammertone finish that cannot chip, peel, or rub-off. Tote-handle gives mobility to the cabinet and its contents.



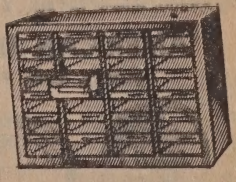
Spillproof "See-Thru" drawers are furnished with adjustable lock-tight dividers, permitting each drawer to be sectioned into smaller compartments.
729X3308. Wt. 9 lbs. 5.49

16 DEEP DRAWER CABINET



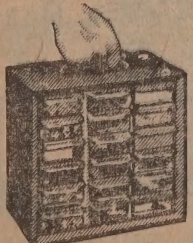
11-266. Akro-Mils cabinets featuring deep 2x2¾x5¾" "See-Thru" drawers. Will hold articles 2" high. Welded steel 9x10x6' hammertone frame. Good for storing all kinds of articles, tools, etc. Keep your property in a safe and convenient place.
729X3307. Wt. 6 lbs.....5.63

11-124 24 DRAWER CABINET. Compact 1¼x2¼x5¾" "See-Thru" drawers in a durable hammertone finish welded steel frame 9x10x6". No-spill stop tab drawers. 1 divider and label per drawer. Good for the shop or home.
729X3305. Wt. 7 lbs.....5.63

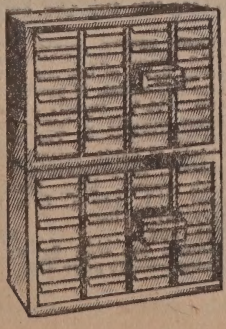


18 DRAWER PORTABLE CABINET

- Convenient and Safe Storage for All Kinds of Articles



11-118. 18 compact 2¾x5¾x1¼" "See-Thru" drawers in a heavy-duty 10x9½x6½" steel frame. Metallic blue baked enamel finish gives it a very attractive appearance. Includes an unbreakable carrying handle. Keeps all kinds of articles in one safe convenient place.
729X3304. Wt. 4 lbs. 10 oz...4.31

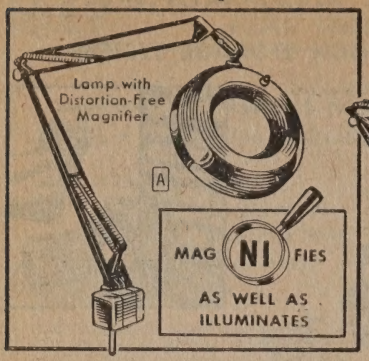


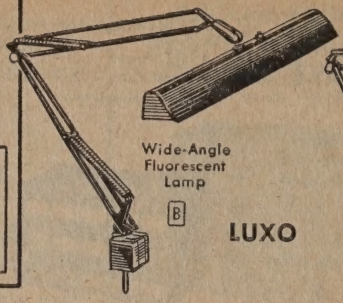
48 COMPACT DRAWER HEAVY-DUTY STEEL FRAME STORAGE CABINET

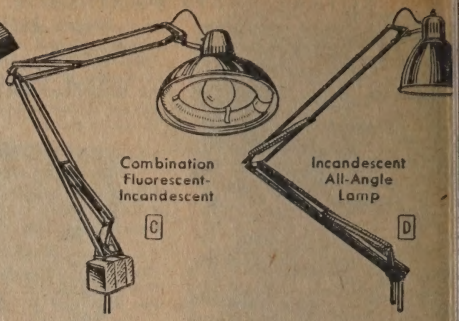
- 48 Clear Drawers
- Labels and Dividers

11-148. Contains 48 crystal-clear 1¼x2¼x5¾" drawers. Sturdy welded steel frame is 18x13x6". Attractive baked enamel hammertone finish. Labels and 1 divider per drawer area also included.
729X3306. Wt. 13 lbs.....11.25

Luxo Lamps and American Dryer Emergency Lights





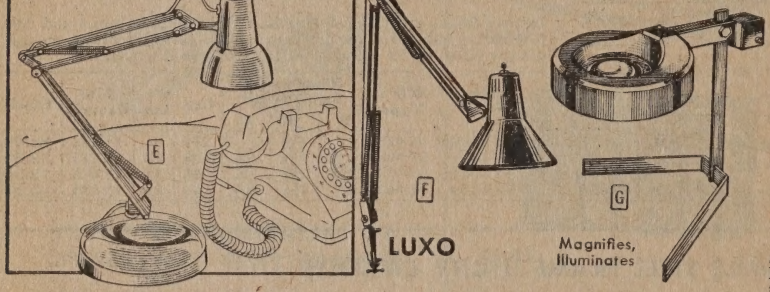


A **MODEL LFM-1.** Fluorescent lamp with distortion-free 5" magnifier. For assembly, inspection. Spring-balanced 18" arms—45" reach, sweep 360°. 3-diopter, bi-convex lens. Gray. U.L. Listed. 6-ft. cord, fluorescent tube. Mtg. bracket below, right. AC.
849 X9480. Shpg. wt. 8 lbs. 1-2...**Each 36.45** 3-Up...**Each 32.90**

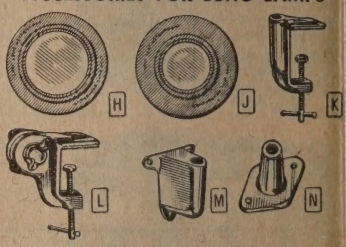
B **MODEL FL-1.** 2-tube fluorescent lamp for office, drafting room or home. Spring balanced arms stay put. Full 45" reach. Swivels 360°. Gray. 6-ft. cord. 2 fluorescent tubes. Order mounting brackets below, right. U.L. Listed. AC.
849 X9450. Shpg. wt. 8 lbs. 1-2...**Each 25.95** 3-Up...**Each 23.57**

C **MODEL LC-1.** Combination lamp features circular fluorescent tube plus incandescent bulb. Lights can be used individually or together. 45" reach; sweeps 360°. Gray. U.L. Listed. With fluorescent tube. Order mounting brackets below. AC.
849 X9470. Shpg. wt. 7 lbs. 1-2...**Each 26.95** 3-Up...**Each 24.4**

D **MODEL LB-1.** Incandescent lamp adjusts with touch of the hand then stays put. Has 45" reach; swivels 360°. Vented 4½" shade. Disposable inner reflector. U.L. Listed. Uses standard incandescent bulbs. Order mounting bracket below. AC.
849 X9460. Shpg. wt. 5 lbs. 1-2...**Each 16.50** 3-Up...**Each 14.9**



ACCESSORIES FOR LUXO LAMPS



AUXILIARY LENSES. For use with HFM-ST or LFM-1 lamps. Clip onto underside of shade for more magnification. Plano-convex lens. With clip. *Diopter. Shpg. wt., 1 lb.

Stock No.	Type	*	Fig.	EACH
849-9520	1	4	H	6.56
849-9521	2	8	J	7.90

LAMP BRACKETS. For mounting Luxo adjustable lamps. Figures (K) and (L) are clamps; (M) and (N) are screw type. *Mounting surface. Shpg. wt., 1½ lbs.

Stock No.	Type	*	Fig.	EACH
849-9410	A	Flat	K	1.68
849-9440	F	Slanted	L	2.62
849-9420	B	Vertical	M	1.68
849-9430	C	Flat	N	1.68

E "LUXO LIL" DESK LAMP

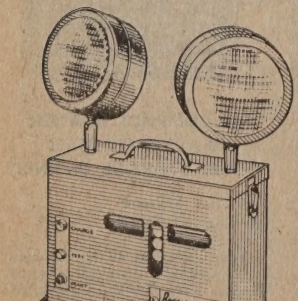
Petite-sized high-intensity lamp swings, swivels and extends into the exact position you want at the touch of a hand. Once properly set, perfect balancing keeps the lamp where you've placed it. Hundreds of uses at home, school or the office. Directs light *exactly* where it's needed to improve lighting and efficiency. Vented design keeps shade cool even under continuous use. 24" fully extended. 7" base. Pleasant red finish. With 40S11 bulb. AC.
849 X9490. Shpg. wt. 5 lbs.....**14.95**
849 X9500. Spare "Lil" Bulb. 4 oz.....**.66**

F **MODEL CS-1A CROWN LITE.** Fine all-purpose lamp that adjusts with finger touch. Extends a full 40". Vented shade stays cool. Uses standard 60-watt incandescent bulb. Modern styling, attractive stone gray finish. Clamp mounting. AC.
849 X9445. Shpg. wt. 5 lbs.....**13.45**

G **HFM-ST HAND STAND MAGNIFIER.** Lamp/magnifier has 3-diopter, bi-convex 5" lens. For reading fine print, inspecting small parts. Balanced hand stand. Cord, fluorescent tube. U.L. Listed. 117 VAC.
849-9447. Shpg. wt. 6 lbs. 1-2..**Each 31.35**
3-Up.....**Each 28.45**

AMERICAN DRYER EMERGENCY LIGHTS FOR OFFICE, SHOP, FACTORY

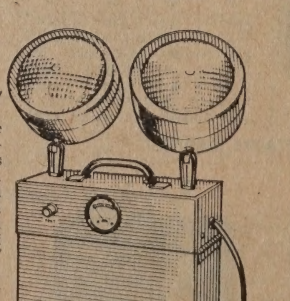
MODEL 2086 POWER FAILURE LIGHT



- Covers 5000 sq. ft.
- No Maintenance Required
- Long-Life Dry Cell Battery

Insure against power failure with instant automatic emergency lights at low cost. Plugs into AC outlet. If power fails, two 7½-V battery-operated lights operate 5 hours; each covers 2500 sq. ft. Test switch checks 5" lights, battery. Steel cabinet, 10½x5½x10¼, 17⅜" high overall. Mtg. brackets, cord. U.L. Listed. Less battery. Wt. 10 lbs.
729-1005.....**39.95**
Requires one 4F5H Battery for operation—see page 420.

MODEL 3062 AUXILIARY LIGHT



- Recharges from Standard AC Outlet
- Covers 10,000 Sq. Ft.

Instant, automatic illumination when 120 VAC power supply is interrupted. Rechargeable wet cell battery operates at 30 amperes per hour. 5" sealed beam heads illuminate up to 10,000 sq. ft. for 3¾ hours. Equipped with test switch, power supply light, cut-off switch, and tapering rate charger. A-type is portable plug-in model; E-type is permanently wired to line. Gray baked enamel finish. Overall size, 15½x6¾x17¾" high. Shpg. wt. 36 lbs.
729-1015. Type A.....**149.95**
729-1010. Type E.....**149.95**

Best Record of Orders Filled in the Nation

Protect Your Home and Property with "Electronic Insurance"

REALISTIC POWERHORN® SECURITY SYSTEM STOPS THIEVES

29.95

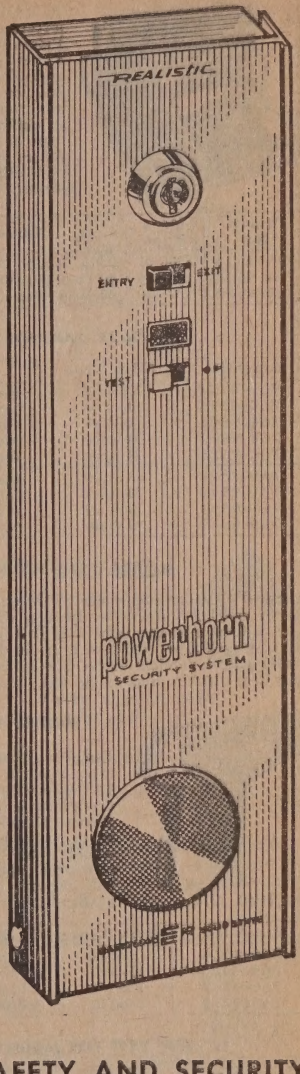
- Electronically Guards Against Intruders and Forced Entry
- Can be Installed Easily by Anyone—No Special Tools Needed
- Key-Controlled and Tamper Proof • Fail-Safe Battery Operation

rovides warning and effective protection in fice areas, factory, shop or home against in-uders or any type of unwelcome entry. Elec-ical failure or disconnection does not disable arm system—can be used anywhere property eds protection without dependancy on outside ower. Especially effective in times of natural saster.

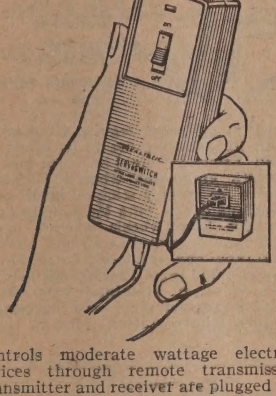
larm is switch-activated when window or door uipped with contact switch is opened, break-g circuit between switch and master unit. roduces loud blast of noise capable of alerting ose nearby and scaring off would-be intruder. nit can be set and location vacated without ounding alarm by special delay provision within aster unit. System is key-controlled and tamper-proof. Compactly designed, unobtrusive security system can easily be installed in small inaccessible places out of sight or reach of potential intruder. Powerhorn unit and switches can be installed without use of special tools. Powerhorn mounts on walls with pressure-sensitive tape. Unit is capable of monitoring 50 additional switches.

Supplied complete with 30 feet of wire, one magnetic switch, set of keys and complete instructions. Require 3 "D" batteries. Size, 3⅜x 12x1⅞". Shpg. wt. 1 lb.

910-6690. Type 275-490.....29.95
910-5114. "D" Batteries. 1 lb.....Each 19¢
910-6959. 100-ft. Extension Wire. 1 lb.....2.49
910-6691. Magnetic Contact Switch. 1 oz. Ea. 2.99



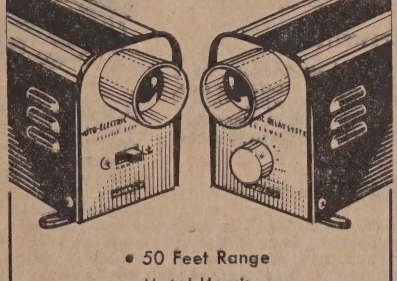
REALISTIC SERVOSWITCH WIRELESS REMOTE CONTROL



Controls moderate wattage electrical devices through remote transmission. Transmitter and receiver are plugged into wall outlets; receiver accepts standard AC plug. Transmitter has on-off switch. Accepts up to 300 watts. For 50-60 Hz AC. Receiver size, 3¼x2⅞x1½". Transmitter, 5¼x1¾x1½". Shpg. wt. 2 lbs.

910-6696. Type 275-696.....14.95

ARCHER PHOTO-ELECTRIC RELAY WARNING SYSTEM



- 50 Feet Range
- Metal Housings

Photo-electric relay system may be used as intrusion alarm or as counter system —anywhere a beam-interruption device would be found most effective. Photo-cell receiver has sensitivity control to adjust for ambient light level which might otherwise produce a spurious response. Switched exciter lamp is separately housed. Each, 5½x4x2⅞". Wt. 6 lbs.

910-6689. Type 275-489.....21.95

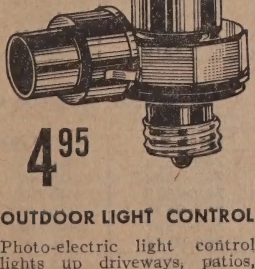
LIGHT CONTROLS AND WARNING ACCESSORIES FOR SAFETY AND SECURITY

INDOOR LIGHT CONTROL

Helps discourage burglars and vandals. Light to be controlled plugs into unit, unit plugs to any standard AC socket. Photo-electric eye turns light on at night, off in the morning. Shpg. wt. 1½ lbs.

910-6330. Type 272-330...4.95

ARCHER



4.95

OUTDOOR LIGHT CONTROL

Photo-electric light control lights up driveways, patios, gardens. Automatically turns lights on at dusk, off at dawn. Takes regular or floodlight bulbs —screws into light socket. Shpg. wt. ½ lb.

910-6305. Type 272-207...4.95

- Overcomes Background Noise
- AC Operated

ELECTRIC ALARM BELL

Durably constructed alarm bell emits a loud, clear ring that overcomes high level background noise. Ideally suited for photo-electric alarm systems. Chrome-plated bell, metal base. 4x2". AC. Shpg. wt. 1 lb.

910-6410. Type 273-020...2.98

ARCHER

ELECTRIC ALARM BUZZER

Use with virtually any alarm system to produce a clear, distinct warning. Sturdy plastic housing with screw terminal connections. Size: 2¼x½x1". Operates on regular AC. Shpg. wt. ¼ lb.

910-6415. Type 273-048...1.98

Dymo Vinyl-Tape Labelmakers and Outfits

MODEL 2300 ¾" TAPEWRITER

Bench model "Tapewriter" embosses letters a full ½" high on ¾" vinyl tape. Prints 104 characters (52 horizontally, 52 vertically) with a single wheel. High legibility, greater reading distances provide far more application possibilities than smaller tapes. Fitted in carrying case with nine ¾"x36-ft. tape in assorted colors. Desk and door plates below offer personalized low-cost identification. Shpg. wts.: Tapewriter, 10 lbs.; Signs, 5 lbs.

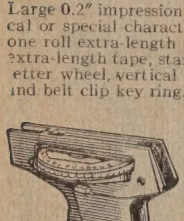
Stock No.	Mfr's Type	Description	EACH
769-9521	2300-01	2300 Tool N' Tape Outfit	179.95
769-9522	3800-20	40 Door Signs, 10" L, black plastic	25.00
769-9523	3803-20	40 Desk Signs, 10" L, black plastic	25.00

¾"x36-FT. TAPE FOR MODEL 2300

Stock No.	Mfr's Type	Color	EACH
769-9524	5134-02	Red	6.95
769-9525	5134-04	Orange	6.95
769-9526	5134-05	Green	6.95
769-9527	5134-06	Blue	6.95
769-9528	5134-08	Brown	6.95
769-9529	5134-09	Black	6.95
769-9530	5134-13	Gold	6.95
769-9531	5134-60	Woodgrain	6.95
769-9532	5135-09	Non-glossy black	6.95

MODEL 1270 ½" TAPEWRITER

Large 0.2" impression made on ½" vinyl tape. Uses standard, vertical or special character embossing wheels. Includes carrying case, one roll extra-length tape. Tool N' Tape Outfit. Tapewriter, 10 rolls extra-length tape, standard horizontal embossing wheel, giant (¼") letter wheel, vertical wheel, special character wheel, carrying case and belt clip key ring. Shpg. wts.: tool, 1 lb.; outfit, 3 lbs.



1260, 1270

MODEL 1260 ⅜" TAPEWRITER

Rugged all-metal tapewriter embosses ⅜" tape with .2" characters. Same design as 1270 above. Includes carrying case, one roll extra-length tape. Tool N' Tape Outfit. Includes Model 1260 tapewriter, standard letter horizontal wheel, .180" horizontal wheel, .160" vertical wheel, and special character wheel. With carrying case and belt clip key ring. Shpg. wts., tool, 2 lbs.; outfit, 3 lbs.

Stock No.	Mfr's Type	Description	EACH
769-9519	1270-00	1270 Single Tool	19.95
769-9520	1270-01	1270 Outfit	29.95
769-9517	1260-00	1260 Single Tool	18.95
769-9518	1260-01	1260 Outfit	28.95

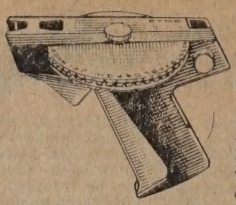
⅜"x200" TAPE FOR MODELS 1200, 1250, 1260

Stock No.	Mfr's Type	Color	EACH
769-9555	5209-01	Clear	1.45
769-9556	5209-02	Red	1.45
769-9557	5209-04	Orange	1.45
769-9558	5209-05	Green	1.45
769-9559	5209-06	Blue	1.45
769-9560	5209-07	Yellow	1.45
769-9561	5209-08	Brown	1.45
769-9562	5209-09	Black	1.45
769-9563	5209-12	Gray	1.45
769-9564	5209-13	Gold	1.45
769-9565	5209-15	Purple	1.45
769-9566	5209-60	Woodgrain	1.45

⅜"x12-FT. TAPE FOR MODELS 1200, 1250, 1260

Stock No.	Mfr's Type	Color	EACH
769-9545	5201-1	Clear	1.25
769-9546	5201-2	Red	1.25
769-9547	5201-4	Orange	1.25
769-9548	5201-5	Green	1.25
769-9549	5201-6	Blue	1.25
769-9550	5201-8	Brown	1.25
769-9551	5201-9	Black	1.25
769-9552	5201-12	Gray	1.25
769-9553	5201-13	Gold	1.25
769-9554	5201-60	Walnut	1.25

MODELS 1200 AND 1250 TAPEWRITERS

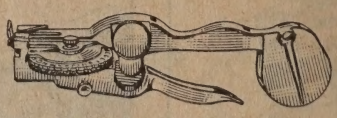


- Prints on Both ½" and ⅜" Tapes
- Choice of Type Size and Format
- Outfits Include Tape, Wheels Case

Print on ½" or ⅜" tape. Model 120 Single wheel makes upper and lower ca letters plus regular and subscript nu merals. With ½x200" roll of tape. 120 Tool N' Tape Outfit. Tapewriter, 5 rol each ½x200" and ⅜x200" tape, upp and lower case wheel, giant lett (.350") wheel, vertical wheel, carrying case. Model 1250. Produce eye-arresting extended letters. One roll ½" tape. 1250 Tool N' Tap Outfit. 1250 tapewriter, 5 rolls each ½x200" and ⅜x200" tape plu standard letter horizontal wheel, vertical letter wheel, giant lette (.250") wheel, case. Av. shpg. wts.: tool, 2 lbs.; outfit, 3 lbs.

Stock No.	Mfr's Type	Description	EACH
769-9513	1200-00	1200 Tool	34.95
769-9514	1200-01	1200 Outfit	49.95
769-9515	1250-00	1250 Tool	29.95
769-9516	1250-01	1250 Outfit	44.95

MODEL M-11 TAPEWRITER OUTFIT



- Metal or Vinyl Embossing
- Heavy-Duty Construction
- Horizontal, Vertical Type

Heavy-duty all-metal tapewriter embosses regular vinyl labels or special metal labels and tags for enduring use in locations where extra-tough labels are needed. Prints ½" vinyl or metal tapes with interchangeable steel or plastic embossing wheels. Metal tapes come with or without adhesive for making stick-on labels or free-flying tags. Built-in hole-punching device puts 3/32" hole in tape for bundling labels or attaching tags. Three wheels included: one steel vertical wheel prints vertical type on metal tape; one horizontal-printing steel wheel for metal tape; one standard plastic embossing wheel for horizontal printing on vinyl tape. Package includes tapewriter, three wheels, 5 rolls ½"x16-ft. aluminum tape with adhesive backing, 5 rolls ½"x12-ft. regular vinyl tape, carrying case for loss-free storage and quick transportation right to the job. Shpg. wt. 1½ lbs.

Stock No.	Mfr's Type	Description	EACH
769-9567	7593-00	M-11 Tool N' Tape Outfit	69.95
769-9511	310-00	Aluminum tape w/o adhesive, ½"x16'	.85
769-9512	358-00	Aluminum tape with adhesive, ½"x12'	1.85

½"x12-FT. TAPE FOR MODELS 1200, 1250, 1270, M-11

Stock No.	Mfr's Type	Color	EACH
769-9500	158-1	Clear	1.65
769-9501	158-2	Red	1.65
769-9502	158-4	Orange	1.65
769-9503	158-5	Green	1.65
769-9504	158-6	Blue	1.65
769-9505	158-8	Brown	1.65
769-9506	158-9	Black	1.65
769-9507	158-12	Gray	1.65
769-9508	158-13	Gold	1.65
769-9509	158-43	Avocado	1.65
769-9510	158-60	Walnut	1.65

½"x200" TAPE FOR MODELS 1200, 1250, 1270

Stock No.	Mfr's Type	Color	EACH
769-9533	5163-01	Clear	1.95
769-9534	5163-02	Red	1.95
769-9535	5163-04	Orange	1.95
769-9536	5163-05	Green	1.95
769-9537	5163-06	Blue	1.95
769-9538	5163-07	Yellow	1.95
769-9539	5163-08	Brown	1.95
769-9540	5163-09	Black	1.95
769-9541	5163-12	Gray	1.95
769-9542	5163-13	Gold	1.95
769-9543	5163-15	Purple	1.95
769-9544	5163-60	Woodgrain	1.95

Electrical Tapes, Templates and Slide Rules

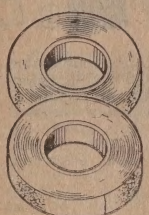
ARCHER FRICTION TAPE

- Abrasion and Moisture Resistant

ype 64-1956. Made from a heavy-duty cotton oth base and impregnated with the finest adesive and sealant compound, this top-quality iction tape is highly resistant to both abraon and nearly all types of weathering. A full ¾" by 60'. Shpg. wt. ½ lb.
10-5802 ..... .59

59¢

ARCHER MASKING TAPE



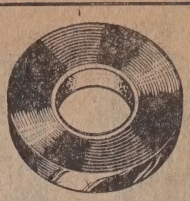
ype 64-188. "Sure-Grip" Masking ape. Best-quality tape has a thound and one uses around the home r shop. Special non-marking adseive cannot mar paint or plastic. ¾"x60 yards.
10-5800 ..... .79

79¢

ype 64-190. Jumbo Size Masking ape. A full two inches wide, this ersatile tape can be used for pacging, masking paint edges, almost nything. Non-marking. 2"x60yards.
10-5801 ..... 1.89

1.89

ARCHER VINYL ELECTRICAL TAPE



- Suitable for All Industrial Uses
- Extremely High Dielectric Strength

Finest electrical insulating tape from one of America's largest manufacturers. Made with quality-controlled vinyl and high-grade bonding adhesive. .007" thickness has a dielectric strength of 10,000 volts. Completely suitable for all uses at temperatures up to 80°C (186° F).

Stock No.	Type No.	Size	EACH 1-2	EACH 3-11	EACH 12-Up
910-5828	64-2348	½" x 12½'	.29	.25	.22
910-5829	64-2349	¾" x 20'	.49	.44	.39
910-5830	64-2350	¾" x 66'	1.09	.99	.89

ASSORTED HEAVY-DUTY ELECTRICAL TAPES

SCOTCH ELECTRICAL TAPE

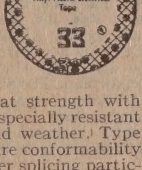
Type 35. For color coding wire bundles. In red or yellow—specify. .007" thick. ¾" x 66'. Wt., 6 oz.
789-2808. 1-9 ..... Each 1.40
10-Up ..... Each 1.16

Type 27. Thermosetting type. .007" thick. ½" x 66'. Wt., 5 oz.
789-2805. 1-9 ..... Each 1.88
10-Up ..... Each 1.58

Type 23. For high frequency electronic circuits. .030" thick. ¾" x 30'. Shpg. wt., 8 oz.
789-2804. 1-9 ..... Each 1.36
10-Up ..... Each 1.14

Type 49. Moisture resistant. .005" thick. 2" x 20'. Wt., 4 oz.
789-2809. 1-9 ..... Each 2.19
10-Up ..... Each 1.84

TYPES 33 AND 88



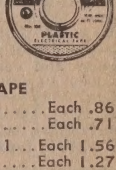
- For Maximum Strength with Minimum Bulk
- Corrosion Resistant
- High Comformability At Low Temperatures

Scotch tapes provide great strength with minimum bulk. They are especially resistant to chemicals, abrasion and weather. Type 88 has high low-temperature conformability which makes cold weather splicing particularly easy. Type 88 also recommended where excessive abrasion is encountered.

TYPE 33. Rated 10,000 V; .007". 6 oz.
789-2806. ¾"x44'. 1-9 ..... Each .94
10-Up ..... Each .78
789-2807. ¾"x66'. 1-9 ..... Each 1.39
10-Up ..... Each 1.15

TYPE 88. All-weather. 8.5-mil. Wt., 6 oz.
789-2810. ¾"x66'. 1-9 ..... Each 1.69
10-Up ..... Each 1.40

ELECTRICAL TAPE



Standard-width plastic and friction tape in dispenser. Makes tight, insulated wrappings. *Cold weather tape. Av. shpg. wt., 7 oz.

DUTCH PLASTIC TAPE

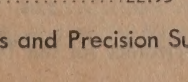
789-2800. A-7. ¾"x44'. 1-11 ..... Each .86
12-Up ..... Each .71
789-2812. 130. ½"x108'. 1-11 ..... Each 1.56
12-Up ..... Each 1.27
789-2811. 167*. ¾"x60'. 1-11 ..... Each 1.33
12-Up ..... Each 1.10

DUTCH FRICTION TAPE (LESS DISPENSER)

789-2801. No. 4. ¾"x30'. 1-11 ..... Each .29
12-Up ..... Each .27
789-2803. No. 8. ¾"x60'. 1-11 ..... Each .58
12-Up ..... Each .50
789-2802. D48200. ⅜"x60'. 1-11 ..... Each .27
12-Up ..... Each .25

POST SLIDE RULES AND ELECTRONICS TEMPLATES

PRECISION CRAFTED SLIDE RULES

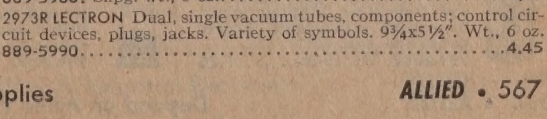


1444K POCKET SIZE 5" RULE. For simple multiplication and division wherever and whenever you might need it, Small enough to carry in your pocket and yet large enough to be accurate for most needs. Fine hair line in movable cursor for accurate reading to final scale, nearest marker. Easy-sliding and non-warping under all weather conditions. With instructions and carrying case.
889-5900. Shpg. wt. 6 oz. 5.95

1447 FULL SIZE 10" RULE. For rapid, accurate answers to simple mathematical problems. Front side has A, B, C1, C, D and K scales; reverse side has S, L, and T scales. With instructions, case.
889-5910. Shpg. wt., 7 oz. 3.95

1450F TECHNICIAN'S RULE. For those who require an advanced trig type rule, yet do not need a log log rule. Excellent for series of related computations; permits accurate determination of squares, square roots. Reverse side has L, A, TT, Sec T ST, Cos S, C, D and D1 scales. Complete with case and instructions.
889-5920. Shpg. wt., 1 lb. 8 oz. 14.95

1460M VERSALOG 23 SCALE LOG LOG RULE. For engineers, mathematicians, and anyone using advanced math. Log log scales cover range from 1.001 to 22.000; reciprocal log log scales cover from 0.00005 to 0.999. Reverse side scales carry LL/1, LL/2, LL/3, TT, Sec T St, Cos S, C, D. With case and 120 page instruction book.
889-5930. Shpg. wt., 2 lbs. 8 oz. 22.95



ELECTRONICS TEMPLATES

2972R ELECTRONIC TEMPLATE. Symbols for dual and single vacuum tubes; 3-phase wiring; control circuit devices, semiconductors, switch. Size, 5x9". Shpg. wt. 6 oz.
889-5940 ..... 3.60

2972½D ELECTRONIC SYMBOLS. Most commonly used control wiring, tube, socket, and solid-state wiring circuitry symbols. J.I.C. Standards. Size, 5x7". Shpg. wt. 5 oz.
889-5950 ..... 2.95

2972D ELECTRO SYMBOLS. Tubes, circuit components. 2¾x9¾".
889-5960. Shpg. wt., 1 oz. 1.75

2974R SINE WAVE CURVES AND VARIABLE WAVE FORM. 6 regular sine curves with printed amplitude-time grid; filtered, nonfiltered DC curves; uniform carrier, modulated carrier wave forms. 8¼x5½".
889-5970. Shpg. wt., 5 oz. 2.65

2973D TRANSISTOR OUTLINE. For 18-pin mount, 6 stud mount, 2 flange mount and 1 press fit transistor. 9½x5½".
889-5980. Shpg. wt., 5 oz. 2.95

2973R LECTRON Dual, single vacuum tubes, components; control circuit devices, plugs, jacks. Variety of symbols. 9¾x5½". Wt., 6 oz.
889-5990 ..... 4.45

Buy Here for Chemicals & Service Aids at Low Cost

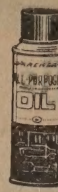
SOLVE YOUR FIX-IT NEEDS FOR LESS MONEY

A

B

C

D



E

F

G

H

A Tuner Cleaner & Lubricant. Cleans and lubricates radio and television tuners. Stops noise in volume controls. Remove knobs and spray. Keep your tuner in top operating condition with this handy cleaner. No mess with the handy spray can.
910-5820. Type 64-2315. 1 lb.....99

B Color-TV Tuner Cleaner. Helps improve color television reception and protect expensive moving parts. Simple to use—just remove knob and spray into your color set's tuner. No mess, with this convenient spray can. Keep your television in good condition with the color TV tuner cleaner. Save money on expensive television repair bills.
910-5827. Type 64-2320. 8 oz.....1.39

C Plastic Repair Kit. Mends all kinds of plastic items in just minutes. Fix damaged plastic knobs, utensils, toys, etc. Shape like putty and just pour into a mold. Includes color powders for good match-ups. Glues and completely waterproofs. Save money on costly repairs and buying new items. Very easy and clean to use. A "must" for every home, shop, and office. Repairs made quick and safe.
910-5836. Type 64-6427. 6 oz.....1.95

D Hi-Voltage Insulator. Stops troublesome corona shorts. Over 20,000-volt dielectric strength. Its many uses include: insulating, waterproofing dangerous exposed wires around the house or shop, preventing leakage of printed circuits. Prevents costly arcing. Keeps electrical and electronic wiring safe.
910-5821. Type 64-2316. 1 lb.....1.98

E All-Purpose Lube Oil. Special Silicone formula. Stops rust, loosens frozen parts, and protects. Attachment for hard-to-reach areas. Resists heat and moisture. Good for all types of jobs. A "must" for all hobbyists and repairmen. Easy and convenient to use.
910-5825. Type 64-2318. 1 lb.....99

F Super Epoxy Glue. Drys quickly at normal room temperature. Bond strength of over 3000 lbs. per sq. in. Very easy to mix and apply. Absolutely no mess involved. Cements non-porous items. Bonds anything to anything. Good for the hobbyist and repairman. Perfect for repairing furniture, upholstery, toys, articles of all kinds. Many applications in jewelry-making and other crafts. Strength that won't wear off.
910-5835. Type 64-2426. ½ lb.....99

G All-Purpose Glue. Use for joining plastics, wood, rubber, glass. 2 oz. Strong and fast drying. Instructions for making permanent invisible bond. Good for all kinds of jobs in home or shop.
910-5815. Type 64-2311. ¼ lb.....59

H TV/Radio Service Cement. Cement parts to chassis, repair plastic cabinets. Fast-setting, clear-drying, firm bond. For speaker and general repair. A "must" for the home or shop.
910-5810. Type 64-2309. 1 lb.....59

CONTACT CLEANER

8682-16. Non-flammable general solvent is ideal for cleaning relay contacts, electronic circuits and other types of equipment. Does not contain carbon-tetrachloride. Leaves no damaging residual, oily deposits. 16 oz. aerosol can. Shpg. wt., 1½ lbs.
799-2058.....3.49

SPRAY-ON METAL PROTECTORS

LPS organic liquid compound forms a film that displaces moisture, protects metals from rust and corrosion. Safe for delicate mechanism at temperatures from -100 to 600°F. Can be sprayed, dipped, brushed or swabbed. Penetrates hard-to-reach places.

A LPS Regular No. 1. Forms fine .0001" non-greasy, non-stick transparent film. 16 oz. spray can.
849-2501. Shpg. wt. 1½ lbs.....2.35

B LPS No. 2. For heavy-duty rust protection. Forms .0002" transparent, oily film. Good for medium size rust problems. 16 oz. Spray can.
849-2502. Shpg. wt. 1½ lbs.....2.75

C LPS No. 3. For toughest rust protection. 16 oz.
849-2503. Shpg. wt. 1½ lbs.....2.75

RAPID ELECTROPLATING KITS

For easy electroplating of small metal objects. Each kit includes: 1-oz. metal cleaner; 1-oz. metal polish plating compound; ⅝" brush; wire and clips; polishing stick. Order batteries p. 421—uses two No. 6—1½-volt. Shpg. wt. 1 lb.

Stock No.	Type	Compound	EACH
909-1600	200	Nickel	2.49
909-1602	202	Cadmium	2.49
909-1604	204	Copper	2.49
909-1605	205	Brass	2.49
909-1606	206	Silver	3.19
909-1607	207	24K Gold	5.29

- Powered by 1½-V Batteries
- Complete Kit For Easy Plating

ELECTRICAL CONTACT CLEANER

EC-44. Conditions, lubricates and cleans electrical contacts, relays, etc. 6-oz. spray can. 5" pushbutton assembly.
799-2007. Wt. 10 oz.....3.42

INSL-X TOOL DIP

Red liquid-plastic hardens into insulating coating. Dries in 24 hrs. 32 oz. Wt. 2¼ lbs.
799-2006. 1-23..... Each 3.40

G-C "RELAY KLEEN" CLEANER

8682. For cleaning relays, contacts. Leaves no residue. Excellent solvent for electrical and mechnical items. Non-flammable. 6-oz. can.
799-2059. Wt. 10 oz.....1.89

G-C COLOR TV TUBE CLEANER

8890. Stops dirt and dust buildup—keeps picture tubes sparkling clear. Acts as antistatic agent—prevents electrostatic dust accumulation. 8-oz.
799-2064. Wt. 10 oz.....99

G-C "JIFF" CONTACT CLEANER

8670. Cleans, lubricates contacts, controls, switches. Contains silicone. No harsh solvents. Non-flammable. 6-oz. spray can.
799-2061. Wt. 10 oz.....1.79

G-C "ZERO MIST" COOLER

8667. Cools components instantly, helping to pinpoint bad capacitors, transistors, oxidized connections. Spray extension. Comes in 16-oz. spray can.
799-2057. Wt. 1¼ lbs.....2.39

G-C "FREEZE-MIST" COOLER

8668. Pinpoint bad capacitors and transistors, oxidized joints, by cooling components. Leaves no residue. 6-oz. can.
799-2062. Wt. 10 oz.....1.26

G-C TRANSISTOR Z5 COMPOUND

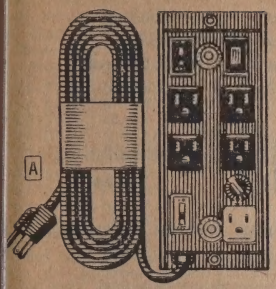
8101. Silicone compound for better heat transfer away from transistors and diodes. Apply when mounting or remounting.
799-2060. Wt. 2 oz.....2.06

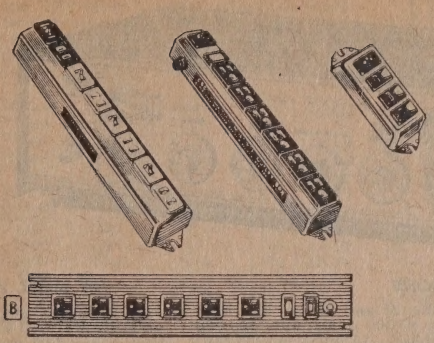
G-C "DRI-SPRAY" SPRAYER

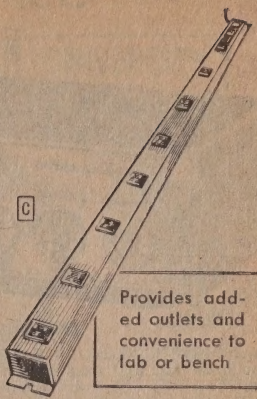
8678. Cleans, lubricates and displaces moisture—prevents corrosion. Fungus and chemical resistant. Perfect for contacts, etc. 6-oz. can.
799-2063. Wt. 10 oz.....1.79

Outlet Boxes, Torches, Precision Tools

CBC







A POWER CONTROL CENTER

Speedtrol. Type PSC-3000. Controls the speed of electric belt sanders, drills, etc. . . any device or portable tool which uses an AC-DC universal motor, not exceeding 7 amps. Controls from 3% to 50% of full speed. Plugs into any 120 volt AC wall outlet. Just plug the power tool into the Speedtrol and it's ready for use. In "On" position, full speed is obtained. In "Off" position, speed can be brought down by rotating the control knob. Separate on-off switch controls entire unit including four independent AC "U" ground outlets. 5 amp. circuit breaker protects speed control section. 15 amp. circuit breaker for entire unit.
759-0426.....24.95

B RACK-MOUNT CONTROL PANEL

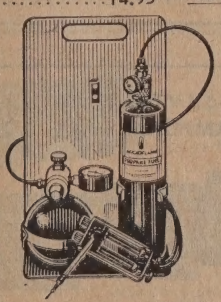
Rack mounted control panel has one master switch which controls power to six "U" type grounded outlets. Pilot light shows when power is on. 10′ cord. 3½x9″. 6 lbs.
759-0434. TR-MO-GD-10. Fuse type. 13.95
759-0436. TR-MO-GD-CB-10. Circuit-breaker type.....14.95

C CBC MULTIPLE-OUTLET CONVENIENCE BOXES

Extend electrical power to lab or bench. Rated 15 A @ 130 V. On/off switches. Series MO and SS. MO-3 has one switch for three 2-wire outlets and plug. SS and SS-CB have individually switched color-coded 2-wire outlets. MO-GD and MO-GD-CB have pilot light, switch, 3-wire, "U" ground outlets with 3-wire plug. 13x2x1½″, 10-ft. cord, except MO-3, 5x2x1½″, 6-ft. cord. Series LL. 4-ft. boxes with 3-wire "U" ground outlets, switch and neon pilot light, 10-ft. cord. 8 outlets or 15. LL-SS-GD-CB-8-10 has individually switched outlets. *Individual pilot lights. 49x2x1½″. Steel cases.

Stock No.	Mfr's Type	Lgth.	No. of Outlets	Outlets 2-Wire	Outlets 3-Wire	Fused	Circuit Breaker	Indiv. Switched Outlets	Wt., Lbs.	EACH
759-0418	MO-3	5″	3	X		X			1½	4.95
759-0428	SS	13⅛″	4	X		X		X	2¼	7.49
759-0422	MO-GD*	13⅛″	6		X	X			2¾	10.95
759-0416	MO	13⅛″	6	X		X			2¼	7.95
759-0430	SS-CB	13⅛″	4	X			X	X	2¼	9.49
759-0424	MO-GD-CB*	13⅛″	6		X		X		2¾	12.95
759-0420	MO-CB	13⅛″	6	X			X		2¼	9.49
759X0400	LL-GD-8-10	49″	8		X	X			6	17.95
759X0404	LL-GD-CB-8-10	49″	8		X		X		6	19.95
759X0402	LL-GD-15-10	49″	15		X	X			6	23.95
759X0406	LL-GD-CB-15-10	49″	15		X		X		6	25.95
759X0408	LL-SS-GD-CB-8-10	49″	8		X		X	X	6	24.95
759X0410	LL-SS-PL-GD-8-10*	49″	8		X		X	X	6	25.95
759-0412	ML-SS-GD-10	13⅞″	7		X	X		X	3	18.95
759-0414	ML-SS-GD-CB-10	13⅛″	7		X		X	X	5	20.95

MICROFLAME® 5000 INDUSTRIAL/HOME GAS WELDING TORCH



Miniature torch produces 5000° F flame to weld, braze, solder and cut even rare metals with pinpoint accuracy. Size only 5¼x2x1¼″. Complete with Miniature Torch Set (with three flame tips), oxygen (75 liter) and LP (26.7 oz.) tanks, valve regulators, hoses, bracket assembly. Order accessories below.
859-3416. Shpg. wt. 9 lbs.....99.95
Model 4000 Microflame Miniature Torch. Set contains torch with six miniature oxygen and three LP cylinders. Cylinders mount in torch housing. Spark igniter, welding tips, brazing rods, bracket.
859-3414. Shpg. wt. 2 lbs.....29.95
Model 3100 Brazing Rod Kit. Contains 18 silver brazing rods, 6 aluminum brazing rods, 2 jars flux, hot block sand paper, brush, instructions.
859-3405.....9.90

ACCESSORIES FOR MICROFLAME TORCHES

859-3404. Type 3000B Gold/Silver Alloy Brazing Rods. Shpg. wt. ¾ oz.....Pkg. of 12/13.90
859-3406. Type 3101 Silver Solder Brazing Rods. Shpg. wt. 1 oz.....Pkg. of 12/2.60
859-3408. 3102 Aluminum Rods. 1 oz. Pkg. of 6/1.00
859-3410. 3103 Silver Solder Flux. 1.5 oz.....50
859-3412. 3104 Aluminum Flux. 1.5 oz.....50
859-3400. 1001 Oxygen Cylinder. Shpg. wt. 13 oz. Each in packs of 10.....75
859-3402. 1002 Butane Cylinder. Shpg. wt. 8 oz. Each in Packs of 6.....50

ACCESSORIES FOR 5000 MODEL ONLY

859-3418. 5006 Oxygen Tank. 2 lbs.....22.00
859-3420. 5007 Propane Tank. 2½ lbs.....3.20

PRECISION ELECTRONIC TOOLS

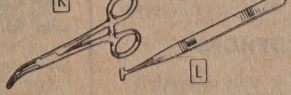
CLAUSS ASSEMBLY TWEEZERS

Especially designed for electronics assembly of miniature and micro-fine scale. Constructed of the finest quality steel—precision workmanship assures freedom from misalignment in heavy use. Hand-ground; points are ground flat on the inside. Precise sharp and shaped points, tension spring action. In various styles (see illustration above).

In table right: Carbon Steel denoted by (C); Stainless Steel, (SS). After figure letters right: *bevelled sharp tips; †bevelled medium tips. All others are round sharp. Av. shpg. wt. ½ oz.

Stock No.	Fig.	Style	Type Steel	EACH 1-11	EACH 12-Up
759-2509	E*	1	C	2.01	1.84
759-2510	E*	1	SS	2.22	2.02
759-2511	D†	227	C	2.01	1.84
759-2512	D†	55	SS	2.22	2.02
759-2514	E	3C	C	3.36	3.06
759-2516	F	5	SS	2.22	2.02
759-2517	G	7	C	3.16	2.86
759-2518	G	7	SS	3.35	3.05
759-2508	H*	MM	C	2.01	1.84

HIGH-QUALITY SOLDERING AIDS



XCELITE 6″ "SEIZERS"

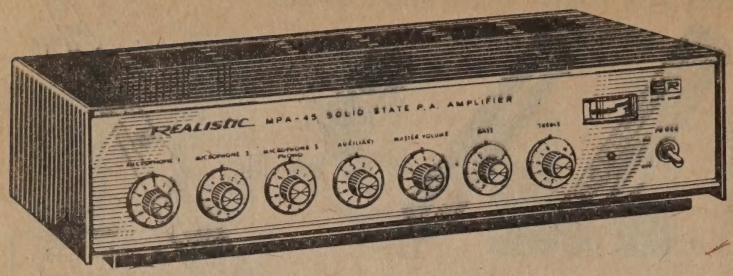
K TYPE-42H. Straight-nose design. Holds parts firmly. 3 oz.
994-2108.....4.13
TYPE 43H. Same as above, but curved nose design. Shpg. wt., 3 oz.
994-2110.....4.27

L CLAUSS MODEL AW ANTI-WICKING TOOLS

Overall length. 5″. *American Wire Gauge. Shpg. wt., 2 oz.

Stock No.	Size*	EACH
759-2501	18	7.95
759-2502	20	7.95
759-2503	22	7.95
759-2504	24	7.95
759-2506	26	7.95
759-2507	28	7.95
759-2508	30	7.95

Our Own REALISTIC® PA Amplifiers



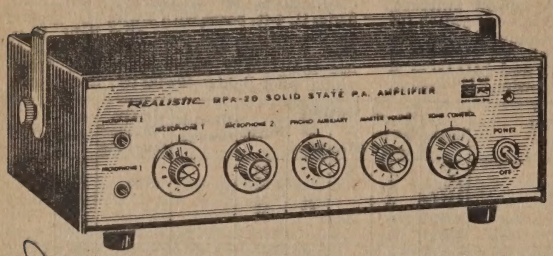
REALISTIC 45-WATT SOLID-STATE PA AMPLIFIER

- Four Mixing Inputs, Including Magnetic Phono Input
- Separate Bass/Treble Controls
- 25 and 70-Volt Line Outputs

99.95 Realistic's Best

SPECIFICATIONS

Power Output: 45 watts at 4, 8, 16 ohms; 25 and 70-volt line. **Input Impedance:** Mic and magnetic phono, 50,000 ohms; aux, 500,000 ohms. **Sensitivity:** Mic, 3 mV magnetic phono, 10 mV; aux, 250 mV. **Signal-to-Noise Ratio:** 60 dB. **Frequency Response:** ±1 dB, 20-20,000 Hz (at full power ±1 dB, 150-7000 Hz. **Power Requirement:** 110-120 VAC, 140 watts. Size: 4x15½x9½".



12 VDC Power Cord and Plug | 2 Phone Plug to Amphenol Plug Adapters | Two MCIF Connectors

59.95

THE MOST VERSATILE UNDER $150 PA AMPLIFIER!

Type 32-1050. Power plus flexibility make our 32-1050 tops for a uses! No-warmup solid-state circuit has output meter to help pr vent overloads. Circuit protector prevents damage even if output shorted. Magnetic phono and aux inputs have 2 phono jacks eac for stereo equipment. Controls: Volume for mike 1, 2, 3/phon aux, and master; bass, treble, on/off, and mike/phono switch.
910-0010. Shpg. wt. 16 lbs.....99.9

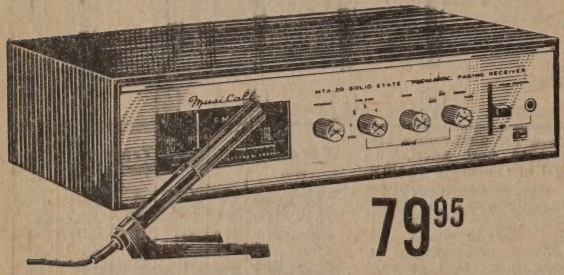
REALISTIC 20-WATT SOLID-STATE 117 VAC/12 VDC MOBILE/BASE PA AMPLIFIE

Type 32-2020. Our most unique PA amplifier—the one that can wor anywhere! The 32-2020 has a standard 117 VAC line cord, *plus* 12 VDC power cord that plugs into an auto cigarette lighter. Perfec for sound trucks, outdoor music/PA systems, indoor music/P systems. Two mixing mike inputs with volume controls, phono/au and master volume controls and tone control. The solid-state circui requires no warmup—always ready for instant use. Draws very littl current, ideal for mobile operation. Includes adjustable bracket fo under-dash mounting in car or truck. Aluminum front panel, blac metal case.
910-0011. Shpg. wt. 12 lbs.....59.9

SPECIFICATIONS

Power Output: 20 watts at 4, 8 and 16 ohms, plus 25 and 70-vol line outputs. **Input Impedance:** 100,000 ohms for mic and phono **Sensitivity:** Mic, 3 mV; aux and phono, 270 mV. **Frequency Response** ±1 dB, 20-20,000 Hz (at full power, 200-10,000 Hz). **Size:** 3x10x7½" **Power Requirement:** 110-120 VAC or 12 VDC.

15-WATT "PAGING" FM RECEIVER

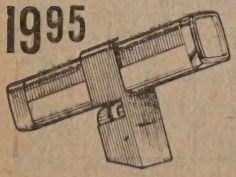


79.95

Type 31-2019. Realistic's "MusiCall" monophonic FM receiver distributes hi-fi music to up to four 8-ohm speakers. Separate speaker terminals end all impedance-matching problems. Paging (breaking into the music with your message) is flipswitch-simple. Built-in monitor speaker. Built-in "Y" adapters for plugging in stereo components. Inputs for magnetic phono, mike, tape recorder. Separate music/paging volume controls. Response: 20-20,000 Hz. 4x10x4". AC. *With walnut cabinet!*
910-0013. Shpg. wt. 12 lbs.....79.95
910-0014. Type 33-990 Microphone. For above. Shpg. wt. 1 lb. 9.95

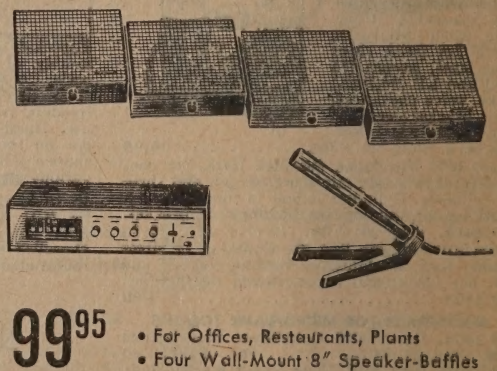
APOLLO WIRELESS FM MICROPHONE

19.95



Type 33-1022. Hi-fi mike and miniature transmitter combined—broadcasts to FM radios up to 300 ft. away! For stage, home, factories. *Exclusive* aux input and switch for plugging in recorder, etc. *Exclusive* volume control for no-overload. Stand for desk, floor mtg. 88-92 MHz. With 9-V batt. 7⅝x1¼x1⅛".
910-0012. Shpg. wt. 3 lbs.....19.95

MONEY-SAVING MUSIC/PAGING SYSTEM WITH AMPLIFIER MIKE, FOUR SPEAKERS



99.95

- For Offices, Restaurants, Plants
- Four Wall-Mount 8" Speaker-Baffles

A money-saving system that's "just right" for distributing music *plus* providing paging facilities. Includes the Realistic 31-2019 15-watt FM Paging Receiver, Realistic 33-990 Microphone with desk stand and 6-ft. cord with plug, plus four Realistic Wall Baffles each with an 8" speaker installed. Each speaker has its own volume control. Baffles are finished in walnut. Mike has 100-10,000 Hz audio response for excellent articulation.
910-0015. Type 34-1023. Shpg. wt. 29 lbs.....99.95

REALISTIC® Audio Products Are An Allied Electronics Exclusive!

Public Address Amplifiers and Accessories

WEATHERPROOF PAGING/TALK-BACK SPEAKERS

May be used as sensitive mikes for talk-back use. UH Series has 360° adjustable hood. B-A8 for medium level sound systems. CIB-A8 for wide coverage in low-noise areas. CMIL-A8 for wide coverage with low power. Compact DLC Series for low-level use. MIL-A8 for low-power. IBR-A8 for wide coverage with minimum of speakers. MIS8 for low-power, flush mounting. All 8 ohms except DLC-45 and UH-45, 45 ohms. *Swivel mtg. bracket; fits 2" pipe without extra fixture.

Stock No.	Mfr's Type	Fig.	Frequency Range, Hz	Watts	Dispersion	Dia.	Length Inch	Wt., Lbs.	EACH
969-5184	UH-8	A	220-16,000	32	120°	10½"	*10⅞	5	29.13
969-5186	UH-45	A	220-16,000	32	120°	10½"	*10⅞	5	30.42
969-5126	IB-A8	D	250-13,000	30	90°	10¼"	*9	4¼	25.17
969-5110	CIB-A8	E	250-13,000	30	120x60°	.....	*7⅜x14x12	6	30.99
969-5115	CMIL-A8	E	350-13,000	10	120x60°	.....	*6½x9½x8⅜6	4	23.91
969-5120	DLC-8	F	400-10,000	7.5	120°	5⅞"	4	1½	12.57
969-5122	DLC-45	F	400-10,000	7.5	120°	5⅞"	4	1½	12.57
969-5155	MIL-A8	D	350-13,000	10	120°	7 13/16"	*6⅞	3¼	20.76
969-5128	IBR-A8	C	300-10,000	30	360°	13"	10¼	3¼	33.71
969-5161	MIS-8	...	500-13,000	7.5	150°	5½"	4 3/16	2½	23.63

DIRECTIONAL REFLEX TRUMPETS

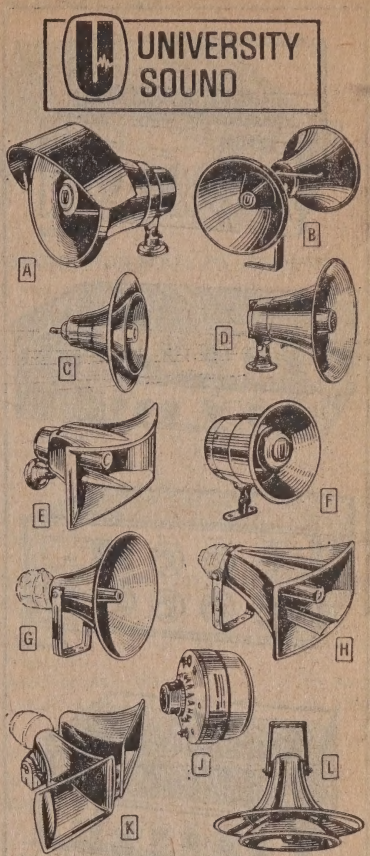
Large horn diameters for deep sound-penetration with narrow angle where "long throw" is necessary, or ambient noise level is high. SWP projects bi-directionally with one driver. Model SMH, for voice reproduction only. With mtg. brackets. Order drivers below.

Stock No.	Mfr's Type	Fig.	Low Cutoff	Dispersion	Length	Dia.	Wt., Lbs.	EACH
969-5165	PH	G	150 Hz	85°	15¾"	20⅜"	11¾	29.22
969-5180	SMH	G	200 Hz	95°	12"	16¼"	8¼	24.77
969-5176	RSH	L	180 Hz	360°	11"	19"	13	39.38
969-5174	RPH	L	140 Hz	360°	13¾"	25⅛"	19	44.85
969-5172	RLH	L	120 Hz	360°	18½"	28⅛"	25	59.07
969-5117	CLH	H	120 Hz	120x60°	20"	21½x11½"	13¼	37.26
969-5112	Cobreflex 2	K	200 Hz	120x60°	10¼"	18½x9¼"	10¼	31.73
969-5197	2WP	B	350 Hz	120° ea. hn.	20½"	8½"	4½	24.59
969-5178	SH	D	350 Hz	100°	7"	8¾"	2¾	23.91

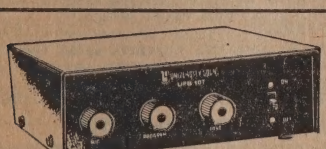
HEAVY-DUTY DRIVERS FOR TRUMPETS ABOVE

16 ohms except multi-impedance transformer equipped (130T, 167/335/500/1000/2000/4000 ohms; 140T, 45/122/250/500/1000/2000; 160T, 16/80/165/250/500/1000/2000) with taps for 70.7 V. *Used as siren, 190-3600 Hz. All weatherproof. All Fig. J at right.

Stock No.	Mfr's Type	Frequency Range, Hz	Wattage of Taps	Max. Watts	Wt., Lbs.	EACH
969-5132	ID-20	120-6500	.....	20	2½	17.33
969-5134	ID-30	85-7500	.....	30	3	22.05
969-5136	ID-30T	85-7500	30/15/10/5/2.5/1.25	30	4	31.83
969-5138	ID-40A	80-12,000	.....	40	4¼	26.76
969-5140	ID-40T	80-12,000	40/20/10/5/2.5	40	5¼	37.26
969-5142	ID-60	70-12,000	.....	60	5¾	39.54
969-5144	ID-60T	70-12,000	60/30/20/10/5/2.5	60	6¾	48.35
969-5146	ID-75*	150-7000	.....	75	5	40.14



QUALITY UNIVERSITY SOUND® PA EQUIPMENT

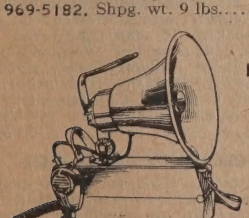


Features Both Hi and Lo Z Mike Inputs

NEW 10-WATT BACKGROUND MUSIC-PA AMPLIFIER

Model UPB-10T. Designed for offices, small stores, restaurants. Selector switch for Hi and Lo Z microphone inputs. Program input suitable for crystal or ceramic phono, tuner or tape player. Direct 8 to 16 ohm outputs, plus 25 and 70 volt constant voltage outputs. Complete and ready for immediate use—just connect speakers, program source and plug into AC outlet. Controls for mike and program level, tone. Power on/off switch. Response: ±1½ dB, 30-20,000 Hz. Solid-state circuitry. Blue enamel case. 3x9⅛x7⅝". For 95-103V, 50-60 Hz AC.

969-5182. Shpg. wt. 9 lbs. 59.95

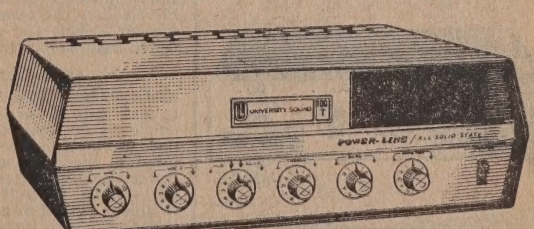


"POWERPAGE" 25-WATT POWER MEGAPHONE OFFERS 3-IN-1 VERSATILITY

- Talk/Listen Switch Converts Megaphone to Listening Device
- Carries Voice up to One Mile
- Voice-Over-Music Feature

Model PP-1T. Transistorized power megaphone for long distance coverage. Provides ultra-sensitive directional listening. Amplifies music with voice-over feature. Input for tuner, tape or phono. Hand-held dynamic mike with press-to-talk switch. Uses 4 lantern-type batteries (not incl.). 10½" dia. bell.

969-5168. Shpg. wt. 13 lbs. 204.72



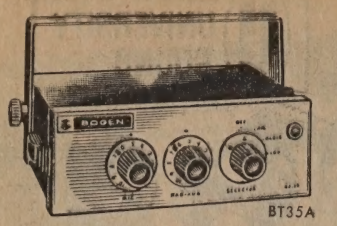
"POWERLINE" AMPLIFIERS TO 100 WATTS

Solid-state circuits reduce need for Constant-Voltage systems in small-to-moderate size installations; Constant-Voltage output provided for service to larger systems. Direct-coupled circuits end insertion losses, boost available power to speakers by 20-25%. Control, mix and amplify three or more input signals, deliver rated power into 4 to 20 ohm loads. X in table denotes factory-installed Output Autoformer to 25-70 V operation for large installations. Hi- or Lo- input selection, switched AC outlet, fused AC line. Power consumption less than 5 W. Response, 15-15,000 Hz ±1½ dB. All units have 5 inputs, master gain control, bass and treble controls. Total Harmonic Distortion less than 5% at rated power and frequency response. Overload protected circuits. For 95-130 V, 60 Hz AC. 5x15¾x10½".

Stock No.	Mfr's Type	Watts	X	Semi-cond.	Wt., Lbs.	EACH
969-5195	UPL100T	100	X	32	22	174.90
969-5192	UPL60	60	.....	32	18	129.27
969-5193	UPL60T	60	X	32	20	141.90
969-5189	UPL35	35	.....	20	15	105.27
969-5190	UPL35T	35	X	20	17	117.57

BOGEN

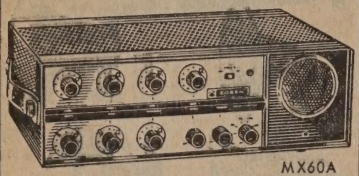
Bogen Public Address Amplifiers



BT35A

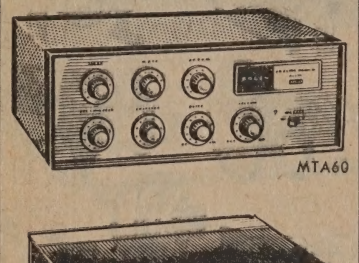
COMPACT SOLID-STATE 40-WATT MOBILE PA AMPLIFIER

Model BT35A. Excellent PA amplifier for police, fire, civil defense and business or industrial use in cars, trucks or boats. Delivers a continuous 40-watt output for enough sound-power to be heard over the noise of traffic or machinery. Solid-state circuit operates instantly—needs no warm-up time. Operates over a temperature range of from —20°C to +65°C. Switch selects either low-impedance mike; or auxiliary (high-level phono, tuner or tape) inputs. Separate controls for mike and auxiliary volume. Built-in RF and line filters; polarity protection. Response: ±3 dB, 15 15,000 Hz. Gain: microphone, 110 dB; au iliary, 90 dB. Hum and Noise: (bel rated output) mike, —90 dB; aux., — dB. Output impedance: 4, 8 and 16 ohm output socket for accessory siren tone-fo horn generator. Durable construction e take plenty of rugged use; splashproof ga ket seals chassis in sturdy metal cabine Compact design allows easy installatio under-dash or elsewhere. With adjustab fixed-lock bracket. 3x8x6¼". 12-15 VD
733X0004. Shpg. wt. 8 lbs.....103.0


MX60A

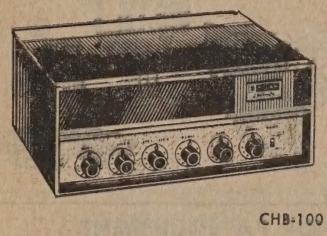
DELUXE 60-WATT PA AMPLIFIER PROVIDES FIVE MICROPHONE CHANNELS

Model MX60A. Versatile amplifier provides five high-impedance mike channels, each with gain control. One channel converts for magnetic phono or tape. Also has two auxiliary inputs with fader; master gain control. Individual speech filters, calibrated low-frequency filter, power stage screen regulation. Exclusive variable level memory markers. Boost-and-cut type bass and treble controls. Identification strips for each channel. Built-in remote gain control circuit. Response: ±1½ dB, 10-38,000 Hz. Gai mike, 125 dB; aux., 85 dB; magnetic phon 120 dB. Hum and Noise: —70 dB. Impe ance: 4, 8, 16, 83 ohms; 25-, 70-V line. Blac and gray metal cabinet with leather carr ing handle. 4¾x16½x12". For 117 VAC.
733U0040. Shpg. wt. 35 lbs.....267.9
MODEL MX30A. Same as above, but 30 wat and 163 ohm output impedance instead 83 ohms. 4¾x16½x12".
733U0039. Shpg. wt. 34 lbs.....218.9


MTA60

ALL-SILICON SOLID-STATE 60-WATT PA AMPLIFIER

Model MTA60. Provides three low-impedance unbalanced microphone and two auxiliary inputs. If balanced mike lines are required, use T525U matching transformer. Equalized for magnetic cartridge and tape heads. Tape recorder and booster outputs. Chimney-type heat sinks and heat-sensing "thermo-guards" permit safe continuous operation to 158° F. RF capacitor-type filters. Output transistors are protected against open or shorted speaker lines. Memory marker controls. Response: 7-20,00 Hz, ±1 dB. Gain: mike, 125 dB; aux., 11 dB. Impedance: 2,6, 8, 16 ohms; 25-V at 10 ohms; 70-V at 82 ohms. 12 transistors, diodes. 4½x12½x9¾". For 117 VAC.
733X10027 Shpg. wt. 23 lbs.....204,0
MODEL MTA30. As above, but 30 watts: 4, and 16 ohms; 70-V at 163 ohms. Respons 30-20,000 Hz, ±1 dB. Operates on 11 VAC or 24-30 VDC (emergency power).
733X0025. Shpg. wt. 19 lbs.....163.0


CHB-100

100-WATT PA AMPLIFIER MIXES TWO MIKES AND PHONO OR TUNER

Model CHB-100. Powerful public address amplifier boasts systems-tested circuitry for continuous, heavy-duty operation. Delivers a dependable 100-watt power output with a wide-range response of 20-20,000 Hz, ±2 dB. Inputs are provided for two high-impedance mikes, magnetic phono and two high-impedance auxiliary inputs; mixes two mikes and phono or tuner.

Includes separate bass and treble controls, fader, master volume control. Memory level markers aid in making accurate adjustments of controls. Output impedance, 4, 8 and 16 ohms, 25-volt line balanced, (6 ohms) 70-volt line (50 ohms). Has two plug-in speaker sockets and screw terminals. Protected against circuit damage caused by accidental shorting of output terminals disconnecting of speaker lines. Hum an noise: microphone, —70 dB; auxiliary, —8 dB. Gain: microphone, 125 dB; auxiliar 100 dB; magnetic phonograph, 115 d Handsomely protected by a solidly-co structed metal cabinet. Size, 6¾x15¾x10 For 117 VAC. Shpg. wt. 25 lbs.
733U0003.....155.9

Model CHB-50. Features same specificatio as CHB-100 above, but has power output 50 watts. Shpg. wt. 22 lbs.
733U0002.....120.9

Model CHB-35A. Features same specifica tions as CHB-100 above, but has power ou put of 35 watts. Shpg. wt. 20 lbs.
733U0001.....100.0

MX6A-T

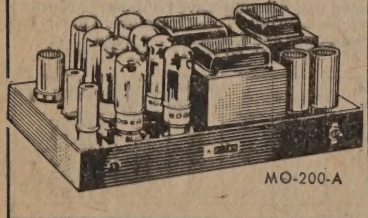
LOW-COST ALL-SILICON SOLID-STATE MIXER-PREAMPLIFIER

Model MX6A-T. Makes it possible to add up to four extra hi- or lo-Z mike channels to amplifiers or tape recorders. Two of the four channels can be used for high-level tuner or phono input. Provides excellent performance with electric guitars. Individual volume controls for each input for complete control in any multi-channel application. Up to three mixer-preamps may be paralleled to provide 12 inputs. Separat high and low-level outputs drive any ampl fier through its mike or aux. input; als drives power amplifiers with 5-V or bett sensitivity. Response: ±2 dB, 50-20,000 H Inputs: four mikes (hi-Z, 150K; lo-Z, 20 ohms); two aux., 250K. Output impedance 2000 ohms. 9¼x6x2⅝". 117 VAC.
733X0037. Shpg. wt. 6 lbs.....56.0

MXM-A

PROFESSIONAL MIXER-PREAMPLIFIER FOR RECORDING AND BROADCAST US

Model MXM-A. Deluxe mixer-preamp has five hi-Z mike inputs (one for magnetic phono or tape head) plus two auxiliary inputs. Accepts signal from remote preamp or O-level line. Up to three units may be paralleled for a total of 21 inputs. Built-in level meter permits calibrated monitoring of 25 and 70-volt outputs of boosters. Adjustable speech filters for each mike input; adjustable low-frequency filter screens out hum or turntable rumble. DC voltage o filaments, silicon rectifiers, high-impedanc cathode follower output. Accepts plug-i low impedance TL-600 transformer t match 500/600 ohm line. Feedback-typ bass and treble controls. Frequency Re sponse: ±1 dB, 18-38,000 Hz. Output: 2 volts at 1% distortion, high impedance: volts, 600 ohms. 4¾x16½x12". 117 VAC
733U0035. Shpg. wt. 23 lbs.....218.9


MO-200-A

200-WATT BOOSTER AMPLIFIER/VARIABLE FREQUENCY GENERATOR

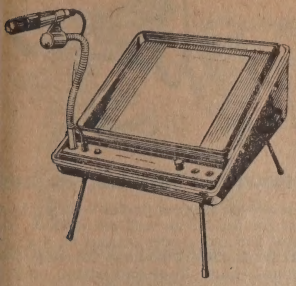
Model MO-200-A. Powerful booster amplifier delivers a full 200 watts for sound systems in schools, outdoor stadia, industrial plants or anywhere that requires a PA system of extra-high capability. Has four outputs, 8-ohm output impedance: 25, 70 and 115 V for industrial uses. Booster amplifier units may be paralleled to multiply power output. May also be used as an inexpensive variable frequency 115-volt generator for servos, motors, vibration (shake) tables, ultra-sonic equipment. Power output: 200 watts at less than 2% distortion. Response ±1 dB, 8-50,000 Hz. Inputs: high imped ance, 0.5 megohm; low impedance, 500/60 ohms (with TL600 transformer, below) Hum: (below rated output) —80 dB. Sensi tivity: hi-Z, better than 2 V; lo-Z (wit TL600), better than 0.5 V. 6x16x11¼
733U0012. Shpg. wt. 65 lbs.....305.0
MODEL MO-100-A. Similar to above, but 10 watts. Outputs: 16 ohms; 25, 70, 115 V. Re sponse: ±1 dB, 8-50,000 Hz. 6¾x8x13".
733U0010. Shpg. wt. 33 lbs.....183.5

Allied Electronics Has a Selection of PA Equipment to Fit Every Nee

Lecterns, Paging Amplifier, Portable PA Systems

AMPLI-VOX

SOLID-STATE PA EQUIPMENT



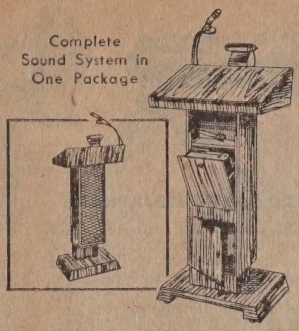
ROVING ROSTRUM

MODEL S-122. Battery-operated. Power enough for audiences up to 1000 people, indoors or outdoors. With professional dynamic cardioid mike with 10-ft. cable, gooseneck stand, lavalier cord. 50-15,000 Hz. Two 6x9" speakers with 10-oz. ceramic magnets, one in rostrum, other in cover with 40-ft. cable. 25 watts music power, 40 peak.

Radio/ceramic phono, mike inputs. Speaker, recorder outputs. Adjustable legs. Combines into luggage style case, 8⅞x16¾x17¼". Uses 10 "D" batteries, 24 lbs.

729 U 1715. ..... 198.95

729 U 1710. S-112. Above, but omnidirectional mike. Shpg. wt., 24 lbs. 169.95

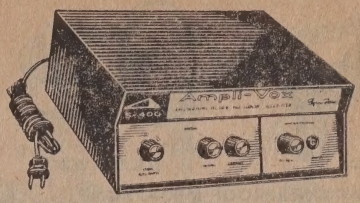


CORDLESS LECTERN

MODEL S-500. For audiences up to 3000. Reading table and complete sound system in one package. The integrated sound column housing six 5" speakers provides superb coverage in medium-size halls or auditoriums. Battery-operated, use indoors and out. 25 watts music power, 40 peak. 50-15,000 Hz.

Includes professional dynamic cardioid mike that mounts on lavalier or gooseneck stand for positioning wherever you want it. Mike and auxiliary inputs. Lectern 15" deep, 21" wide at base. Table, 13x20" Dx W. Wood with walnut Formica furniture finish. Hidden wheels. Adjustable 36-46". Order 10 batteries at left. Shpg. wt., 66 lbs.

729 Z 1732. ..... 389.50



ALL-PURPOSE SOLID-STATE PA AMPLIFIER

MODEL S-402. This small, attractive amplifier can be used anywhere. Perfect for marine, park, classroom, truck, lodge, store or beach applications. Paging override allows you to page without interfering with background music. Separate controls let you adjust background music volume and paging volume levels. Has tone control and three-position input selector switch. Sound quality meets high professional standards. Advanced all-transistor circuit design provides instant performance and cool, long-life operation. Built-in battery charger for connecting rechargeable batteries. Inputs: one microphone (Lo-Z to 50K); Hi-Z auxiliary for magnetic or ceramic phono, tuner and tape recorder. Power output: 35 watts music power (50 watts peak). Outputs: 4, 8, 16 ohms; 25 VCT, 70.7 V line; 600-ohms telephone line. Size, 3¼x8⅜x8¾". For 110 VAC and 12 VDC. U.L. Listed.

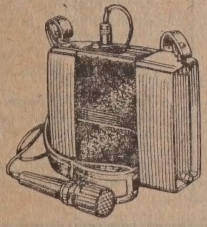
729U1721. Shpg. wt. 8 lbs. 99.95

FOR A COMPLETE PAGING AND BACKGROUND MUSIC SYSTEM: To complete a public address system using the Ampli-Vox Model S-402 above, we recommend one Electro-Voice 602F Low-Impedance Dynamic Microphone, see page 576 for full specifications, and two Electro-Voice PA-30A Weatherproof Speakers.

781-0058. Electro-Voice 602F Mike. 1 lb. ..... Ea. 36.50

781 X0009. Electro-Voice PA-30A Speaker. 4½ lbs. Ea. 23.70

GELOSO "AMPLIBOX" PORTABLE PA SYSTEM



Model 2589. This portable PA system is for indoors or outdoors. Excellent for air terminals, crowd control, tours, product demonstrations. Features cardioid dynamic mike with on/off switch, wind screen, volume control, two ceramic magnet, lavalier clip, speakers, shockproof nylon case. Bi-directional dispersion. Output: 10 watts. 8x9x3½". With shoulder strap, 8 "C" batts. Wt. 6 lbs.

729U1629. 1-4...76.55 5-Up...73.05

Argos PRODUCTS COMPANY

BATTERY-POWER SOUND COLUMN PA SYSTEM

- Full 25-Watt Power Output
- Completely Portable

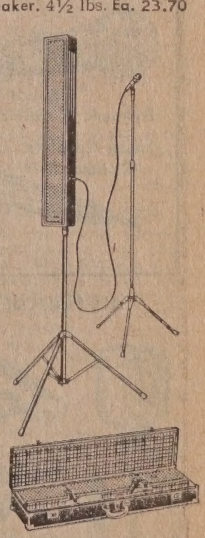
MODEL PSD-5060. Amplifier; sound column; microphone with 18-ft. cable, stand and lavalier all in one easy-to-carry case. Amplifier has 25 watts power capacity (40 watts peak). Solid-state design. Mike, auxiliary inputs. Output for sound column.

Operates on 10 flashlight batteries or long-life alkaline batteries for up to 400 hours of use. Low impedance dynamic mike. Stand adjusts from 26-64". Sound column contains six specially designed speakers. Response, 200-10,000 Hz. Impedance, 16 ohms. Blue-grey case with handle. 29¾x9¾x6⅞". Less batteries. 31 lbs.

729U2727. ..... 195.00

GELOSO GELOSO "ULTRAVOX" INDOOR-OUTDOOR SOUND COLUMN PA SYSTEM

- Built-In 25-Watt Power Amplifier
- Covers An Area Up to 5000 Sq. Ft.
- Can Be Assembled in Seconds



Model 3121. Portable system consists of sound column with 25W amp, dynamic cardioid mike, collapsible floor stands, batteries, carrying case. Offers directional and controlled sound dispersion. Takes up to 20 auxiliary columns. Operates on 8 "D" batteries or single 12-volt battery using external cable incl. Also uses AC with adapter sold below. 4½x5x39". Wt. 42 lbs.

729 X1640. ..... 179.97

Model 3126 Auxiliary Sound Column. 25-watt amp, stand, 34' cable, 8 "D" batts.

729U1644. Shpg. wt. 20 lbs. 155.61

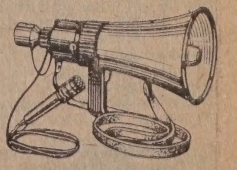
Type (2/1) 1489 AC Adapter. For 3121 or 3126. One req'd. for each column. Wt. 6 lbs.

729-1610. 1-4. ..... 34.00 5-Up. 32.10

Type 80781 Auxiliary Cable. 36-ft. cable for connecting 3121 to 3126. Wt. 2 lbs.

729-1654. 1-4. ..... 7.80 5-Up. 7.02

GELOSO "AMPLIVOICE" MEGAPHONES



MODEL 2583. Weatherproof, solid-state power megaphone featuring detachable dynamic cardioid microphone. Converts to a portable PA system simply by removing microphone module and inserting mike extension cable. Covers more than one-half mile range. Provides 15 watts power output. On-Off trigger in pistol-grip handle. Has external volume control. Bell dia.: 9¾"; length: 16½". With batteries, mike cable and cover, shoulder strap. 6 lbs.

729-1625. 1-4. ..... 84.00 5-Up. 80.97

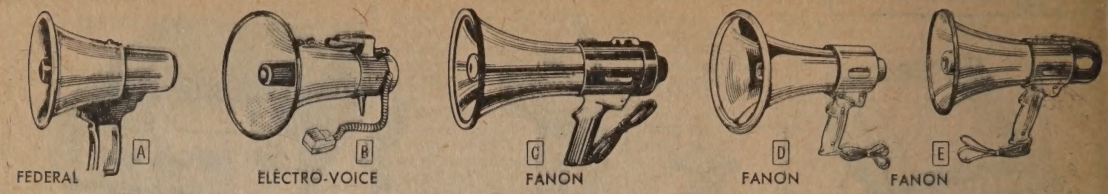
MODEL 1/350. Same features as Model 2583 above, but has 10-watt power output. Bell diameter: 7½"; length: 15". Does not include microphone extension cable (sold below). Shpg. wt. 5 lbs.

729-1600. 1-4. ..... 76.00 5-Up. 70.77

729-1650. Type 80649 Mike Exten. Cable. W/on-off switch. ... 6.75

Power Megaphones and Our Own REALISTIC® Mike

BATTERY-OPERATED SOLID-STATE PORTABLE POWER MEGAPHONES



A WEATHERPROOF MEGAPHONE

FEDERAL A-12. Weatherproof megaphone is made of lightweight, virtually unbreakable Cycolac®. 3-transistor amplifier with industrial paging-type speaker. Carries sound 500 yards or more. Controlled magnetic microphone. Press-to-talk switch on pistol-grip handle. 10½x9½" long; 7¼" dia. bell. With carrying strap. (Operates on 8 ordinary "AA" penlight cells).
795X0612. Shpg. wt. 5¼ lbs.....90.00

B 16-WATT PORTABLE MEGAPHONE

ELECTRO-VOICE PM16EAC. Battery-powered portable megaphone provides 16-watt peak power (10-watt continuous) output to cover a range of 650 yards. Has external noise-cancelling mike with on-off switch, volume control, coiled cord. Built-in siren alarm tone. Bell diameter, 11½". With shoulder strap. Operates on 8 ordinary flashlight "C" batteries.
781X0020. Shpg. wt., 6 lbs.....78.95

C 600-YARD-RANGE MEGAPHONE

FANON MV-8S. Completely self-contained battery-powered portable megaphone sound system is ideal for police, fire, civil defense and industrial applications. Indispensable for recreational and commercial uses; crowd control, general announcements or any public address function. Just touch the pistol-grip trigger switch for powerful voice projection—carries over a 600 yard range. Includes a built-in siren signal that simulates a real police siren.

Push-pull Class B 5-transistor amplifier circuit provides a rated output of 8 watts (10-watt peak power). Volume control compensates for loss of battery power. Lightweight aluminum construction with durable weatherproof baked enamel finish; built-in waterproof dynamic microphone; carrying strap. 7x14" long; 9" bell diameter. Uses six ordinary "C"-size flashlight batteries—see index for battery pages.
790X0008. Shpg. wt. 5 lbs.....63.99

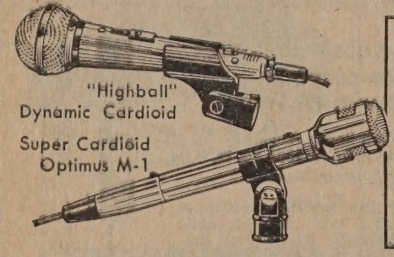
D MEGAPHONE WITH BUILT-IN SIRE

FANON MV-4S. Rugged portable megaphon is ideal for indoor as well as outdoor us Provides a rated power output of 4 wat (6-watt peak power) for good coverage ov a 300 yard range. Equipped with a built-i siren alarm; waterproof dynamic mik pistol-grip trigger switch. Weatherpro spun aluminum construction with bake enamel finish. 5-transistor push-pull class circuit. Volume control. Carrying strap. 7½ x13". Order 4 "D" batteries below.
790X0004. Shpg. wt. 4 lbs.....46.9

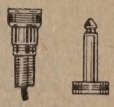
E 200-YARD-RANGE MEGAPHONE

FANON MV-3. Features two volume switche for high or low power. Carries over a rang of 200 yards. Pistol-grip trigger switc Transistorized circuit. Weatherproof alum num construction. Built-in dynamic mik With carrying strap. 8¾x13" long. Orde 4 "D" batteries—see index for batteries.
790X0003. Shpg. wt. 4 lbs.....31.9

REALISTIC® "PROFESSIONAL SERIES" U.S.A.-MADE MIKES



WITH BOTH MIKES!

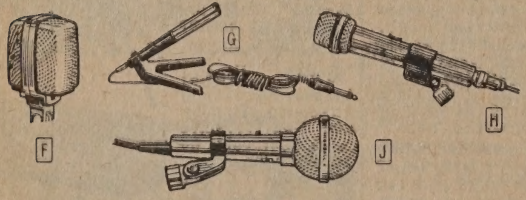


15' cable with universal plugs, screw-in ¼" phone plug adapter; MOIF Amphenol plug

Type 33-983 "Highball" Dynamic Cardioid Dual-Impedance Mike. Smooth wire screen eliminates wind and breath noises, cuts "popping" and "booming". Suppresses feedback. Reduces echo in near-empty rooms. Full 50-15,000 Hz audio response for hi-fi sound. On-off switch. Impedance: 50-250, 50,000 ohms. Cannon body connector. Made in U.S.A.
910-0016. Shpg. wt. 5 lbs.....39.95

Type 33-1019 Super Cardioid Optimus M-1. Professional quality. Extra-wide response of 45-16,000 Hz for live recording sessions, stage, PA. For indoor/outdoor use. Wire-mesh wind screen. On-off switch. 3-pin Cannon-type connector to body. 40,000 ohms. Steel case. Made in U.S.A.
910-0017. Shpg. wt. 5 lbs.....49.95

ALL-PURPOSE DUAL IMPEDANCE MICROPHONES



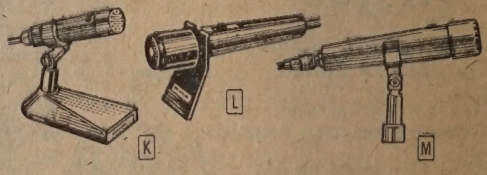
F Type 33-989 "Studio" Deluxe Cardioid. "Pop" and "boom-free" vocal mike with dual 200- and 10,000-ohm impedances. On-off switch. Swivel mike stand adapter. With 16' shielded cable and plug. Audio response, 70-10,000 Hz. Rubber shock mount. With vinyl case.
910-0018. Wt. 3 lbs.....23.95

G 33-990 Pencil-Thin Microphone. Desk stand or lavalier cord type. For recording music or speech on cassette-type tape recorders. Also for PA systems or reel-to-reel recorders. 100-10,000 Hz. Impedance, 10,000 ohms. 6-ft. cable, ¼" phone plug.
910-0014. Wt. 1 lb.....9.95

H Type 33-992 Cardioid Dynamic Mike. For recording, PA and group use. Switchable impedances of 600 and 50,000 ohms. On-off switch. 80-12,000 Hz audio response. Wire mesh screen. Slide-on mike stand adapter. 6-ft. cable, molded phone plug. Chromed die-cast case included.
910-0019. Wt. 3 lbs.....17.95

J Type 33-985 "Highball-2". This low-cost all-purpose dynamic model reduces feedback and "sequel." Ball screen filters out "pop." 90-11,000 Hz. Dual impedances of 250 ohms and 50,000 ohms. On-off switch. 6-ft. cable, ¼" phone plug.
910-0020. Wt. 2 lbs.....12.95

REPLACEMENT TAPE RECORDING MIKES



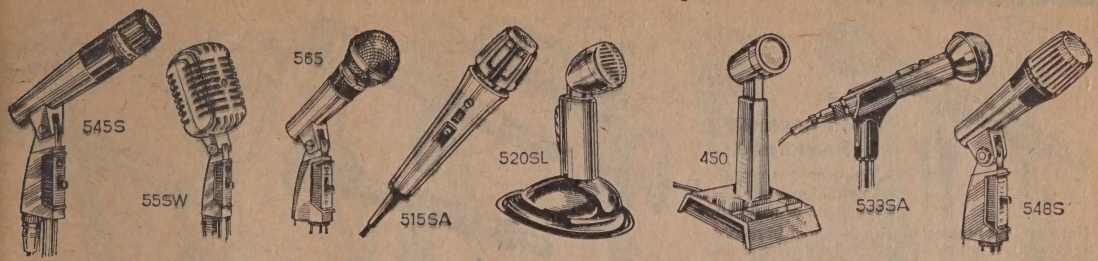
K Type 33-918 Dynamic Mike with Desk Stand. Mike holder becomes stand adapter when base is removed. Response is 40-9000 Hz. Impedance, 50,000 ohms. Has −53 dB output level. Stand tilts vertically 100°, swivels in a full 360° circle. With 5½-ft. cable. 4x3¾".
910-0023. Shpg. wt. 2 lbs.....8.95

L Type 33-928 Dynamic Lavalier Mike. Slender high-impedance mike can be used as a lavalier, hand or desk model. Has 50,000-ohm impedance. On-off switch. Gray molded case, neck cord, stand, 54" shielded cable. 4x1".
910-0024. Shpg. wt. 2 lbs.....6.95

M Type 33-907 "Lipstick" Crystal Mike. Super-value model for hand, stand or lavalier use. On-off switch. Full 60-10,000 Hz audio response—for voice or music. 50,000 ohms impedance. Standard ⅝"-27 thread for stand. 5-ft. cable, neck cord. 4⅝x1⅛".
910-0022. Shpg. wt. 1 lb.....3.95

General-Purpose and PA Microphones

SHURE

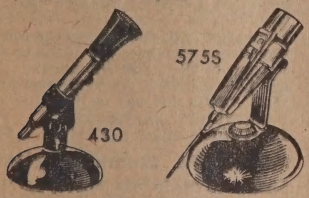


MODEL 545S "UNIDYNE III" DYNAMIC

Features cardioid pickup pattern; dynamic element with 50-15,000 Hz frequency response. Impedance: 50-250 ohms or Hi-Z. Output levels: low-Z, —57 dB; hi-Z, —55 dB. Satin-chrome and black finish. Swivel-mount permits tilting the head a full 180°. On-off switch. With 15-ft. detachable cable. 1¼" diameter x 5¾" long.

949-4550. Shpg. wt. 3 lbs.....61.20

949-4552. Model 545. Above, without on-off switch, Swivel adapter.....57.60



MODEL 430 CONTROLLED MAGNETIC

Omnidirectional, dual-impedance, controlled magnetic microphone. Excellent for PA paging; can be used both indoors and outdoors. Frequency response: 60-10,000 Hz. Impedances: 150 to 250 ohms and high impedance. Output: —52 dB. Black and satin chrome finish. On-off switch and swivel adapter. 15-ft. 3-conductor cable. Less base (see stands below). 6¾x1¾" dia. 2¼ lbs.

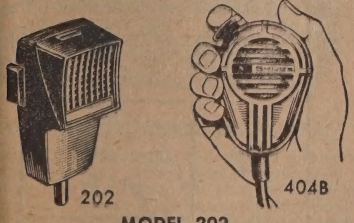
949-4535.....25.80

LOW-PRICED MODEL 575S

Omnidirectional high-impedance dynamic, 40-15,000 Hz. Built-in filters reduce voice "pop". Output: —56 dB. Black satin. Slide to talk locking on-off switch, stand adapter, lavalier assembly, 7' shielded cable. Less S-38B base (see below). Size: 4¾x1⅛". Shpg. wt., 1 lb.

949-4564.....16.70

949-4566. Model 575SB. Low Z.....15.25



MODEL 202

Ceramic, noise-canceling microphone, ideal for wide applications in CB, Radio and Amateur communications. For use where high noise levels may cause problems in clear voice transmission. Response: 200-4000 Hz. High impedance. Output: —50 dB. Press to talk. Bracket. 5-ft. coiled cable. 4x2¼x1⅝".

949-4530. Shpg. wt. 1 lb.....13.95

MODEL 404B

Controlled-magnetic press-to-talk mike. Response: 200-8000 Hz. 150-250 ohms. Output: —52 dB. Hand-held. High-impact gray case. With bracket, 5½-ft. coiled cord.

949-4532. Shpg. wt. 1 lb.....22.90

949-4534. Model 404C. Same as Model 404B above, but for high impedance. Output level, —54 dB. Shpg. wt., 1 lb...22.90

MODEL 55SW "UNIDYNE II" DYNAMIC

Cardioid dynamic mike has response of 50-15,000 Hz. Impedance: 35-50 ohms, 150-250 ohms, hi-Z. Output: 35-50 ohms, —55 dB; 150-250 ohms, —56 dB; hi-Z, —55 dB. Chrome finish. Swivel mount with on-off switch. 15-ft. 2-cond. cable. 4½x2¼x3¼".

949-4526. Shpg. wt. 3⅛ lbs.....59.00

949-4528. Model 55S. Same as Model 55SW but without on-off switch.....57.00

949-4558. Model 556S. Deluxe version of Model 55SW. Shock mount gives greater protection, high reliability. 40-15,000 Hz. Shpg. wt. 3½ lbs.....93.00

MODEL 565S "UNISPHERE I" DYNAMIC

Rugged, feedback-free dynamic cardioid mike. "Pop-proof" wire mesh screen for protection against wind blasts and pops. Frequency response is 50-15,000 Hz. Dual impedance, 50-250 ohms and hi impedance. Outputs: low-Z, —57 dB; hi-Z, —55 dB. Chrome, black housing. Complete with on-off switch, swivel mount, 15' detachable connecting cable. Diameter, 2"; length, 6¼". Shpg. wt., 2½ lbs.

949-4560.....68.20

949-4562. Model 565. Above, less on-off switch, swivel mount. With swivel adapter. Shpg. wt., 2½ lbs.....65.20

MODEL 515SA "UNIDYNE B" DYNAMIC

Economy-priced dynamic microphone with highly effective cardioid pickup pattern rejects sounds from sides and rear. For all types of general purpose use—recording, stage and set voice pickup—where low-cost must be a consideration. Provides good response suitable for most applications. Complete with on-off switch. Swivel adapter adjusts to optimum position. Response: 80-13,000 Hz. Hi-Z output: —58 dB. Chrome and black housing. 1½ diax6⅞". With 15-ft. one-conductor non-detachable cable.

949-4538. Shpg. wt. 1½ lbs.....27.95

949-4540. Model 515SB. Same as 515SA, but low impedance, —59.5 dB.....27.95

949-4542. Model 515SAC. As 515SA, but pre-wired plug and assembly.....29.00

MODEL 520SL

Rugged, top-performing controlled-magnetic mike, designed for efficient communications. For all types of voice pickup. Has grip-to-talk locking switch. Frequency response: 100-9000 Hz. Output level: —52.5 dB. Attractively styled, chrome and green finish. With 7-ft. two-conductor cable. Size, 9⅜x5x7". Wt, 5 lbs.

949-4544.....31.00

MODEL 450

Deluxe controlled-magnetic mike features adjustable stand height; lockable push-to-talk mike relay switch. For limited frequency communications. Response: 100-10,000 Hz. High or low impedance. Output Levels: hi-Z, —54 dB; low-Z, —55 dB. Two-tone gray finish. 7-ft. four-conductor cable. "Armo-Dur" case. 10½x5¾x4".

949-4536. Shpg. wt. 2¼ lbs.....34.25

MODEL 533SA DYNAMIC

High-impedance dynamic microphone with hand-to-stand feature. Wind, breath and pop filters. On-off switch. Frequency response: 40-11,000 Hz. High impedance output: —54.5 dB. Single-conductor shielded 15-ft. cable, swivel adapter. Satin chrome finish. 6⅝x2⅛" dia.

949-4546. Shpg. wt. 1¾ lbs.....35.00

949-4548. Model 533SB. Same as above, but low-impedance output: —55.5 dB. Two-conductor shielded cable. Shpg. wt. 1¾ lbs.....35.00

DUAL-IMPEDANCE MODEL 548S

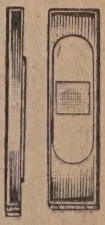
Improved shock mounting. Wind, pop and blast filters. Unidirectional pickup. Dual impedance. Response: 40-15,000 Hz. Output levels: high impedance, —55 dB; low, 150 ohms, —55.5 dB. With broadcast-type Cannon connector, 15' 2-cond. high flexibility detachable cable. Handsome contemporary styling. Swivel mount. On-off switch. Chrome and black housing. 5⅛x1⅝" dia. Shpg. wt. 2¼ lbs.

949-4554.....73.00

949-4556. Model 548. Same as above, less on-off switch and swivel mount. With swivel adapter. Shpg. wt. 2 lbs.....70.00

MODEL CA5AJ ULTRAMINIATURE CERAMIC MICROPHONE

- Only 1/10-Inch Thick
- 50-4500 Hz Response
- Weighs Just ¾ Gram
- For TV, Theater Work



Remarkably small mike can be hidden easily for TV and theater use. Ideal for closeup interviews, recordings, and many other uses. Originally designed to be used with miniature experimental equipment. Has a broad operating temperature range of —20° to —200° F. Frequency response of 50-4500 Hz equals mikes of much larger size and cost. High impedance. Output level: —70 dB. Only 1/10th of an inch thick, weighs just ¾ gram. Has 1" leads attached. Overall size: 1x¼x 1/10" Shpg. wt., 6 oz.

949-4510.....14.00

ACCESSORIES FOR SHURE MICROPHONES

S-38B BASE. For use with microphones having stand adapter. Shpg. wt., 1½ lbs.

949-4514.....3.50

A-2WS WINDSCREEN. Fits "Unidyne III" Model microphones—545S, 545, 545L, 546; "Omni-dyne" Models 578 and 578S. Protects from wind blasts. 4x2¼".

949-4500. Shpg. wt. 5 oz.....4.80

A-25B 90° SWIVEL ADAPTER. Tilts to 90°.

949-4502. Shpg. wt. ½ lb.....4.30

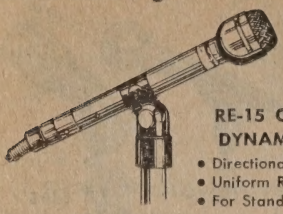
A95A TRANSFORMER. 35-50, 150-250 ohms. MC1F output, XL-3-11 input. 2½x¾".

949-4504. Shpg. wt. 9 oz.....14.00

A95P TRANSFORMER. Above, with phone plug output.

949-4508. Shpg. wt. 10 oz.....16.50

Electro-Voice "Broadcast Quality" Microphones



RE-15 CARDIOID DYNAMIC MIKE

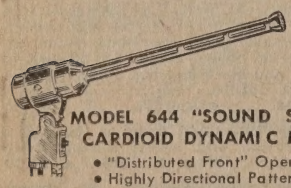
- Directional Pattern
- Uniform Response
- For Stand or Hand Use

For exacting professional applications in recording voice or music. Super-cardioid directional pattern with continuously variable D construction eliminates musical coloration for off-axis instruments. Maintains uniform cardioid pattern at any position. Maximum noise rejection is at 150° off axis. Bass-tilt switch restores spectrum balance for longer reach. Rugged housing and inner construction. Response: 80-15,000 Hz. Output: −56 dB. Impedance: 150 ohms. With 18-ft. 2-conductor shielded broadcast cable. Switchcraft A3F connector. 6⅞" long, ¾" dia. barrel, 1⅜" dia. head. Wth metal storage case, No. 310A clamp. Fawn Beige finish.
781-0027. Shpg. wt. 4 lbs.....**176.75**

MODEL RE16 CARDIOID DYNAMIC. Highest quality super-cardioid microphone designed for the most exacting applications. Continuously variable D response eliminates bass boost close up. Has integral blast and pop filter around head; bass tilt-down switch. Response: 80-15,000 Hz. Output: −56 dB. Impedance: 150 ohms. Fawn Beige finish. With 18-ft. 2-conductor shielded broadcast cable. Switchcraft A3F connector. 7¼" long. ¾" dia. barrel, 1¾" dia. head. With metal case, No. 310A clamp.
781-0028. Shpg. wt. 4 lbs.....**165.00**

MODEL 664 CARDIOID DYNAMIC
All-Purpose Public Address Microphone

Extra-rugged dynamic mike for general-purpose PA and recording use. High-quality, natural-sounding reproduction of voice and music. Cardioid pickup pattern and variable "D" construction for uniform response at all freqnencies. "Pop-proof" wire-mesh grille minimizes wind and breath blasts to allow close talking without boominess. Shielded Acoustalloy® diaphragm. Response: 60-15,000 Hz. Output: −58 dB. Impedance: Dual 150 ohms and hi-Z. (Wired for hi-Z, changeable to 150 ohms.) On-off switch, detachable 15-ft. 2-cond. cord, QC4M connector. Chromed. 5⅛"-27 thread. 7¼x1⅞" dia.
781-0062. Shpg. wt. 3 lbs.....**53.40**



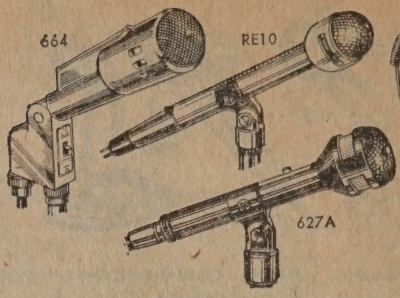
MODEL 644 "SOUND SPOT" CARDIOID DYNAMIC MIKE

- "Distributed Front" Opening
- Highly Directional Pattern

Combination of cardioid and distributed front opening for high directivity. Allows working distances of up to 2½ times that of conventional mikes. Ideally suited for press conferences, meetings, any activity for which maximum directivity is essential. Provides more than 20 dB sound cancellation above 700 Hz from rear and sides of mike for high noise rejection, low reverb and feedback. 40-12,000 Hz. −53 dB. Dual 150 ohms/hi-Z. Front acceptance angle 45° each side of center. On-off switch. Satin chromed. 16x2⅝". ¾" tube. 5⅛"-27 thd. 15-ft. 2-cond. shielded broadcast cable. Shpg. wt. 4 lbs.
781-0061.....**81.80**

MICROPHONE DESK STAND

MODEL 418. For use with microphones having small-type stud such as models 611, 623, 630, 636, 641, 644, 664, 674. Heavy die-cast stand in non-reflecting gray. Shpg. wt. 3 lbs.
781-0052.....**10.00**



MODEL RE10 CARDIOID DYNAMIC

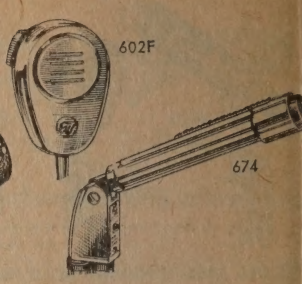
Super-cardioid mike with "continuously variable D" response. Similar to RE15, but for less exacting uses. Uniform response at all frequencies. Maximum off-axis rejection at 150° from front. Switch provides controlled low-frequency attenuation to cut feedback and rumble. Response: 80-13,000 Hz. Output: −56 dB. Impedance: Low-Z. Rugged housing with micromatte satin-finish, black grille and "backbone." 18-ft. 2-conductor shielded cable. 6⅝x¾" shank, 1⅜" dia.
781-0025. Shpg. wt. 4 lbs.....**104.00**
781-0026. Similar to above, but with "blast" and "pop" filter. 4 lbs. **109.00**

MODEL 602F MOBILE MIKE

Differential noise-canceling close-talking mike. Press-to-talk switch shorts mike in "off" position; closes relay in "on" position. 100-5000 Hz. Output, 60 dB. 5-ft. coiled cord. 1 lb.
781-0058. Low Impedance.....**39.00**
781-0057. High Impedance.....**39.00**

MODEL 627A CARDIOID DYNAMIC

"Single-D" cardioid pattern rejects sound from sides and rear, reduces feedback. Enhances "robust" sound when used close to lips. Breath and pop filter. For handheld or stand. Mike alone weighs only 8 oz. Response, 60-13,000 Hz. Output: −58 dB. High impedance. 15-ft. cable. Black satin chrome finish. On-off switch. 6⅛" long, 1⅝" dia. head. With No. 310 stand clamp.
781-0059. Shpg. wt. 1 lb.....**36.00**



MODEL 674 CARDIOID DYNAMI

For PA, recording, communications an other general purpose microphone appl cations. Continuously variable D cor struction and cardioid pickup patter assures uniform symmetrical cardioi pattern at all freqnencies. Three-pos tion bass-tilt switch offers controlle low-freqnency attenuation to overcom rumble and feedback when microphon is used at a distance. Rugged high pre sure die-cast construction. Acoustallo diaphragm. QC-4M connector for fa impedance changes, 150 ohms or hi-Z Response: 60-15,000 Hz. Output: −2 dB. On-off switch. Satin chrome finis Stud mount for use on floor or des stand with ⅝"-27 threads.
781-0063. Shpg. wt. 3 lbs.....**57.0**

MODEL 676 CARDIOID DYNAMI

Similar to Model 674, above, but wit out on-off switch and stud mount. Wit model 300 stand adapter.
781-0064. Shpg. wt. 2½ lbs.....**57.0**

MINIATURE DYNAMIC LAVALIER MICROPHONES

MODEL RE85. Miniature lavalier designed to eliminate rustling sounds from clothing and cable handling. Double case with rubber isolation. Very flat from 100-11,000 Hz. Low-Z. Output, −63 dB. 2⅝"x⅝". 30' cable.
781-0031. Wt. 8 oz.....**88.75**

MODEL 649B. Omnidirectional. 31 grams (less cable). 70-10,000 Hz. Output, −61 dB. Low-Z. Pop-proof wire mesh grille. Non-reflecing finish. Neck cord, belt clamp, 30' shielded cable, stand clamp. 2¼x¾".
781-0073. Wt. 1 lb.....**76.75**

MODEL 647A. (Not illus.) 2 oz. less cable. Pop-proof grille. 70-10,000 Hz. Output: −60 dB. Non-reflecting finish. 3⅝x¾". For neck, hand-held, or clipped to jacket. 18' cable, lavalier, belt clip, stand mount.
781-0069. High Impedance...**76.75**
781-0071. Low Impedance...**76.75**

MODEL 635A OMNIDIRECTIONAL DYNAMIC MIKE

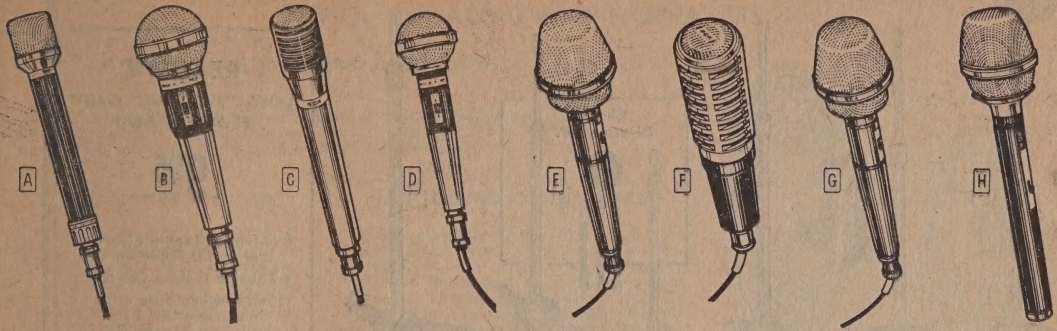
Ideal for entertainers and vocalists

Omnidirectional pickup pattern. Can be hand held, used on stand, or as lavalier. Four-stage blast filter is virtually unaffected by breath or wind. 80-13,000 Hz. Minimum pickup of low-freqnency reverberations, room "rumble" and prop noise. Output: −55 dB. Low impedance. Special Acoustalloy® diaphragm provides excellent vocal reproduction. Magnetically shielded housing, non-reflective matte nickel finish. With Switchcraft A3M connector, 2-cond. 18-ft. cable. Model 310A clamp, lavalier. 6x1⅜" diameter.
781-0066.....**58.75**

MIKE LINE TRANSFORMER

MODEL 502B. (Not illus.) Matches low impedance microphone to high impedance input of amplifiers, recorders, etc. Response flat from 30-20,000 Hz. With 2-ft. cable for high-impedance side.
781-0055. Shpg. wt. 1 lb....**11.75**

Professional Quality Microphones from RCA



A **MODEL HK-96 CARDIOID DYNAMIC MICROPHONE.** Unidirectional. For music and recording. 50-15,000 Hz. Outputs, −57 and −60 dB. Wind screen, 3-position Bass-Roll-Off switch. Black/chrome, 9¾x 1⅝" dia. With carrying case, ⅝"-27 adjustable holder. High Z/Low Z connector, 20-ft. 2-cond. cable.
902-0096. Shpg. wt. 1½ lbs.....50.00

B **MODEL HK-111 DYNAMIC MICROPHONE.** Professional omnidirectional mike. Response, 50-20,000 Hz. Outputs, −57 and −60 dB. Removable wind screen, High Z/Low Z connector, ⅝"-27 and ⅝"-18 thread holder. Black/chrome. 10⅝x1⅝" dia. With carrying case, 20-ft. 2-cond. cable.
902-0111. Shpg. wt. 1 lb.....54.00

C **MODEL HK-97 CARDIOID DYNAMIC MICROPHONE.** Unidirectional for radio, TV broadcasting. Response, 50-15,000 Hz. Outputs, −60 and −67 dB. Has wind screen, ⅝"-27 adjustable holder, on/off switch. Black/chrome, 7½x1⅞" dia. With carrying case, High Z/Low Z connector, 20-ft. two-connector cable.
902-0097. Shpg. wt. 1 lb.....40.00

D **MODEL HK-98 DYNAMIC MICROPHONE.** Omnidirectional. For professional music and recordings. 40-17,000 Hz. Outputs, −57 and −60 dB. Has wind screen, ⅝"-27 adjustable holder, High Z/Low Z connector, on/off switch. Black/chrome. 7⅞x1⅞" dia. With carrying case, 20-ft. two-conductor cable.
902-0098. Shpg. wt. 1 lb.....40.00

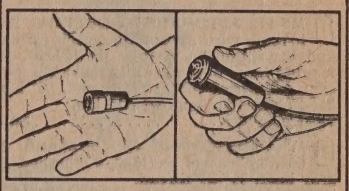
E **MODEL HK-103 "GOLDEN STARMAKER" CARDIOID DYNAMIC MICROPHONE.** Unidirectional. For voice and orchestra. 100-15,000 Hz. Outputs, −63 and −64 dB. Has ⅝"-27 holder, weighted desk stand, High Z/Low Z connector. 6⅝x1" dia. Black/chrome. With carry case, 20-ft. two-conductor cable.
902-0103. Shpg. wt. 1 lb.....64.00

F **MODEL HK-106 "STARMAKER" SUPER-CARDIOID DYNAMIC MICROPHONE.** Unidirectional. For high-noise ambients. Response, 150-10,000 Hz. Outputs, −62 and −65 dB. Has ⅝"-27 holder, weighted desk stand, High Z/Low Z connector. Black/chrome. 5⅜x1¼" dia. With carry case, 20-ft. two-cond. cable.
902-0106. Shpg. wt. 7 oz.....44.00

G **MODEL HK-110 "GOLDEN STARMAKER" CARDIOID DYNAMIC MICROPHONE.** Unidirectional. For "music" groups. 100-12,000 Hz. Outputs, −62 and −64 dB. Has ⅝"-27 and ⅝"-18 holder, High Z/Low Z connector, wind screen, on/off switch. Black/gold. 7⅝x1¾" dia. With case, 20-ft. 2-cond. cable.
902-0110. Shpg. wt. 1 lb.....54.00

H **MODEL HK-115 "STARMAKER" DYNAMIC MICROPHONE.** Omnidirectional. For music and recording. 70-16,000 Hz. Outputs, −62 and −64 dB. Has ⅝"-27 adjustable holder, removable wind screen, High Z/Low Z connector. On/off switch. Black/chrome. 8⅜x1⅞". With carrying case, 20-ft. two-conductor cable.
902-0115. Shpg. wt. 7 oz.....44.00

SUBMINIATURE LAVALIER MIKES

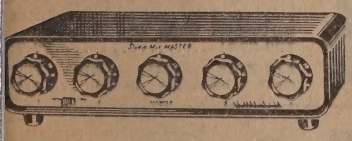


BK-12A BK-6B

MODEL BK-12A. Dynamic. Very small, extra-lightweight with excellent speech balance. Inconspicuous when worn, held in the hand, or concealed on set or stage. Non-directional. 60-18,000 Hz. Use with 30-250 ohms unloaded inputs. 30-ft. 2-conductor cable, lanyard, tie-clip holder, cable clip. 1⅛x¾" dia.
902-0012. Shpg. wt. 7 oz.....99.00

MODEL BK-6B. Dynamic. Has excellent speech balance. Semi-directional. Ideal in situations where an unidistracting mike is needed. 60-15,000 Hz response. 250 ohm output easily altered to 30 or 150 ohms by simple cable connection. 30-ft. 3-conductor cable, lanyard and fastener. 2⁹⁄₁₆x1⁵⁄₁₆" dia.
902-0006. Shpg. wt. 3 oz.....95.00

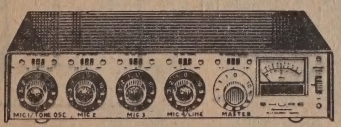
SHURE AND SWITCHCRAFT PROFESSIONAL MIKE AND PROGRAM MIXERS



SWITCHCRAFT STEREO MIXER AMP

MODEL 307TR. Provides control to incoming monophonic or stereo signals from any combination of program sources—mikes, recorders, phono pickups, etc. Accepts up to four monophonic input signals or up to two stereo signals for mixing and blending of sound to any degree. Has individual gain control for each channel to attenuate or increase sound below or above relative level of other signals. Master control governs overall input level. Solid-state circuitry. Provides minimum of two volts output into high impedance load. Frequency response, 20-20,000 Hz; S/N ratio, 60 dB min., referred to 1 mV input. Gain; mike inputs, 60 dB; phono inputs, 40 dB; auxiliary inputs (tuner, preamp, recorder, etc.) 20 dB. 5½x12x7¼". Accepts standard ¼" phone jacks. Power furnished by 2 "D" batteries. (not supplied). Shpg. wt. 4½ lbs.
932-1070.....87.00

Model 308TR. Same as model above but powered by 117 VAC. Wt. 5 lbs.
932-1071.....96.00

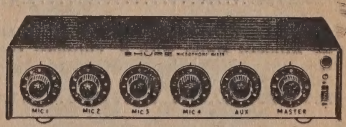


SHURE MIKE MIXER

MODEL M67. Professional microphone mixer /remote amplifier specifically designed for studio and remote broadcasting, recording and sound reinforcement. Compact and lightweight, ideal for studio, remote or original installation uses—or as add-on mixer for providing additional microphone inputs.

Has four balanced low-impedance mike inputs; one line input. Line and mike level outputs; two-level headphone monitor jack. Illuminated VU meter is calibrated for 4 and 10 dBm output. Built-in tone oscillator. Individual input gain controls; master control for overall output. Line input switchable for 600 ohms or bridging.

Low-frequency roll-off switch on each channel; direct mix bus permits stacking units for additional input capacity. Response, ±2 dB, 20-20,000 Hz. Hum and Noise: −125 dBv max. equivalent input hum and noise. 11⅜x7½x2½". 115 VAC.
949-4511. Shpg. wt. 5½ lbs.....165.00



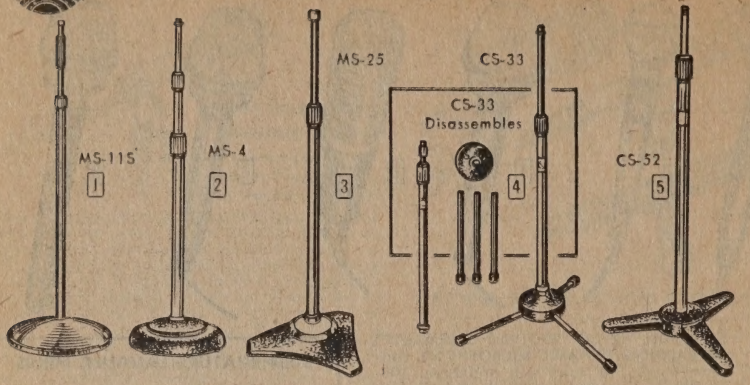
SHURE MIKE MIXER

MODEL M68. Solid-state monophonic mixer handles up to five separate signals through four mike inputs and one auxiliary high-level input for tuner, tape or other accessories. Individual volume controls on each input govern proportional intensity of signal to mixed output. Master control provides level attenuation for overall input. Switch-selected low or high impedance for mike inputs. Low or high impedance mike level output and high impedance auxiliary output. Frequency response, 30-20,000 Hz. 28 VDC jack. Size, 2½x11⅜x5¼". With male Cannon-type input receptacles. 105-130 V, 50-60 Hz AC.
949-4512. Shpg. wt. 4 lbs.....89.00

949-4513. Model M68FC. Provides same features as model above but with female Cannon-type input receptacles.....94.00

949-4515. Model M68BRM. Similar to M68-FC, but has built-in adjustable intensity reverb for special effects. Jack for use with remote reverb. 40-20,000 Hz.....120.00

Microphone Stands and Accessories



[1] **MS-11S AUTOMATIC FLOOR STAND.** Self-locking with automatic clutch for easy and instantaneous changes in height. Removing hand automatically locks the position. Adjusts 39-62". All chromed. 10" base. 5/8"-27 thread. Shpg. wt., 13 lbs.
729L2X2900.....22.40

[2] **MS-4 TELESCOPING FLOOR STAND.** 25-65". 3 chromed sections, 2 clutches. 10" gray base. 5/8"-27 thread.
729L2X2901. Wt. 12 lbs.....15.60

[3] **MS-25 PROFESSIONAL FLOOR STAND.** "Air Lock Cushion" controls drop of chromed tube. 38-67". 17" chromed and gray base. 5/8"-27 thread. Wt., 22 lbs.
729L2X2902.....27.20

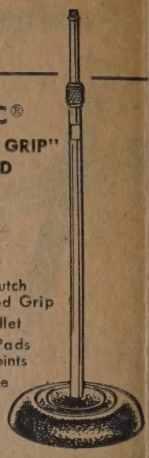
[4] **CS-33 COLLAPSIBLE FLOOR STAND.** Fully demountable floor stand with full grip "Velvet Action." Can be collapsed to a total length of only 22½", making it ideal for fixed as well as portable applications. Base legs remove and are self-leveling. No tools or screw fastenings are required to hold the base assembly together. Fully adjustable from 26 to 64". Chromed. 20" base diameter. 5/8"-27 thread. Wt., 4 lbs.
729X2903.....14.50

[5] **CS-52 PORTABLE FLOOR STAND.** Adjusts 34 to 62". Chromed tube. 2 sections. Chromed self-leveling legs. 15" dia. base. 5/8"-27 thread. Wt., 9 lbs.
729X2904.....11.80

REALISTIC®
LOW-COST "FULL GRIP" FLOOR STAND

9.95

- Extended-Length Clutch Body for Full-Hand Grip
- Bakelite Locking Collet
- Self-Leveling Base Pads and "Anti-Tip" Points
- Stable 10"-Dia. Base



Model 33-320. Low-cost stand, inner-lined with bakelite to prevent jamming or slipping. 2-section, chrome-plated tube adjusts from 35" to 63". Shrivel-gray base, 10" in diameter. Self-leveling, shock-absorbing base pads. Standard 5/8"-27 thread. Shpg. wt., 10 lbs.
910L2X0053.....9.95

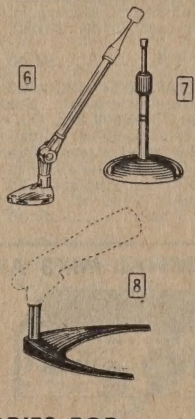
33-321. Similar to 33-320 above, but has all chromed finish. 34-62". Shpg. wt. 13 lbs.
910L2X0054.....11.95

MICROPHONE DESK STANDS

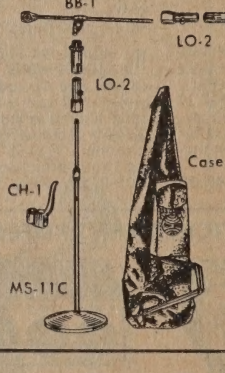
[6] **US-2 MULTIPURPOSE MICROPHONE SUPPORT.** Ideal for language labs, switchboards, pulpits. Spring-loaded omni-swivel assembly "floats" in any position. Vertical: 180°. Horizontal: 360°. Chromed. 12¾" arm. 2⅝" base. 5/8"-27 thread. 2 lbs.
729-2918.....8.00

[7] **DS-7.** General-purpose desk stand with adjustable "Velvet Clutch." Base is of cast iron with gun metal shrivel finish; has pads to prevent damage to desks or table tops. Adjusts from 8 to 13". Base diameter 6", tube height 4". Chrome finished. 5/8"-27 thread. Shpg. wt., 3 lbs.
729-2919.....4.99

[8] **DS-14 CONTEMPORARY DESK STAND** Modern stand with 3" chromed tube. Has gray-shrivel base. Standard 5/8"-27 thread. Shpg. wt., 2 lbs.
729-2920.....3.50



COMBINATION STAND, BOOM, HANGER

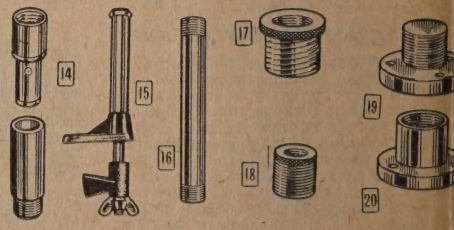


- With Two Lock-On Attachments
- Case with Fitted Compartments
- Mike, Boom Disconnect Easily

"PORTO-STAND" PS12C. Unique device incorporates mike stand, baby boom and cable hanger in one easy-to-assemble unit. Ideal for musicians, band members—anyone who requires fast and easy setup and disassembly of mike equipment. Mike and boom disconnect in seconds and fold away into case. Height: 34 to 62", 10" diameter black wrinkle base. Cable hanger for tubes ⅞ to 1¼" diameter. Black vinyl carrying case with fitted compartments. Shpg. wt., 19 lbs.
729-2921.....29.95

729-2922. **PS11C.** Above, with chrome base. Wt., 20 lbs.....31.25

ACCESSORIES FOR MICROPHONES AND STANDS



ADAPTERS AND FITTINGS. Add to the versatility of your equipment. Thread sizes shown as ⅛" pipe are International Pipe Standard. 5/8" dia., 27 threads-per-inch is standard—fits all stands on this page. Shpg. wt. 6 oz., except *1¼ lbs.

Stock No.	Type	Fig.	Description	EACH
729-2913	LO2	9	Lock-on mike attachment	3.60
729-2914	CH1	10	Cable hanger; fits all stems ⅞" to 1¼" in diameter	2.81
732-0671	254	11	"Y" Mike Connector	1.72
729-2915	GN13	12	Flexible 13" gooseneck	2.81
729X2910	GN19	12	Flexible 19" gooseneck*	3.80
932-1080	329	13	Mike volume control; hi-imp.	5.00
729-2916	SO1	14	Snap-on mike attachment*	3.13

Stock No.	Type	Fig.	Description	EAC
729-2917	BC1	15	Bracket clamp; 6" stem*	3.7
729-2905	AD7	16	3" extension rod; 5/8"-27 ends	.9
729-2906	AD8	16	6" extension rod; 5/8"-27 ends	.9
729-2907	AD3	17	⅛" pipe female to 5/8"-27 female	.7
729-2908	AD5	17	5/8"-27 to 5/8"-27 female coupling	.7
729-2909	AD2	18	⅛" pipe female to 5/8"-27 male	.7
729-2912	AD12	19	Mike base flange. Male. 5/8"-27	1.0
729-2911	AD11	20	Mike base flange. Female. 5/8"-27	1.0

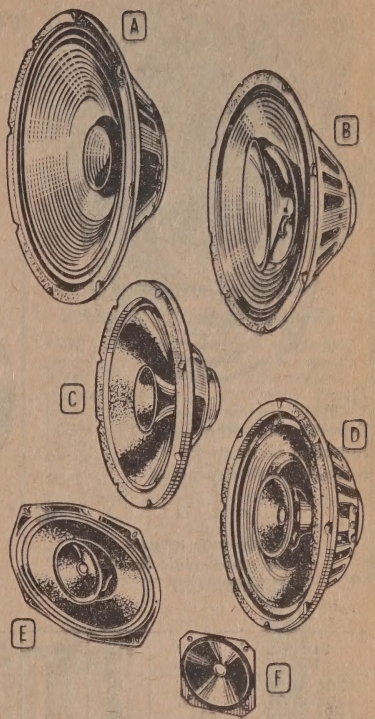
All Stands on this Page Fit Microphones with Standard 5/8" -27 Threa

Our Own Realistic® and Nova® Speakers

NOVA REPLACEMENT HI-FI SPEAKERS

FOR CONSOLES, RADIOS, TV OR PHONOS

These replacement speakers provide crisp, clean sound at low cost. Designed and manufactured in the U.S.A. Choice of six sizes for a multitude of applications as either replacment or extension speakers.



[A] 12" FULL-RANGE SPEAKER

ODEL 40-1200. Handles 30 watts of ower with ceramic-magnet construction. xclusive internal dust seal protects the recision voice coil from "stray whiskers" iat may work loose from the magnet. igh efficiency design with frequency re-onse of 50-11,000 Hz. Impedance, 8 ms. Shpg. wt. 4½ lbs.
10-0021 ..... 6.99

[B] 12" 3-WAY COAX SPEAKER

ODEL 40-1230. Features horn-shaped veeter, coaxially mounted with prewired pacitive crossover. Midrange cone is axially mounted to woofer cone with echanical crossover. 10-oz. ceramic mag-t. Capacity, 16 watts; 30 watts peak. requency response, 35-17,000 Hz. Im-edance, 8 ohms. Shpg. wt. 4 lbs.
10-0027 ..... 11.95

[C] 8" DUAL CONE SPEAKER

ODEL 40-1232. Flexible speaker with re-pleasing baked-on lacquer finish, at surprisingly low price. Handles up to watts with frequency response of 40-,500 Hz. Has 3-oz. ceramic magnet and hizzer cone for smooth highs. Imped-nce, 8 ohms. Shpg. wt. 1¾ lbs.
10-0025 ..... 5.95

[D] 8" ROUND COAX SPEAKER

MODEL 40-1226. Only 2¾" deep, this super-efficient speaker is shallow enough to be built into a wall. Has 3" tweeter for crisp music and voice reproduction. Prewired tweeter and crossover simplify installation. 3-oz. ceramic magnet. Baked-on lacquer finish. Response, 50-17,000 Hz. 8 ohms. Shpg. wt. 1¾ lbs.
910-0028 ..... 8.95

[E] 6x9" COAX SPEAKER

MODEL 40-1231. Separate coaxially mounted 3" tweeter makes this the perfect choice for a "better than original" replacement. Ceramic magnet gives sharp, clear reproduction of voice and music. Capacity, 8 watts; 18 watts peak. Frequency response, 50-15,000 Hz. Impedance, 8 ohms. Shpg. wt. 1½ lbs.
910-0026 ..... 8.95

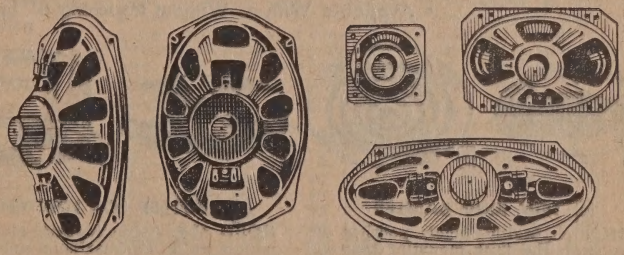
[F] 3½" SQUARE TWEETER

MODEL 40-1224. Basket has sealed back to protect cone against woofer back pressure. Big features include electronic crossover (non-polarized capacitor at 4500 Hz). Power handling capacity, 10 watts. Frequency response, 2000-16,000 Hz. Impedance, 8 ohms. Shpg. wt. ¾ lb.
910-0029 ..... 3.99

REALISTIC® EXTRA-VALUE REPLACEMENT SPEAKERS

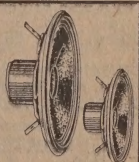
- Ideal for Auto Radio, Public Address and Home Replacement Use
- Perfect for Use as Extension Speakers
- All Speakers Made In U.S.A.

High-quality American-made replacement speakers put your music system, PA system or car radio in top form. Wide variety of top-performing sound reproducers, all with high efficiency Alnico V magnets and rigid frame construction to maintain proper voice coil and magnet alignment. Each speaker is individually packed.



Stock No.	Mfr's Type	Size	Magnet	Watts	Ohms	Wt., Lbs.	EACH 1-3	EACH 4-9	EACH 10-Up
910-0030	40-1201	3"	.68 oz.	3	3-4	¼	2.29	2.09	1.69
910-0031	40-1202	3½"	.68 oz.	3	3-4	¼	2.39	2.19	1.79
910-0032	40-1203	4"	.55 oz.	3	3-4	¼	2.39	2.19	1.79
910-0033	40-1204	4"	1.00 oz.	4.5	3-4	¼	2.59	2.29	2.09
910-0034	40-1205	5"	.55 oz.	4	3-4	¾	2.39	2.19	1.79
910-0035	40-1206	5"	1.00 oz.	5	3-4	¾	2.79	2.49	2.19
910-0036	40-1207	6"	.68 oz.	5	3-4	1¼	2.99	2.69	2.39
910-0037	40-1209	5x3"	.55 oz.	4	3-4	½	2.39	2.19	1.79
910-0038	40-1210	4x6"	.68 oz.	4	3-4	½	2.79	2.49	2.19
910-0039	40-1211	5x7"	.68 oz.	4	3-4	¾	2.99	2.69	2.39
910-0040	40-1212	6x9"	.68 oz.	4	3-4	1¼	3.29	2.99	2.69
910-0041	40-1213	8"	1.47 oz.	8	3-4	2	3.99	3.59	2.99
910-0042	40-1905	6"	1.47 oz.	6	10/20/40	1¾	3.99	3.59	2.99
910-0043	40-1214	4x10"	2.15 oz.	8	10/20/40	2¼	4.99	4.19	3.49
910-0044	40-1215	5x7"	1.48 oz.	7	10/20/40	2	4.99	4.19	3.49
910-0045	40-1216	6x9"	1.47 oz.	8	10/20/40	2	4.99	4.19	3.49

"MINIATURE" 8-OHM SPEAKERS

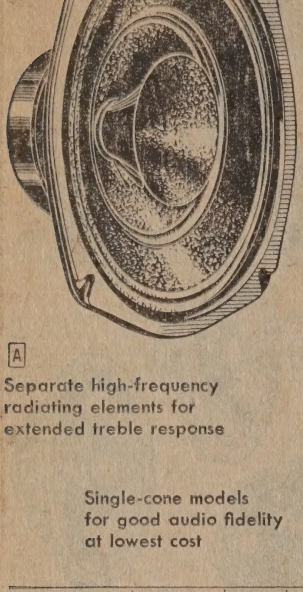


Alnico PM replacement speakers, very thin to fit the tightest space possible. Exact replacements for most transistor radios, walkie-talkies and tape recorders. Av. shpg. wt. ½ lb.

98¢ 4 Sizes

Stock No.	Type	Size	EACH
910-0109	40-262	2¾"	.98
910-0110	40-247	2½"	.98
910-0111	40-246	2¼"	.98
910-0112	40-245	2"	.98

ALLIED® Extra-Value PA and Replacement Speakers

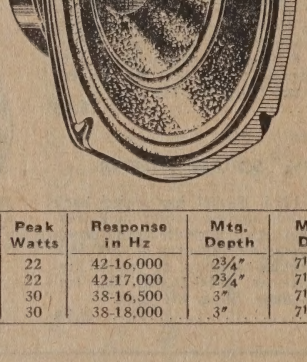


A

Separate high-frequency radiating elements for extended treble response

NEW! ALLIED'S OWN 8" SPEAKERS FOR PA SYSTEMS PRODUCTION LINE OR REPLACEMENT USE . . AT LOW COST

- Internal Dust Seals • Shallow Profile for Convenient In-Wall Mountin
- Mounting Facilities for Transformers with up to 2 3/8" Centers
- High-Efficiency Barium Ferrite Magnets • For Voice or Music



B

Single-cone models for good audio fidelity at lowest cost

The best buys anywhere in general-pu pose 8" speakers. Built right and price right for good-quality sound in music an paging systems, low-costs stereo equip ment. Many production-line application too. All have high sensitivity for greate overall efficiency, epoxy between plate and magnet—cured with RF heat—for a indestructible bond, shallow constructio for easier in-wall mounting, powerfu barium-ferrite magnets, 1"-diameter voic coils. Integral mounting facilities fo transformers with 1¾", 2" and 2¾" center Internal dust seals protect critical clos tolerance voice coil gaps. Models 801W and 803W have separate high-frequenc (whizzer) cone for higher treble respons Impedance, 8 ohms. Made in U.S.A. Avai able exclusively from Allied Electronic

Stock No.	Mfr's Type	Fig.	Magnet Oz.	Peak Watts	Response in Hz	Mtg. Depth	Mtg. Dia.	Wt., Lbs.	EACH 1-5	6-24	25-49	50-Up
706-8000	800	B	6	22	42-16,000	2¾"	7 11/16"	2½	8.30	6.90	6.21	5.60
706-8001	801W	A	6	22	42-17,000	2¾"	7 11/16"	2½	8.70	7.20	6.48	5.80
706-8002	802	B	10	30	38-16,500	3"	7 11/16"	2¾	9.00	7.50	6.75	6.00
706-8003	803W	A	10	30	38-18,000	3"	7 11/16"	2¾	9.35	7.80	7.02	6.25

soundolier

BAFFLES AND ENCLOSURES FOR 8" SPEAKERS

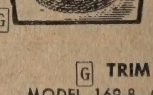
- Designed for Simple Installation in Ceilings • Omnidirectional
- Available With or Without Matching 8" Speaker and Transformers

C

D

E

F



G

H

C TRIM RING BAFFLES

MODEL 61-8. Sturdy, highly polished 20-gauge steel. Has flush mounting that will not "give" or buckle when installed. Requires 8½" ceiling hole. Accepts 8" speaker. Use with 95-8 Protective Enclosure (right). Outer dia., 12¾". Less speaker. Wt., 2 lbs. 923X6061. 1-4...Ea. 3.72 5-Up...Ea. 3.10

MODEL B61-8. As above but with 8" speaker mounted. With transformer. 4 lbs. 923X6000. 1-4...Ea. 11.50 5-Up..Ea. 9.70

D LOUVERED BAFFLES

MODEL 67-8. Similar to air diffusers in appearance. Allows free passage of air for maximum sound dispersion. Sturdy flushed mounting, recessed louvers. Attractive aluminum finish. Welded construction eliminates vibration. Requires 10¼" hole. Accepts any 8" speaker. Dia., 12". Use 95-8 enclosure (right). Less speaker. Wt., 2 lbs. 923X6067. 1-4...Ea. 5.75 5-Up...Ea. 4.80

MODEL B67-8. As above but with 8" speaker mounted. With transformer. 4 lbs. 923X6007. 1-4..Ea. 12.70 5-Up..Ea. 11.00

E BAFFLES FOR LOW CEILINGS

MODEL 68-8. Attractive-satin-brushed aluminum finish. For maximum sound dispersion. Special diffractor avoids "beaming" of sound in low-ceiling applications. Requires 8½" hole. Takes 8" speaker. Overall dia., 12¾". Use with 95-8 Protective Enclosure (below). Less speaker. Wt., 1¼ lbs. 923X6068. 1-4...Ea. 8.75 5-Up...Ea. 7.25

MODEL B68-8. As above but with 8" speaker mounted. With transformer. 4 lbs. 923X6008. 1-4..Ea. 16.50 5-Up..Ea. 13.60

F ROUND ENCLOSURES

MODEL 95-8. Constructed of durable 20-gauge steel. Use with Trim Ring Baffle and speaker. Undercoated; jute patch lining reduces resonance. Measures 4¼x9⅞" diameter. Shpg. wt., 3 lbs. 923X6095. 1-4...Ea. 6.00 5-Up...Ea. 5.10

G MODEL 193-8 SQUARE ENCLOSURE

(Illustrated with Model 169-8 baffle.) Fits 169-8, right. Designed for use with any 8" speaker. Welded 20-gauge steel. Undercoated. 3¾x9⅝" square. Wt., 1¾ lbs. 923-6099. 1-4...Ea. 5.00 5-Up...Ea. 4.18

G TRIM SQUARE BAFFLES

MODEL 169-8. (Illustrated with 193-8 e closure.) This heavy-duty low-cost baffle designed for convenience. Sturdy 24-gau steel, attractive white finish. Requires 8½ round or 9⅝" square hole with enclosur Can be used with any 8" speaker, includi Allied 8" models above. 10½x10½". Le speaker. Shpg. wt. 1 lb. 923X6097. 1-4...Ea. 3.00 5-Up...Ea. 2.5

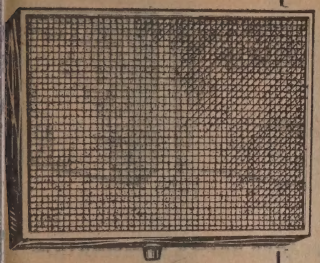
MODEL B169-8. As above but with 8" speak mounted. With transformer. 4 lbs. 923X6016. 1-4...Ea. 10.00 5-Up..Ea. 8.6

H TRIM RING BAFFLES

MODEL 51-8. White finish. Made of rugge 24-gauge steel. May be painted. Flus mounting. Requires 8½" hole. For any speaker, including Allied models abov Use with 95-8 Enclosure (left). 12¾" di Less speaker. Shpg. wt. 6¼ lbs. 923X6051..... Package of 5 for 12.5

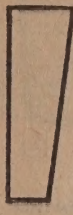
MODEL B51-8. As above but with 8" speak mounted. With transformer. 3½ lbs. 923X6005. 1-4...Ea. 9.99 5-Up...Ea. 8.5

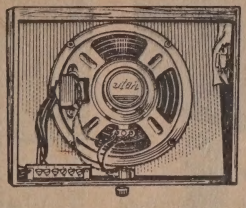
Baffles and Speaker-Baffles



EXTRA-THIN BAFFLE WITH 8" SPEAKER

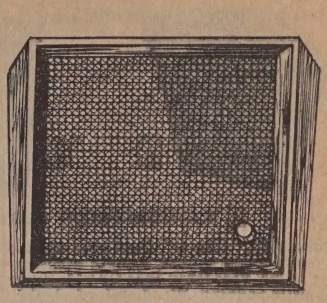
Optional Volume Control, Transformer





mart, modern styling in a sloping baffle iat's only 4" deep. Features 8" dia. shallow peaker with internal dust shield, bonded agnet structures and barium ferrite mag- et for more sound per watt. Ideal for use in assrooms, offices, reception rooms, and any other background music and paging stem applications. Impedance, 8 ohms, ze, 9x12x4". Available as baffle-speaker unit alone, or with tapped transformer and/or L-pad volume control for adjustments right at the speaker. Screw terminals for fast installation. Supplied with all hardware for easy mounting. "T" suffix in Mfr's Type indicates baffle-speaker with transformer, tapped at 5, 2.5, 1.25, 0.62 and 0.31 watts. Transformerless types, 15 watts peak. "V" suffix, with volume control.

Stock No.	Mfr's Type	Enclosure Finish	Wt., Lbs.	EACH 1-4	EACH 5-Up
973X1135	TP8A-VT	Walnut-Finished Wood	4	19.99	16.89
973X1141	TP8B-V	Walnut-Finished Wood	3½	17.50	14.64
973X1147	TP8C	Walnut-Finished Wood	3½	14.50	12.15
973X1156	TP8D-T	Walnut-Finished Wood	4	16.75	14.94
973X1170	TS8A-VT	Walnut-Textured Vinyl	3½	16.75	14.94
973X1175	TS8B-V	Walnut-Textured Vinyl	3	14.75	12.54
973X1180	TS8C	Walnut-Textured Vinyl	3	11.99	10.14
973X1185	TS8D-T	Walnut-Textured Vinyl	3½	15.75	13.14



DELUXE BAFFLE WITH 8" SPEAKER, VOLUME CONTROL

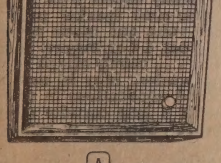
TYPE 1205. Utah's best! Molded styrene baffle has fine-furniture walnut finish. Big 8" speaker, with ceramic magnet, handles 24 watts peak. Factory wired L-pad volume control. Screw terminals for no-solder installation. 10¾x13x6".

973X1205. Wt. 4¾ lbs.....16.50

TYPE 1206. Above, plus wired 70.7-volt transformer with screw terminals for 10, 5, 2.5, 1.25, .62 watts.

973X1206. Wt. 5 lbs.....19.50

973-1207. Baffle Alone. 2 lbs....5.50



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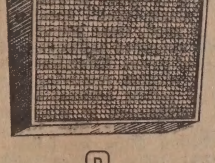

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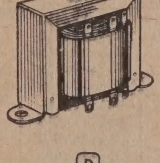


D

E

- These Factory Wired "Assemblies" Save You Labor Costs
- Constant-Voltage Type Ends Impedance-Matching Problems
- Excellent for Do-it-Yourself PA Systems—No Soldering

A BIG-VALUE BAFFLE WITH PREWIRED 8" SPEAKER, 70.7-VOLT TRANSFORMER, VOLUME CONTROL

(PE 8A-W. Ready-to-hang assembly with all the tedious "wiring ork" done at the factory. Speaker, transformer and L-pad volume ntrol are already connected to the screw terminals. No soldering—l you need is a screwdriver. Transformer has taps for 5, 2.5, 1.25, 62 and 0.31 watts. Speaker has powerful Alnico V magnet. L-pad aintains a constant impedance on the line. Authentic walnut ain is molded into the styrene baffle, color goes all the way rough. 10⅜x13x6".

73X1305. Shpg. wt. 3¼ lbs.....14.99

B LOW-COST BAFFLE WITH 8" SPEAKER, AND VOLUME CONTROL—PREWIRED!

(PE 8B-W. The same value-priced assembly above, but without the).7-volt transformer. The 8" speaker easily handles 14 watts of eak power for excellent voice or music reproduction. Speaker is ctory wired to handy screw terminals for quick hook-up with no oldering. Use as an extension to existing installations or for new stems. Impedance, 8 ohms.

73X1306. Shpg. wt. 3 lbs.....12.99

C "SLOPING" BAFFLE WITH 8" PREWIRED SPEAKER

(PE A-124896. Sloping baffle has thin look for contemporary decors. Vith 8-inch speaker, designed for best dispersion angle. Nine-watt, ohm speaker has 1.45-oz. Alnico V magnet. Screw terminals for sy installation with no soldering. Bonded corners for maximum rength and years of service. Recessed front for a neater, trimmer ppearance. For use in average offices, classrooms, reception oms, hospital rooms. All hardware is included in a coin envelope, r fast, easy mounting. Size, 9x11x6". Covered with durable wood-rained fabric. Attractive walnut finish enclosure matches most teriors.

73X1001. Shpg. wt. 4 lbs.....9.99

C "PROFESSIONAL QUALITY" PA SPEAKERS

Built to deliver year-in, year-out dependability in commercial sound installations. Ceramic magnet assemblies are permanently bonded with RF-cured epoxy for the ultimate in reliability. Screw terminals eliminate all soldering—you need only a screwdriver. All types have 8-ohm impedance. Number in Mfr's Type column indicates speaker diameter. Suffix "W" indicates dual-cone design. *Coaxially mounted tweeter.

Stock No.	Mfr's Type	Watts	Mag. Oz.	Mtg. Depth	Wt., Lbs.	EACH 1-2	EACH 3-5	EACH 6-Up
973-1050	PA8ECS	8	3.0	1⅞"	1½	6.45	5.84	5.54
973-1052	PA8FC	10	5.5	2¾"	1¾	6.60	5.70	5.40
973-1053	PA8FC-W	10	5.5	2¾"	1¾	6.90	5.93	5.62
973-1064	PA8JC	15	10.0	3"	2¾	7.99	7.21	6.83
973-1065	PA8JC-W	15	10.3	3"	2¾	8.25	7.52	7.12
973X1075	PA12JC	18	10.0	4⅞"	4½	9.99	9.12	8.64
973-1067	PA8JC-3*	15	10.0	3"	3¼	13.70	11.88	11.26

D LOW COST LINE-TO-VOICE COIL TRANSFORMERS

For driving speakers at various power levels from the same 70.7-volt or 25-volt audio line. Just select desired power (volume) level by changing transformer taps. Solder terminals. Impedance and wattage are printed on coil. For 4, 8 or 16-ohm speakers as indicated. Have 1¾" mtg. centers, *except 2" centers. Shpg. wt. 1 lb.

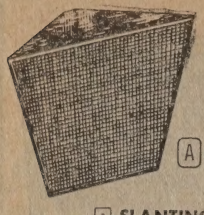
Stock No.	Watt Taps	Line Volts	Impedance in Ohms	EACH 1-11	EACH 12-Up
973-1012	5, 2.5, 1.25, .62, .31	70.7	8, 4	2.86	2.58
973-1015	10, 5, 2.5, 1.25, .62	70.7	16, 8, 4	3.25	2.97
973-1016	18, 9, 4.5, 2.25, 1.12	70.7	16, 8, 4	4.25	3.88
973-1014	10, 5, 2.5, 1.25, .62	25.0*	16, 8, 4	4.29	3.90

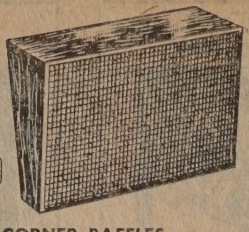
E READY-TO-MOUNT SOUND COLUMN SPEAKER

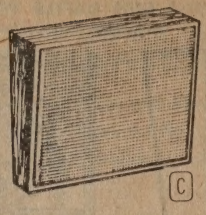
MODEL SND-3. Heavy-duty "sound column" speaker system with six 8" speakers for 72-watt power capability. Mounting bracket supports column while you "aim," wire and fasten it in place. 50-15,000 Hz. 120° horizontal dispersion. 30° vertical. 51x11x7¾", 8 ohms.

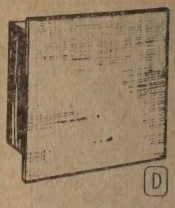
973-1110. Shpg. wt. 42 lbs. 1-3....Ea. 99.99 4-Up....Ea. 79.95

Speaker-Baffle Combinations









A SLANTING-FRONT CORNER BAFFLES

Model ACB. "Clip-In" front goes on or off in seconds without front screws—entire cabinet mounts easily on wall with "Speedy Mounting" clips. Bass reflex type for wide-range response. Screw terminals; acoustic padding. Wood-grained vinyl covered. Walnut finish.

Stock No.	Model	Size	For	Wt., Lbs.	EACH 1-5	EACH 6-Up
729X2721	SCB-8D	15x17¾x9"	8"	6	12.99	12.35
729X2722	SCB-12D	20x20¾x10½"	12"	8	17.75	16.90

B "THINLINE" SPEAKER-BAFFLE COMBINATIONS

Have 8" or 12" speakers with wide-range response, clear tone for paging and background music systems. All baffles are expertly styled—thin and wide—with clean, sculptured appearance.

Series 108 has 8" speaker with 1-oz. magnet and 6-watt capacity. Series 408 has 8" speaker with 4.8-oz. magnet and 10-watt capacity. Series 508 has 8" speaker with 6-oz. magnet and 15-watt capacity. Series 212 has 12" speaker, 10-oz. magnet, 20-watt capacity.

Screw terminals for fast hookup. Wood-grained vinyl-covered baffles, except Series 508—wood-veneer walnut finish.

In table below "L" indicates L-pad volume control; "V" indicates standard volume control; "T," 70.7-volt transformer.

Stock No.	Model	Baffle Size	Wt., Lbs.	EACH 1-5	EACH 6-Up
729X2766	WB-108CS	9½x12x4¼"	4	10.99	10.45
729X2767	WB-108CSVT	9½x12x4¼"	6	17.00	16.15
729X2771	WB-408CS	9½x12x4¼"	5	13.99	13.30
729X2772	WB-408CSL	9½x12x4¼"	6	16.99	16.15
729X2773	WB-408CST	9½x12x4¼"	7	17.52	16.64
729X2725	PB-508CS	9¾x11x5⅜"	6	16.50	15.70
729X2726	PB-508CST	9¾x11x5⅜"	7	20.00	18.00
729X2769	WB-212CS	13¾x16x6½"	7	20.40	18.36
729X2770	WB-212CSL	13¾x16x6¼"	9	23.50	22.35

C ALL-WEATHER SPEAKER-BAFFLE COMBINATION

Model WWB-6000S. Ideal for PA use or as background music areas subjected to heavy moisture conditions or actual precipitati in entrance areas such as shipping and receiving and loading dock etc. May be immersed in water without damage. Heavy-duty 5½ speaker has 5.3-oz. magnet with 12-watt power capacity. 8 ohm 9½x12x4¼". Walnut woodgrain. Shpg. wt., 4½ lbs.

729X2775. 1-5.....Each 13.00 6-Up.....Each 12.0

D ECONO/LINE TWO-WAY SPEAKER-BAFFLE

Model EB-8S. Versatile speaker-baffle combination may be hung wall like regular baffle or may be mounted flush with only conter porary grille showing. Has 8" diameter shallow speaker. Ideal f low level paging or background music. For use in classrooms, r ception areas, stores, homes or office, and many other backgrou music and paging system applications. Power, 6 watts. Impedanc 8 ohms. Size, 11⅝x11⅝x4¼". Speedy mounting clip for fast, ea installation. Shpg. wt., 3¾ lbs.

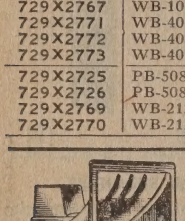
729X2710. 1-5.....Each 8.90 6-Up.....Each 7.4

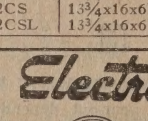
E "HALLMARK" TWO-FACED SYSTEM FOR CORRIDORS

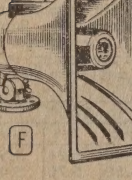
Model TCB8S. Smartly designed 2-faced corridor speaker syste solves your bi-directional sound problems. Delivers the same cor dor paging coverage as you would normally expect from two o dinary "single-faced" speakers. 8" dual-cone speaker puts o plenty of good, clear sound to provide voice and music covera even over extended hallways or factory areas. 4.8 oz. magnet handl 10 watts of power. Effortless installation . . . merely attach to wa or ceiling without removing mounting bracket. May be used in variety of public address or background applications in schoo offices, warehouses, or wherever there is a long corridor stretc Impedance, 8 ohms. Size, 10¾x10¾x3½". Finished in handson Dusk Walnut. Shpg. wt., 6 lbs.

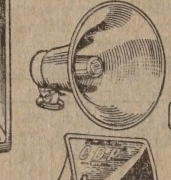
729X2731. 1-5.....Each 20.00 6-Up.....Each 18.0

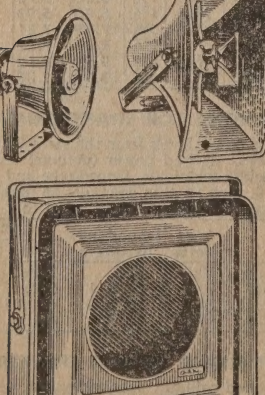
Electro-Voice PA Horns, Speaker Systems











HIGH-EFFICIENCY HORN PROJECTOR PA PAGING SPEAKERS

F PA30AT-7. Rugged 30-watt paging projector speaker with integral 70-7 volt line transformer. Easily selected line power taps at 30, 15, 8, 4 and 2 watts. Virtually indestructible Implex rectangular horn for maximum durability, versatility, and sound dispersion. Driver, conservatively rated at 30 watts, provides smooth response for both voice and music. Universal swivel bracket mounts speaker in any position and allows rotation without dismounting. Response: 250-14,000 Hz. Power handling capacity: 30 watts. Dispersion: 120° by 90°. Sensitivity (EIA): 59 dB. Sound-pressure level: 125 dB. 11x6½x8½". Shpg. wt. 7½ lbs.

781 X0010. 1-5.....40.00 6-Up..32.10

G PA30R. Re-entrant projector speaker has round spun-aluminum bell for uniform 105° dispersion. Conservatively rated 30-watt driver delivers smooth response for both voice and music. Universal swivel bracket mount speaker in any position and allows rotating without dismounting. Response: 250-14,000 Hz. Power capacity: 30 watts. Sensitivity (EIA): 60 dB. Sound pressure level: 127 dB. Impedance: 8 ohm 9¾x10" dia. Shpg. wt. 6¾ lbs.

781 X0022.....25.2

H 844A. Durable, compact 30-watt gener purpose paging projector speake Smooth natural voice reproduction; pr vides highly intelligible paging witho feedback. Frequency response: 250-13,0 Hz. Power handling capacity: 30 watt Nominal impedance: 8 ohms. Nominal di persion: 90°. Sensitivity (EIA): 54 d Sound-pressure level: 123 dB. Size, 7½ 9⅞" diameter. Shpg. wt. 13 lbs.

781 X0065.....27.0

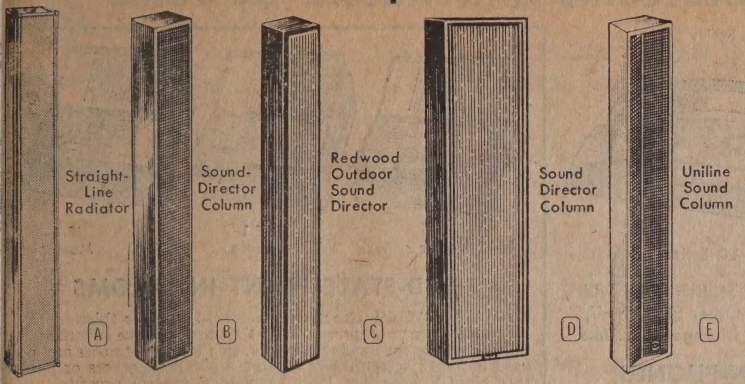
J 848ACDP. Compound diffraction wid angle projector speaker with FC1 Horn and 1828C Driver. Low-distortic voice and music reproduction. Frequen response: 150-10,000 Hz. Power handlin capacity: 30 watts. Nominal dispersion: 9 to 120°. Impedance: 8 ohms. Size: 10½ 20½x20". Shpg. wt. 16¾ lbs.

781 U0070.....57.0

COMPACT WIDE-RANGE ALL-WEATHER 12" SPEAKER SYSTEM

K Musicaster 11A. Integrated loudspeaker system particularly suited to voice and music reproduction. For indoor or outdoor use, in home, office, or industrial applications. Performs reliably at rallies, picnics and other outdoor events. Has 12" wide-range driver for good bass response. Radax dual-cone driver assembly for crisp highs. Weatherproofed and fungusproofed compression housing assures reliable operatio under all weather conditions. Easy mount ing. Universal "U" bracket converts carrying handle for portability. Respons 80-16,000 Hz. Mechanical crossover at 400 Hz. Electrical crossover at 5000 Hz. Dis persion: 120° Capacity: 30 watts (60 watt peak). Impedance: 8 ohms. 21½x21½x6½ 781 U0045. Shpg. wt. 37 lbs.....94.5

Sound Column Speakers for Better PA Coverage



A ELECTRO-VOICE RADIATOR

MODEL LR4SA. Offers uniform loudness over an extended horizontal pattern. Contains 12 speakers in weatherproofed aluminum enclosure. Response: 200-10,000 Hz. Capacity: 40 watts. 8 ohms. Dispersion 160° horizontal, 30° vertical. 48⅜x6¼x4⅜".
781U0005. Shpg. wt. 27 lbs..... **108.00**

B ARGOS SOUND-DIRECTOR COLUMN

MODEL SD-1064. Provides sound distribution for rooms up to 200-ft. long. "Focusing" adjustment adapts to room length. Uses six 5" speakers. Walnut-grain vinyl finish, plastic cane grille cloth. Response: 200-10,000 Hz. Capacity 30 watts. Imp: 16 ohms. Dispersion: 120° horizontal, 30° vertical. 30¼x7x3⅛". With mounting clips.
729X2718. Shpg. wt. 10 lbs..... **54.99**

MODEL MSD-1060. Deluxe version of SD-1064, above. Features six 8" speakers. Response: 70-15,000 Hz. 60 watts. 16 ohms. Dispersion: 120° horiz., 30° vert. 50½x10¾ x8¼".
729X2715. Shpg. wt. 40 lbs..... **99.00**

MODEL MSD-1060HD. For institutional use. Same as Model MSD-1060, but ruggedized with shock mounted speakers, protective bar across front and hidden steel grille to protect speakers. Ideal for gyms, schools, etc.
729-2716. Shpg. wt. 49½ lbs..... **105.00**

C ARGOS OUTDOOR COLUMN

MODEL SD-1062. Outdoor sound director withstands inclement weather, temperature extremes. Constructed of ¾" solid redwood. Louvered, aluminum grille backed with moisture barrier. Uses six 6" speakers with waterproof cones and aluminum voice coils. Dispersion: 130° horizontal, 30° vertical. Response: 50 to 15,000 Hz. Capacity: 60 watts. 16 ohms. Size: 44x11½x7¾".
729-2717. Shpg. wt. 35 lbs..... **105.00**

D NEW ARGOS SOUND DIRECTOR

MODEL SD-1100. Designed to work under adverse acoustic conditions. Has ten 5½" speakers. Permits adjustment of vertical angle from 15° to 25°. Entire column tilts to focus the sound beam. Walnut grain vinyl finish. Capacity: 50 watts. Response: 200 to 10,000 Hz. 16 ohms. 49¼x7x6".
729-2719. Shpg. wt. 22 lbs..... **83.95**

E UNIVERSITY UNILINE COLUMN

MODEL CSO-4. Weatherproof steel enclosure with 4 fungus-proof 8" speakers. Response: 70-17,000 Hz. 75-watts. 8 ohms. Dispersion: 120° horiz. 18° vert. 41½x12x8".
969U5113. Shpg. wt. 40 lbs..... **156.87**

MODEL CS-2. Six 5" speakers. Response: 175-12,000 Hz. 30 watts. 8 ohms. 165° horiz., 25° vert. dispersion. 31x5½x5".
969X5114. Shpg. wt. 14 lbs..... **65.67**

DELUXE Allied® SOUND COLUMN SPEAKER

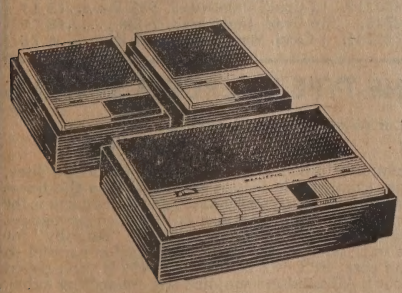
- 41" High with Six 6" PA Speakers
- 145° Horizontal, 30° Vertical Dispersion
- 60-Watt Capacity, 50-15,000 Hz
- Wood-Grain Vinyl Cabinet

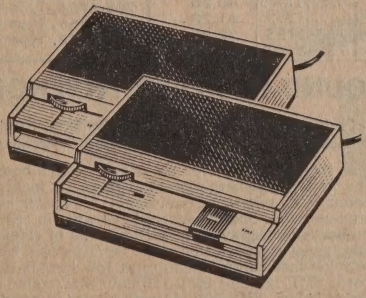
MODEL 3350. Deluxe sound column utilizes six powerful 6-inch speakers for outstanding wide-angle dispersion and excellent sound projection in any PA use. Provides wide-range response of 50-15,000 Hz. Delivers uniform sound over a wide 145° horizontal, 30° vertical pattern for better coverage throughout entire room with lower reverberation and feedback. Overall sound projection up to 250 feet (indoor).

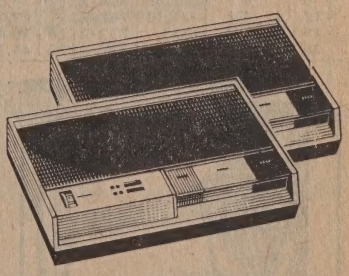
Heavy-duty speaker; voice coil of each speaker has aluminum nomax bobbin to handle high power at wide response without distortion. Power capacity, 60 watts. Impedance, 16 ohms. Includes mounting hardware. Walnut wood-grain vinyl cabinet. 41x11x6".
706U8020. Shpg. wt. 44 lbs..... **69.95**

ALLIED 3300. Four 8" speakers. Dispersion: 140° horiz., 45° vert. 60-11,000 Hz. 25-watt capacity. 8 ohms. With mounting hardware. Walnut wood-grain vinyl cabinet. 41x11x6".
706U8021. Shpg. wt. 37 lbs..... **39.95**

REALISTIC® INTERCOM SYSTEMS FOR HOME OR BUSINESS







"COMM-5" DELUXE 3-STATION SYSTEM

Type 43-240. The Comm-5 intercom system is expandable to four remotes. Master station has Remote-selector buttons to talk to each Remote individually. Buttons have indicator lights to identify Remote in operation. Call button on each Remote signals the Master. Lock button for monitoring, hands-free talking. Master volume control adjusts volume of remotes simultaneously. Remote "privacy" button permits separate conversations. Standby operation button. To install, just run connecting cord between units, plug Master into AC outlet. Walnut wood cabinet. Complete with 150 feet of connecting cable. Extra Remote below.
910-0055. Shpg. wt. 6 lbs..... **59.95**
910-0056. 43-241 Extra Remote Station **10.95**

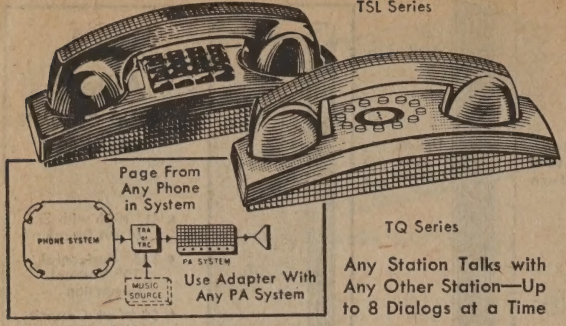
WIRELESS 2-WAY SY-STEM

Type 43-210. Provides instant inter-room talking anywhere in the house, basement, office or factory. No wires to connect. Just plug each unit into a convenient AC outlet. You can unplug it and take it with you when moving from one room to another. May be used between adjacent homes or buildings on same power-line transformer. Both units are Masters so you can add extra stations to each for four-way communications or more. Has convenient illuminated "talk-bar." Lock button for hands-free conversation, dictation, monitoring children's room. Large 2½" speaker gives extra-clear voice reproduction. Solid-state for maintenance-free operation. 5x5½x5⅛". AC.
910-0057. Shpg. wt. 4 lbs..... **29.95**

WIRELESS DUAL-CHANNEL INTERCOM

Type 43-225. Update your home, office or shop with a modern, wireless intercom system. Provides two separate channels on each Master station. Gives you instant inter-room or inter-office communication with quiet, step-saving efficiency. No wires to hook up. Just plug into AC outlet. Can be used in separate buildings on the same electric line transformer.
Add as many stations as desired. Extra stations permit conferences, separate conversations simultaneously. Each set has thumbwheel volume control. Lock button for hands-free conversation or monitoring. Illuminated press-to-talk bar. Call button to signal other station. Solid state. AC.
910-0058. Shpg. wt. 3 lbs..... Each **19.95**

BOGEN Intercoms and Phone Systems



Any Station Talks with Any Other Station—Up to 8 Dialogs at a Time

TSL MULTI-CHANNEL BOGEN-PHONES

In 8-station TSL-8 system, up to 4 private conversations can be held at once; in 16-station TSL-16, up to 8; any station talks with any other. Push desired number of selector buttons for conference calls. To call, lift phone, press selector button, then press ring button; buzzer sounds at called station. 3½x9½x3¼". Beige. Use cable with at least 3 cond. more than number of phones. 4½ lbs.

733-0078. TSL-8 Phone. 1 ring, 7 station-selector buttons. Calls up to 7 other stations individually or together.....Each 45.40

733-0079. TSL-16 Phone. 1 ring. 15 station-selector buttons. Calls up to 15 other stations individually or together.....Each 53.50

733-0063. PRS-16 Power Supply. Takes 1 per system. Use 3-cond. cable. 6x2x3½". For 110-120 V, 50-60 Hz AC. Wt., 4 lbs.....45.40

733-0075. TRC Phone-Page Adapter. Allows paging through PA system. Volume control for separate paging and music levels—music stops during page. Use 3-cond. cable. 4x4x2". Wt., 6 lbs.....32.00

TQ COMMON-TALK BOGEN-PHONES

Any station talks with any other station, but only 1 conversation (2-way) can be held at a time. Has selective ringing, conference call feature. Total of 7 stations can be used in TQ-6A system; 13 in TQ-12A. Beige. 3¼x3¼x9¼". Use cable, below, with at least 3 conductors more than number of phones in system. 3 lbs.

733-0070. TQ-6A Phone. For up to 7-station system....Each 32.30

733-0072. TQ-12A Phone. For up to 13-station system..Each 36.00

733-0060. PRS-1A Power Supply. Takes 1 per system. Use 3-cond. cable, below. 3½x6x2". For 110-120 V, 50-60 Hz AC. 6 lbs...27.80

733-0074. TRA Phone-Page Adapter. Allows paging through PA system. Volume control for separate paging and music levels—music stops during page. Use 3-cond. cable. 4x4x2". Wt., 5 lbs.....32.00

CABLE FOR ABOVE IN 100 AND 500-FT. SPOOLS

No. of Cond.	Lbs./ 100'	Type	100-Ft. Spool Stock No.	100-Ft. Spool EACH	500-Ft. Spool Stock No.	500-Ft. Spool EACH
3	2	832203	768-2702	4.11	.....	16.46
6	4	832206	768-2712	9.08	.....	40.20
12	5½	832212	768-2721	13.17	.....	61.20
15	7	8458	732-2124	30.40	732-2125	92.25
25	12	8459	732-2126	46.70	732-2127	145.50

SOLID-STATE PLANT INTERCOMS

ALL-MASTER SYSTEM. Use up to seven IE-7 or up to thirteen IE-13 Masters. One non-private RIE-1 Remote may be substituted in IE-7 system for hands-free reply, two RIE-1 Remotes can be used in IE-13 system. Any Master can call all others or page thru plant P.A. system. Each has volume control, press-to-talk bar with dictate lock, pushbutton selector switches. For desk or wall mounting. Gray. Each unit 4x6⅞x7⅜". Order cable below—use unshielded cable with at least one more conductor than total no. of stations. All Masters require 110-120 VAC.

SINGLE MASTER-MULTIPLE REMOTE SYSTEM. One IE-7 Master, up to six RIE-1 Remotes; or one IE-13 Master, up to twelve RIE-1 Remotes. Master calls one or more stations simultaneously. Remote originates calls to Master, has press-to-talk bar, privacy switch. Each unit, 4x6⅞x7⅜". Order cable below—use 3-conductor unshielded cable between each station.

IE-4S "ANNUNCIATOR" SYSTEM. IE-4 Master takes up to three RIE-1 Remotes (one incl.). Calls one or more remotes as desired. Remotes originate calls to master by means of beep-tone and magnetic annunciator that remains visible until cleared by Master. IE-4 Master has volume control, press-to-talk bar, 3 pushbutton selector switches (each with annunciator), beep tone call button, clearing button. For desk or wall mounting. Gray. Each unit, 4x6⅞x7⅜". Order cable below—use 2-conductor unshielded cable between each station. For 110-120 VAC.

TBR-1 RELAY ACCESSORY. For IE-7 and IE-13 systems only. Permits tie-in to plant P.A. system for paging from any Master and hands-free reply from loudspeaker or horn. IE-13 system can be used with two TBR-1 relays. Order cable below—requires single-conductor shielded cable for each TBR-1.

733-0006. IE-7 Seven-Station Master. Shpg. wt. 4 lbs.....50.00

733-0007. IE-13 Thirteen-Station Master. Wt. 4 lbs.....61.00

733-0005. IE-4S System. 1 Master; 1 Remote. 8 lbs.....59.00

733-0067. RIE-1 Remote Station. Shpg. wt. 3 lbs.....14.00

733-0076. TBR-1 Relay. Shpg. wt. 2 lbs.....28.00

733-0008. JB-E Junction Box. For ea. IE-7, IE-13, 2 lbs.....5.90

CABLE FOR ABOVE INTERCOMS IN 100-FT. SPOOLS

732-5045. Type 8740. 2-Cond. Unshielded. 2 lbs.....6.95

768-2702. Type 832203. 3-Cond. Unshielded. 2 lbs.....4.11

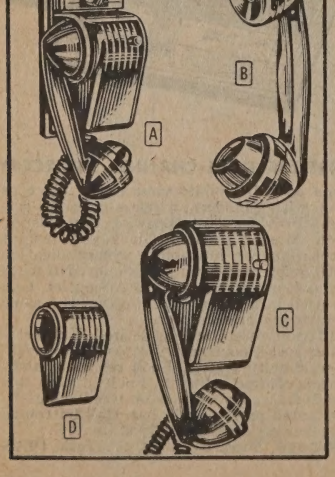
732-2099. Type 8449. 9-Cond. Unshielded. 5 lbs.....16.25

768-2721. Type 832212. 12-Cond. Unshielded. 5½ lbs.....13.17

732-5066. Type 8748. 16-Cond. Unshielded. 7 lbs.....18.00

768-2202. Type 722201. 1-Cond. Vinyl Shielded. 1 lb.....5.75

WHEELER SOUND-POWERED TELEPHONE-TYPE INTERCOM SYSTEMS



- Designed for Factories, Construction Sites, Farm or Anywhere Power Is Lacking
- Sound-powered Telephone and Ring Generator
- Up to 12 Phones Can Be Hooked Up

Use these handsets for maintenance-free communications in the plant, on construction sites, the farm, anywhere electrical power is lacking. Comparable in size and quality to the finest commercial telephone equipment. No batteries required. Voice power alone generates current for transmission. Sound-powered elements in telephone and ring generator have Alnico permanent magnets for infinite life without loss of strength. Can remain on an indefinite "standby" for emergency service when other facilities fail. Up to 12 telephones may be connected in parallel to provide fast communication at low installation cost. SPT-102 handset has 4½-ft. non-coiled cord. SPT-123 and SPT-150 have 4-ft. coiled cord. All handsets supplied less connecting cable, listed below. SPS-205-MI wall-mounted handset holder can accommodate up to 12 telephones in a common ringing system. All units constructed of corrosion resistant materials for trouble-free operation in any weather.

Stock No.	Type	Fig.	Description	Lbs.	EACH
989-4330	SPT-102	B	Handset. Up to 12 can be paralleled.	1½	16.50
989-4333	SPT-123	B	Hi-level handset for noisy areas (less clips).	1½	18.50
989-4336	SPT-150	B	Same as SPT-123 but with insulated clips.	1½	19.00
989-4314	SPS-305	C	Wall-mount handset holder. For installations with separate ringing systems. 2⅞x5⅝x3".	1½	14.75
989-4323	SPS-1205	C	Same as SPS-305 but with self-contained bell.	1½	21.00
989-4312	SPS-205-MI	A	Master phone with station selector switch; up to 12 stations. Ready for installation. Less connecting wire.	5¼	60.40
989-4306	B-5446	D	Handset hook. For wall or desk-side mtg.	¼	1.70

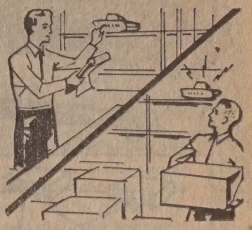
768-2802. Type 852201 Dearborn Cable for Sound-Powered Phones. 2-conductor. 100-ft. spool. Measure from Phone 1 to Phone 2, 2 to 3, etc. Shpg. wt. 3 lbs.....3.50

768-2702. Type 832202 3-Conduct. Cable. For SPS-205 Series. Wt. 2 lbs.....100 ft. Spool 4.11

Intercom Systems for Office and Plant

LET AN INTERCOM SYSTEM SAVE YOU TIME . . SAVE YOU STEPS . . CUT YOUR OPERATING COSTS

Provides An Important Link Between Departments . . . Reduces Switchboard Congestion . . . Keeps Telephone Lines Open



An Intercom System **saves time**—important executive decisions and up-to-the-minute reports are transmitted in an instant. **Saves steps**—key personnel stay where they're needed most, and inter-departmental traffic is reduced to a minimum. **Saves money**—expedites work in every productive area. **Reduces switchboard congestion**—keeps telephone lines open for important incoming calls. **Provides a link between departments**—key people are always in constant contact. **Inexpensive to own and operate**—costs you only a few pennies a day. Whatever your organizational structure, Allied Electronics has an Intercom System for you.

SOLID-STATE INTERCOM SYSTEMS BY *TALK-A-PHONE*

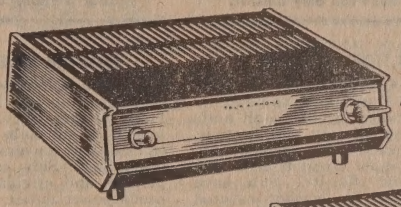
Meet Your Every Requirement . . Offer Time-Proven Dependable Operation

K-LC-2 SOLID-STATE 2-STATION SYSTEM

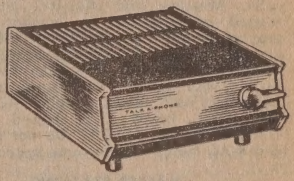
Rugged two-station intercom system for office, plant or warehouse. Consists of one Master Station, one Remote Station and 50 feet of interconnecting cable (up to 2000 feet more can be added). Both Master and Remote can originate calls. Remote can be set for private or non-private operation. Extra Remote Stations (below) can be added at any time. Only Master need be connected to AC power outlet. Master has volume control and pilot light. Master's steel case finished in charcoal gray vinyl and brushed chrome. Remote's case in matching baked enamel. Master, 3⅛x10½x8¾". Remote, 2⅞x7½x8¾". U.L. Listed. For 110-120 VAC. 11½ lbs.

959X0143 ..... **49.00**

959X0153. K-LR-3M Extra Remote Station. Wt., 4 lbs. .... **Each 16.60**



K-LC-2
MASTER STATION



K-LR-3M
REMOTE
STATION

SELECTIVE WIRELESS INTERCOM SYSTEMS

T-LC-33 DELUXE TWO-STATION WIRELESS INTERCOM

Just plug each system into any AC outlet, on the same power company transformer, and you establish instant communications. "Uni-Trans" switch permits dictating or listening. Steel case finished in charcoal gray vinyl and brushed chrome—resists effects of liquids and corrosive atmospheres. Each unit, 3⅛x10½x8¾". U.L. Listed. For 110-120 V, 50-60 Hz AC or DC. Shpg. wt., 16 lbs.

959X0181 ..... **108.00**

T-LC-17 EXTRA STATION. Add any number—same as above. Shpg. wt., 8 lbs.

959X0179 ..... **Each 54.00**

ALL-MASTER WIRELESS SYSTEM

Instantly operating wireless intercom systems, using up to six T-LCM-8906 or up to twelve T-LCM-8912 Master Stations. No installation or wiring problems—just plug each Master into electrical outlets on the same line transformer, and you're ready to talk. Each Master Station can originate calls to any other Master on any of 6 or 12 channels. It can also receive calls on any channel. And, by individually calling other Masters to come in on the same channel, it can set up a conference. T-LCM-8906 system can hold up to 3 separate conversations simultaneously; T-LCM-8912 system, up to 6 separate conversations simultaneously. Each Master has "Uni-Trans" for long periods of continuous transmission to another unit (as in dictation), and "Sonic-Gate" circuit to screen out line noises and hum. 3⅛x14x8¾". Charcoal gray vinyl and brushed chrome. U.L. Listed. For 110-120 V, 50-60 Hz AC-DC.

T-LCM-8906 6-STATION WIRELESS MASTER. Handles up to 6 stations individually or in conference. Wt., 10 lbs.

959X0183 ..... **108.00**

T-LCM-8912 12-STATION WIRELESS MASTER. Handles up to 12 stations individually or in conference. Wt., 12 lbs.

959X0185 ..... **121.00**

MASTER-AUXILIARY SYSTEMS

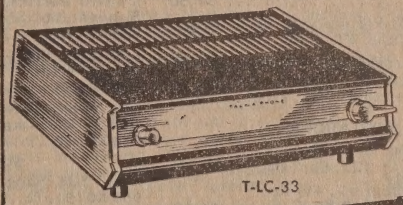
Consists of one or more T-LCM-8906 or T-LCM-8912 Master Intercoms and any number of the T-LCS Auxiliary Stations listed below. Master Stations are described above. Auxiliaries are for use in locations where calls need not be originated, but replies must be made to calls originating from Master Stations. Each Auxiliary is on one fixed channel—from channels 1 to 3—to match that of the Master. Place one or more channel 1 Auxiliaries in one area, one or more channel 2 Auxiliaries in another and one or more channel 3 Auxiliaries in a third. Master can then page any area including other Masters as described above. Auxiliaries can be called by, and reply to any Master in the system. No wiring or cables necessary—simply plug each Auxiliary unit into an electrical outlet on the same line transformer as the rest of the system. Charcoal gray vinyl and brushed chrome. 3⅛x10½x8¾". U.L. Listed. For 110-120 V, 50-60 Hz AC-DC. Shpg. wt. 7 lbs.

959X0187 T-LCS-901. Channel 1. . . Ea. 77.50 ..... 3 Up . . 62.00

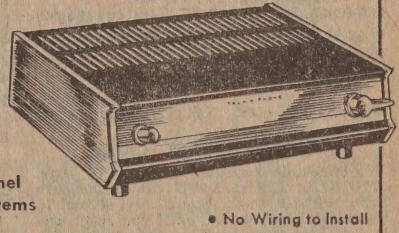
959X0188 T-LCS-902. Channel 2. . . Ea. 77.50 ..... 3 Up . . 62.00

959X0189 T-LCS-903. Channel 3. . . Ea. 77.50 ..... 3 Up . . 62.00

WIRELESS INTERCOMS

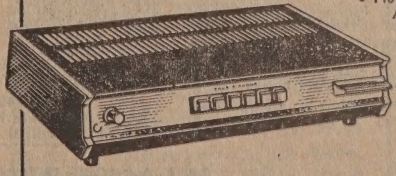


T-LC-33



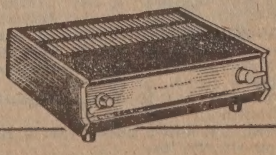
Multi-channel
Wireless Systems

- No Wiring to Install
- Plug Into Any AC Outlet



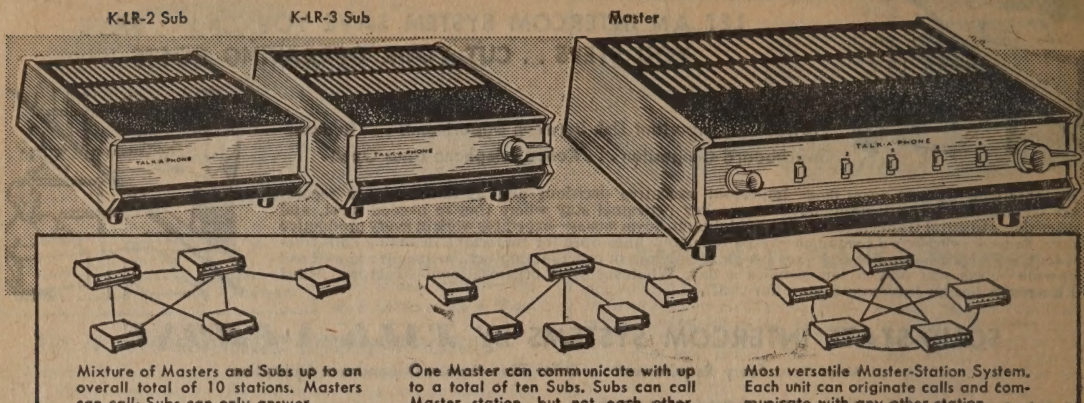
T-LCM

Just Plug
Them In



T-LCS

TALK-A-PHONE Solid-State Intercoms



Mixture of Masters and Subs up to an overall total of 10 stations. Masters can call; Subs can only answer.

One Master can communicate with up to a total of ten Subs. Subs can call Master station, but not each other.

Most versatile Master-Station System. Each unit can originate calls and communicate with any other station.

COMBINATION SYSTEMS

MASTERS AND STANDARD SUBS. Versatile system allows the Master calls to be either private or non-private. Speak to all units simultaneously or single out specific unit. Masters can call each other or any Sub, selectively. Subs cannot originate their own calls. Masters and K-LR-2 Sub have rugged steel cases in leather-textured gray vinyl and chrome. K-LR-2M Sub in grained enamel. *Indicates stainless steel front panel. Masters, 3⅛x10½x8¾"; Desk Subs, 2⅞x7½x8¾". Wall-mounting opening, 4⅛x4⅛x2"; front panel, 4¹³⁄₁₆" square. Less cable, below. U.L. Listed. 110-120 volts, 50-60 Hz AC-DC. Do not mix K-CL and K-AC Masters in the same system.

MASTER STATIONS

K-CL-5 MASTER. To be used with 5-station systems. Shpg. wt., 7 lbs.
959 X0129 ..... 57.50

K-CL-10 MASTER. For use with up to 10-station systems. Shpg. wt., 7 lbs.
959 X0131 ..... 69.50

959 X0106. **K-AC-610 High-Power Master.** For 10-station systems. Wt., 7 lbs. 79.95

SUBSTATIONS

K-LR-2 SUB. Shpg. wt., 5 lbs.
959-0145. Ea. ..... 22.43 3-Up 21.00

K-LR-2M SUB. Shpg. wt., 4½ lbs.
959-0147. Ea. ..... 17.76 3-Up 16.60

***K-LR-2R BUILT-IN WALL SUB.** 4 lbs.
959-0149. Ea. ..... 17.76 3-Up 16.60

959-0175. **KSM Mtg. Accessory.** For above. 4¹³⁄₁₆x2⅛". Shpg. wt., 2 lbs. 5.81

HIGH-POWER SUBS. *See accessories, below.*

INTERCONNECTING CABLE

To determine required quantity of Type 6210, 6226, 5506 and 9911 cables, measure from first station to second only; second to third only; and so on, until you reach the last Master in the system. Do not connect last station to first. Add measurements for total. Consult table at right for proper cable type. Required quantities of Type 6902, 5303 and 6303 cables are determined by measuring from each Sub to nearest Master only. Wt., per 100': Type 6210, 6 lbs.; 6226, 12 lbs.; 6902, 2 lbs.; 5303, 1 lb.; 6303, 2 lbs.; 5506, 4 lbs.; 9911, 5 lbs. *Unshielded; †shielded.

MASTER-SELECTIVE SYSTEMS

STANDARD-POWER MASTERS AND SUBS. For systems using one Master and up to ten Subs. Master can call and listen to one, several or all Subs simultaneously. Subs can call and converse with Master, but not other Subs. Subs can be private or non-private, and originate calls. Only Master needs power outlet. K-LR-3M Sub is finished in baked enamel; all others styled in leather-textured gray vinyl and chrome. Masters, 3⅛x10½x8¾"; Subs, 3⅛x7½x8¾". K-LR-3R: panel, 7³⁄₁₆x4¹³⁄₁₆"; opening, 6½x4½x2". Less cable, below. U.L. Listed. For 110-120 V, 50-60 Hz AC-DC. Only one Master-Station can be used per system.

MASTER STATIONS

K-ML-5 MASTER. Accommodates up to 5 Sub stations. Shpg. wt., 7 lbs.
959 X0171 ..... 48.40

K-ML-10 MASTER. Accommodates up to 10 Sub stations. Shpg. wt., 7 lbs.
959 X0173 ..... 59.20

K-AC-5406 HIGH-POWER MASTER. 10 times greater volume. For up to 5 Subs. 7 lbs.
959 X0165 ..... 59.20

K-AC-5411 HIGH-POWER MASTER. For use with 10 Sub stations. Shpg. wt., 7 lbs.
959 X0167 ..... 71.00

SUBSTATIONS

K-LR-3 SUB. Shpg. wt., 4½ lbs.
959 X0151. Ea. .... 22.43 3-Up 21.00

K-LR-3M SUB. Shpg. wt., 4 lbs.
959-0153. Ea. ..... 17.76 3-Up 16.60

K-LR-3R BUILT-IN WALL SUB. Shpg. wt., 4 lbs.
959-0155. Ea. ..... 17.76 3-Up 16.60

959 X0163. **K-SM-L Mtg. Accessory.** For above. 7³⁄₁₆x4³⁄₁₆x2⅛". Wt. 2 lbs. 5.25

HIGH-POWER SUBS. *See accessories, below.*

SUPER-SELECTIVE SYSTEMS

SELECTIVE MASTER STATIONS. Most versatile type of intercom systems consisting entirely of Master units. Any station can originate a call to any other station or stations and converse with them—several separate conversations can be held simultaneously without interfering with each other. System can be easily arranged so all units are simultaneously in communication with each other. Perfect for holding group conferences at a moment's notice.

Each unit has a translucent indicator that lights up when the unit is in operation. Fast action slide-switch lets you select each station instantly and effortlessly. Also features spring return, press-to-talk lever and volume control. All stations may be more than 1000 feet apart and still maintain excellent communications.

System operates for only a few pennies a day. Bonded leather-textured gray vinyl, trimmed in brushed chrome. Supplied less cables, below. 3⅛x10x8¾". U.L. Listed. 110-120 volts, 50-60 Hz AC or DC. *K-AC 605 and K-AC 510 High-Power Masters available on Special Order.* Do not mix K-LS and K-AC Masters in same system.

MASTER STATIONS

K-LS-5 MASTER. For use in systems with up to 5 Master stations. Wt., 6¼ lbs.
959 X0157 ..... 48.40

K-LS-10 MASTER. For use in systems with up to 10 Master stations. Shpg. wt., 8 lbs.
959 X0159 ..... 59.20

K-AC-505 HIGH-POWER MASTER. For high-noise areas. Provides 10 times the output of K-LS-5 Master above. Accommodates up to 5 Master stations. Shpg. wt., 7 lbs.
959 X0100 ..... 59.20

INTERCONNECTING INTERCOM CABLE (SEE EXPLANATION AT LEFT)

Type No.	Cond.	For Connecting	Stock No.	50' Spools	Stock No.	100' Spools	Stock No.	200' Spools
6210	5 pr.	K-CL-5	959-0111	10.00	959-0112	20.00	959-0113	40.00
6226	13 pr.	K-CL-10, K-AC-610	959-0117	22.00	959 X0118	44.00	959 X0119	88.00
6902	2	Sub to Nearest Master Only	959-0123	1.38	959-0124	2.76	959-0125	5.52
5303	3*	K-ML-5, K-ML-10, K-AC-5406, K-AC-5411	959-0100	2.00	959-0101	4.00	959-0102	8.00
6303	3†	K-ML-5, K-ML-10, K-AC-5406, K-AC-5411	959-0120	3.25	959-0121	6.50	959-0122	13.00
5506	6	K-LS-5, K-AC-505	959-0103	5.50	959-0104	11.00	959-0105	22.00
9911	11	K-LS-10	959-0126	10.50	959-0127	21.00	959-0128	42.00

TALK-A-PHONE INTERCOM SYSTEM ACCESSORIES

HIGH-POWER SUBSTATIONS. All Subs can answer Master, as well as originate calls in Master selective systems when used with K-S-100 switch, at right.

959 X0169. **K-C-20 Trumpet-Type.** 9" re-entrant horn. Shpg. wt., 5 lbs. 31.00

959 X0139. **K-HP-3 Indoor-Type.** 8" speaker. Shpg. wt., 9½ lbs. 22.00

TYPE K-S-100 ORIGINATION SWITCH. Wall-switch, allows High-Power Subs to originate calls. 1¾x5¾x2½". Wt., 1 lb.
959-0161 ..... 5.80

KW-1 WALL-MOUNTING BRACKETS. Use with Subs above, except built-ins. Wt., ½ lb.
959-0177 ..... Per Pair .60

OPTIONAL BUILT-IN CRADLE PHONE. To order any Master station (except K-CL-5, K-CL-10, K-AC-610) with optional built-in cradle phone, insert "Special" in place of regular stock number, and add "H" to Mfr's Type No. Example: Special. K-ML-5H Master with Cradle Phone. Add $38.00 to price of the Master for Model with Cradle Phone.

Call the Allied Electronics Facility Nearest You For Your Electronic Needs

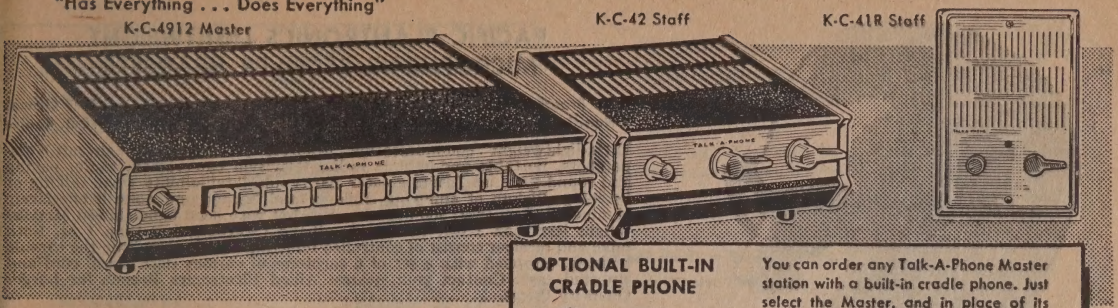
Solid-State Intercoms by *TALK-A-PHONE*

"Has Everything . . . Does Everything"

K-C-4912 Master

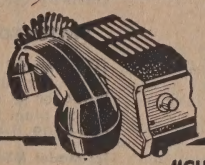
K-C-42 Staff

K-C-41R Staff



- ✓ Easy-to-Use Intercoms with "Built-In Brain" Register Busy Signals, Priority Break-Ins
- ✓ Dozens of Practical, Cost-Saving Applications
- ✓ Private or Non-Private, Noise-Free Operation

OPTIONAL BUILT-IN CRADLE PHONE



You can order any Talk-A-Phone Master station with a built-in cradle phone. Just select the Master, and in place of its regular stock number, insert the word, "Special" and add "H" to the Mfr's Type No. Example: Special. Talk-A-Phone Model K-C-4906H Master with Cradle Phone. Add $38.00 to price of Master for Model with Cradle Phone.

"CHIEF" SOLID-STATE MASTER STATIONS

Deluxe, all-transistor universal Master Stations that can be used in all-Master or Master(s)-Staff(s) systems with capacities of 6, 12, 20 or 30 stations. Effects savings of thousands of man-hours in offices, plants, factories, etc. Masters can operate privately or non-privately and engage in conference calls. In private operation, talk-listen switch is necessary to reply; in non-private, a control is not necessary.

Built-in signal indicates whether line is busy—priority calls can over-ride a busy line. Incoming call is indicated by a light and chime. Master unit includes pushbutton selector, push-to-talk bar, dictation control and volume control. Master Stations may be placed up to one thousand feet apart.

Relays to operate horns, sirens or lights can be connected to operate together with chime in high noise level areas. Master is still fully operational—relay does not take place of Master. Each Master has a junction box with a power supply, and 6-ft. of cable. Steel cases are styled in leather-textured, gray vinyl and brushed chrome. Size, 3⅛x14x8¾". U.L. Listed. For 120 VAC.

Stock No.	Mfr's Type	Capacity	Wt., Lbs.	EACH
959X0121	K-C-4906	6 stations	15	108.00
959X0123	K-C-4912	12 stations	15	121.00
959X0125	K-C-4920	20 stations	16	144.00
959X0126	K-C-4930	30 stations	18	167.00

"CHIEF" SOLID-STATE EXTRA-POWER MASTER STATIONS

"Chief Redi-Power" Master Stations have features of "Chief" Masters above, plus up to 30 watts of extra power. Provide reserve power for conference calls to many stations at once, or for calling individual stations in noisy area. Receive return speech at normal volume. Built-in 30-watt amplifier. Network automatically adjusts output to pre-selected volume level of each station—no division of output when you call several stations at once. Same size, style, finish and AC rating as Masters above. U.L. Listed.

Stock No.	Mfr's Type	Capacity	Wt., Lbs.	EACH
959U0133	K-CRP-5912	12 stations	20	185.00
959U0135	K-CRP-5920	20 stations	21	207.00
959U0137	K-CRP-5930	23 stations	23	230.00

CONNECTING MASTER TO MASTER. Measure from first to second Master only; from second to third Master only; and so on, until you have reached the last Master in the system. Then add all measurements together. For 6-station Masters, use Type 6214 cable; 12-station Masters, Type 6226 cable. For 20-station Masters, double total measured length (two equal lengths of cable run parallel to each other between Masters) and order Type 6226 cable. For 30-station Masters, triple total and use Type 6226 cable.

CONNECTING STAFF TO MASTER. Measure distance from each staff to Master, and total all measurements. Use single length Type 6206 cable to connect "Chief" Staffs to Masters.

CONNECTING HIGH-POWER STAFFS. Same as Staffs above, using 6206 cable, if origination switch is used. If not used, connect each Staff to nearest Master with single 6902 cable.

INTERCOM CABLE. Indoor or outdoor use. 6214 has 7 pairs of conductors; 6226, 13 pairs; 6206, 3 pairs; 6902, 1 pair. Wt., per 100': 6214, 7 lbs.; 6226, 12 lbs.; 6206, 4 lbs.; 6902, 2 lbs.

Type	Stock No.	50' Spool	Stock No.	100' Spool	Stock No.	200' Spool
6214	959-0200	11.50	959-0201	23.00	.....	.....
6226	959-0202	22.00	959X0203	44.00	959X0204	88.00
6206	959-0205	5.50	959-0206	11.00	959-0207	22.00
6902	959-0208	1.38	959-0209	2.76	959-0210	5.52

"CHIEF" ALL-TRANSISTOR STAFF STATIONS

For mixed systems with Masters. Originates calls to private masters with which it is directly connected, answers calls from any Master in system. Cannot talk with another staff. Talk/Listen switch must be used in private operation; non-private operation allows "hands-free" (no switch) conversation. Has monitoring and busy signals, with signal light when other stations call. "M" in Mfr's Type means grained, baked-enamel-gray finish; others, charcoal gray. Powered by Master Station. Metal case, 3⅛x7½x8¾". U.L. Listed.

Stock No.	Mfr's Type	No. of Masters Staff Can Call	Wt., Lbs.	EACH
959X0110	K-C-41	one	5	28.50
959X0112	K-C-41M	one	5	23.50
959X0115	K-C-42	two	5	35.50
959X0116	K-C-42M	two	5	30.50

959X0114. Type K-C-41R Flush Wall-Mount Staff. Same as K-C-41 in operation. 4⅛6x7⅜". Shpg. wt., 4 lbs. 23.50

959X0178. Type K-C-42R Flush Wall-Mount Staff. Same as K-C-42 in operation. 4⅛6x7⅜". Shpg. wt., 5 lbs. 30.50

959-0163. Type K-SM-L Surface Mounting Accessory. 2 lbs. 5.25

959-0177. Type KW-1 Wall-Mounting Brackets. For Staffs (except KC-41R and KC-42R). Reg. 1 pair per station. 8 oz. . . Per Pair .60

HIGH-POWER SOLID-STATE STAFF STATIONS, ACCESSORIES

HIGH-POWER STAFF STATIONS. Provide higher volume output than standard units. Specifically designed for use in noisy surroundings and outdoor areas. Staff can answer Master and, with use of origination switches listed below, can originate calls. For use with any "Chief" system.

A K-C-20 TRUMPET-TYPE SPEAKER. 9" weatherproof speaker featuring talk-back design. Power capacity, 15 watts. Charcoal gray. Shpg. wt., 5 lbs.
959X0107. ..... 31.00

K-C-20 V TRUMPET-TYPE SPEAKER. As above, with volume control adj. to full output.
959X0108. Wt., 5 lbs. 41.00

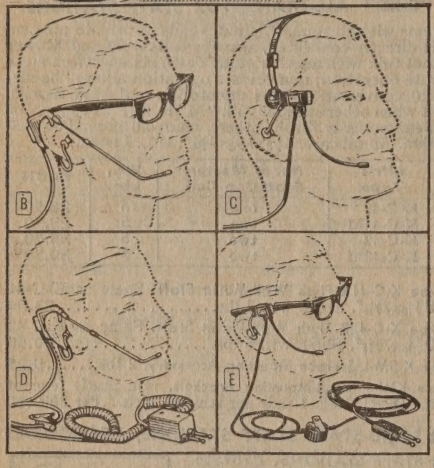
B K-HP-3 INDOOR-TYPE 8" SPEAKER. Charcoal-gray metal baffle. Capacity, 5 watts. Baffle, 12x12x8". 9½ lbs.
959X0139. ..... 22.00

K-HP-3V 8" SPEAKER. As above, but with volume control adj. to full output.
959X0141. Wt., 9½ lbs. 27.00

C ORIGINATION SWITCHES. Make K-C-20 or K-HP-3 operationally equivalent to K-C-41 or K-C-42. With incoming call and busy lights. Wt., 2 lbs.
959-0162. K-S-101. Calls 1 Master. . . . 9.80
959-0164. K-S-102. Calls 2 Masters. . 15.90

D K-S-111 WALL-MOUNT CRADLE PHONE. For listening privacy and/or use in noisy areas. Use as many as needed, in combination with remote speaker in systems where Sub Stations reply to calls. Phone lifted from cradle automatically disconnects remotes in/out calls. When cradled remote operates normally. Also usable with origination switches. 4 lbs.
959X0166. ..... 46.00

Headsets/Mikes; Headsets; Intercom Modules



PACIFIC PLANTRONICS LIGHTWEIGHT MICROPHONE/RECEIVER HEADSETS

- For Broadcasting and Sound, Dispatchers
- Headband or Clipped-to-Eyeglass Models
- Weighs Less than 2 Ounces
- Mobility within 10-ft. Radius

Ultra-lightweight communication headsets for telephone, aircraft, dispatchers, portable and mobile radio, television cameramen, radio, paging and sound systems. Insure greater clarity and intelligibility when talking or listening. Pickup of annoying sibilance and background noise is effectively eliminated. Response: 300-3000 Hz. Headset with head band (MS50 Models) weighs less than 2 oz.; without headband (StarSet), less than 1 oz. Both mike and receiver consist of controlled reluctance elements within the capsule housing. Supplied with a set of 6 earpieces of various sizes, tinsel cord and zippered case. Contact your nearest Allied Electronics Branch for Larger Quantity Prices.

SWITCHBOARD TYPE FOR RADIO CONSOLES, TV CAMERAMEN

[A] [C] **Model MS50/T55-2.** Replaces carbon type headsets. Microphone amplifier output at 50 ohms, 112 mV. 300 ohm receiver requires 0.1 mW input for 98 dB SPL. 10-ft. retractile cord terminated with telephone type double plug. Supplied with headband. Shpg. wt. 16 oz.
889-4409. 1-4 Ea. 95.80 5-9 Ea. 86.22 10-24 Ea. 81.45 25-Up Ea. 76.64

[E] **Model MS50/T55-6.** Same as above except terminated with PJ051B Plug. Can be used with Clark Intercom System at bottom of page.
889-4410. 1-4 Ea. 107.00 5-9 Ea. 96.30 10-24 Ea. 91.00 25-Up. Ea. 85.60

[B] [D] **Model HS-0108-1B "StarSet".** New ultra-compact microphone-receiver headset which rests over the ear. No headband required. Microphone amplifier built into telephone type double plug has nominal output of 100 mV into 50 ohm resistive load, 10 ft. retractile cord. Amplifier provides switchable gain with a decrease in amplifier sensitivity of 12 dB when sound level drops below 80 dB SPL. Shpg. wt. 18 oz.
889-4400. 1-4 Ea. 115.00 5-9 Ea. 104.25 10-24 Ea. 98.45 25-Up Ea. 92.65

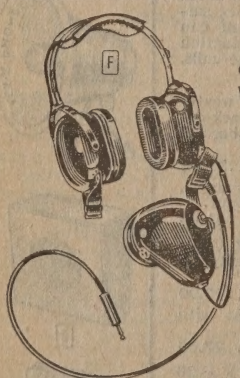
UNTERMINATED HEADSETS FURNISHED WITH HEADBANDS

[C] **Model MS50-59.** 3000 ohm dynamic microphone output 1.55 mV. 0.1 mW required for 98 dB SPL output from 600 ohm receiver. 60 inch cord is pigtailed. Shpg. wt. 14 oz.
889-4402. 1-5 Ea 59.95 5-9 Ea. 53.96 10-24 Ea. 50.96 25-Up. Ea. 47.96

Model MS50-60. Same as above, except 150 ohm microphone, output 0.275 mV. 60" pigtailed cord. Shpg. wt. 14 oz.
889-4403. 1-4 Ea. 59.95 5-9 Ea. 53.96 10-24 Ea. 50.96 25-Up. Ea. 47.96

Model MS40-4 Microphone. 3000 ohm impedance, output 1.55 mV, 60" pigtailed tinsel cord. Shpg. wt. 13 oz.
889-4401. 1-4 Ea. 44.95 5-9 Ea. 40.46 10-24 Ea. 38.20 25-Up. Ea. 35.96

Model MS40-5 Microphone. 150 ohm impedance, output 0.275 mV, 60" pigtailed tinsel cord. Shpg. wt. 13 oz.
889-4405. 1-4 Ea. 44.95 5-9 Ea. 40.56 10-24 Ea. 38.20 25-Up. Ea. 35.96



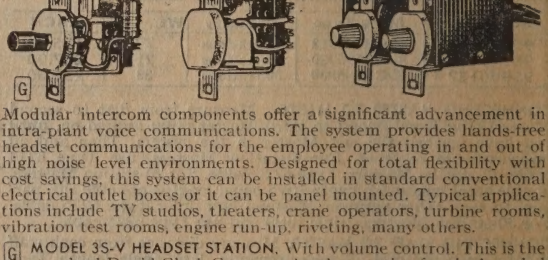
DAVID CLARK
600 OHM RECEIVER CIRCUIT WITH CARBON MICROPHONE

- Hands-Free Communications in High-Noise Environments
- For Indoor/Outdoor Uses

[F] **MODEL 15BM.** For high level noise areas up to 135 dB. Mike shield, push-to-talk switch. Dynamic earphone, 3-conductor, 2½-ft. cord, PJ-051 plug.
759-9034. Wt. 3 lbs. 115.50
MODEL 800HM. As above, but has behind the head band.
759-9030. Wt. 3 lbs. 115.50

MODEL 10BB. For medium noise areas up to 120 dB. 3-conductor, 2½-ft. cord, Switchcraft #267 plug. Infinite adjustment of boom mike.
759-9030. Shpg. wt. 2 lbs. 96.75
MODEL 800HB. As above, but has behind the head band.
759-9055. Shpg. wt. 2 lbs. 96.75
MODEL 720HB. For low noise areas up to 100 dB. Dynetic earphone, 3-cond. 2½-ft. cord. Switchcraft #267 plug.
759-9042. Shpg. wt. 2 lbs. 77.00
MODEL 710 HB. As above, but single ear. Up to 85 dB.
759-9038. Shpg. wt. 2 lbs. 62.50
ASP-124-12 EXTENSION CORD. 12-ft., 3-cond. cord for Models 15BM and 800HM. PJ-051 plug, Switchcraft 838 jack.
759-9010. Shpg. wt. 1 lb. 12.50

DAVID CLARK MODULAR INTERCOM COMPONENTS



Modular intercom components offer a significant advancement in intra-plant voice communications. The system provides hands-free headset communications for the employee operating in and out of high noise level environments. Designed for total flexibility with cost savings, this system can be installed in standard conventional electrical outlet boxes or it can be panel mounted. Typical applications include TV studios, theaters, crane operators, turbine rooms, vibration test rooms, engine run-up, riveting, many others.

[G] **MODEL 3S-V HEADSET STATION.** With volume control. This is the standard David Clark Company headset station for single ended talk line installations. Terminal strip has access for wiring handset or hand held microphone.
759-9022. Shpg. wt. ½ lb. 41.75

[H] **Model 3PA-2 Amplifier.** Eight or more stations. Output: 2 watts; input: 40,000 ohms. Gain 28 dB.
759-9016. Shpg. wt. 1 lb. 62.75

[H] **MODEL 2LA-500 LINE AMPLIFIER.** Used for installation with from two to eight headset stations (Model 3S-V). Input: 1000 ohms. Output: 500 mw. Provides 25 dB voltage gain.
759-9015. Shpg. wt. ½ lb. 37.00

[J] **MODEL 2PS-24 POWER SUPPLY.** A well regulated power supply specifically designed for intercom use. An on/off switch is provided. Also includes a pilot light for quick visual reference.
759-9018. Shpg. wt. 2 lbs. 98.00

Telex Language Lab, General-Purpose Headsets

DELUXE DUAL HEADSET WITH BOOM MIKE

- Meets all Language Lab Requirements
- Mike Rotates 360° and Is Easily Detached
- Headset Response a Full 20-20,000 Hz
- Dynamic, Noise Canceling Microphone

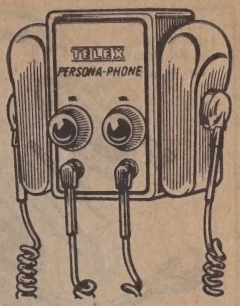
MODEL 2400-42. Beautifully made dynamic headset with boom mike. Headset response is an excellent 20-20,000 Hz. Field-detachable dynamic noise-canceling mike has 100-8000 Hz response and 360° rotation. Impedances: headset, 600 ohms; mike, 300 ohms. Soft, removable earcushions form snug acoustic seal. With 5-ft. cord and straight ¼" molded plugs.

959-2242. Shpg. wt. 1½ lbs.....34.95
959-2241. Model 2400-19. Same as above, but has right-angle plugs. Shpg. wt., 1 lb.....34.95

959-2202. Model ACV-4 Extra Foam Earcushions. Soft, comfortable, reduce outside sounds. Brown, washable. 2 oz...Pair 1.70

PERSONA-PHONE PRIVATE LISTENER FOR AUDIENCES

- Has Two Earsets—Each With Its Own Separate Volume Control
- Ideal for Churches, Theaters and Other Institutions With Audience PA System
- Connects Easily to Sound System
- Lets Each Listener Hear Clearly



MODEL 62185.00. Ideal for large auditoriums, churches, theaters, museums, exhibits, libraries—wherever audiences might have trouble hearing. Increases enjoyment of programs by letting listeners hear comfortably without straining.

Operate from institution's 70-volt, 25-volt, or 8-ohm sound system. Connects easily and quickly to system and is ready to operate without complicated wiring. Has built-in matching transformer and terminal strip for simplified installation.

Compact dual-receiver unit provides individual listening for audiences of large institutions. Unit has two earsets, each with its own volume control. User can adjust sound to his personal preference. Earshells fit all listeners, even those who wear glasses; will not disturb ladies' hairdos. Earsets have 5-ft. coil-cords; hang up on control box when not in use; weigh less than 1.5 oz. Gold color. 4¾x3⅞x2⅞".

959-2262. Shpg. wt. 5 lbs.....34.00

QUALITY HEADSETS FOR EVERY APPLICATION

"TWINSET" HEADPHONES

MODEL HTW-2. Lightweight, comfortable headphones for pilots. Hams, etc. Sound is fed direct to ears through adjustable arms. Background sounds remain intelligible. Magnetic elements rest at temples. 500 ohms. Weighs only 1.6 oz. Complete with 5-ft. cord ¼" plug. Shpg. wt., 10 oz.

959-2228.....15.80

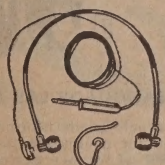
SINGLE HEADPHONE WITH MIKE

MODEL CS78. "MAGNA-TWIN" MARK III. Professional type. Magnetic headphone element with response of 50-10,000 Hz; carbon boom mike, 50-60,000 Hz. Impedance: headphone, 5000-600 ohms; mike, 20 ohms. Mike cannot accidentally rotate. 5-ft. cord, ¼" phone plugs. Gray.

959-2205. Shpg. wt. 1 lb.....31.60

LIGHTWEIGHT SECRETARIAL HEADSETS

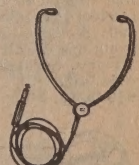
"TELE-FI" HEADSET



Designed for comfort as well as for fine performance. Worn under the chin for ease of operation and so as not to mess hairdos. Headset delays sound to one ear for improved clarity. Frequency Response, 60-6000 Hz. Earloop included for one-ear listening. Choice of 15-ohm or 2000-ohm impedance. Complete with 5-ft. cord and ¼" phone plug.

959-2209. Model HFR-91. 15 ohms. 1 lb. 6.00
959-2211. Model HFY-91. 2000 ohms. 1 lb. 6.00
959-2200. Model 2200 Replacement Cord. For HFR, HFY, and HMY-2. 3 oz.....2.25

SECRETARY'S MONOSET

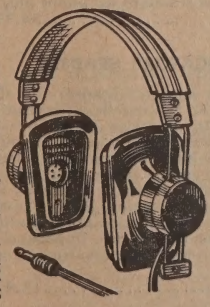


MODEL HMY-2. Comfortable, weighs only 1.2 oz. Worn under the chin for convenience; keeps headset cord from getting in the way; won't mess hairdos. Ideal for use in transcribing from office dictation equipment. Has magnetic element, metal housing, removable earplugs. Frequency Response, 50-5000 Hz. Impedance, 2000 ohms. Maximum Input, 25 milliwatts. Complete with 5-ft. cord and attached standard ¼" phone plug. Takes same replacement cord as "Tele-Fi" secretarial headset at left.

959-2224. Shpg. wt. 8 oz.....9.30

MODELS FOR HAMS, CB, LANGUAGE LABS AND SWL'S

FULL-FIDELITY HEADSET FOR FINE PERFORMANCE

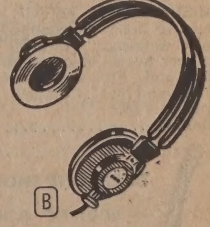


MODEL 820-02. Lightweight headset reproduces the entire orchestral spectrum with amazing fidelity. Provides enjoyable private listening, makes music a personal experience. Ideal for music courses, libraries, etc. Weighs only 10 ounces. Can be worn over head, or under chin to avoid ruffled hairdos. Comfortable, lets you listen for hours without strain. 50-18,000 Hz frequency response. Impedance, 4 ohms. High-impact plastic phones, vinyl-covered spring-steel headband. Circumaural earcushions reduce outside noise; remove easily for cleaning. 6-ft. cord, molded plug.

959-2235. Shpg. wt. 1 lb.....9.99

959-2236. Model 820-04. Above, but 600 ohms. Shpg. wt., 1 lb.....13.25

- Wide-Range Response for Music
- Choice of 4 or 600 Ohms



A "TELESET" HEADSET

MODEL HM-100. Dual headset ideal for Amateurs, CB'ers, shortwave listeners, others. Magnetic element. Adjustable stainless-steel headband. 50-10,000 Hz. 2000 ohms. 5-ft. cord, ¼" phone plug.

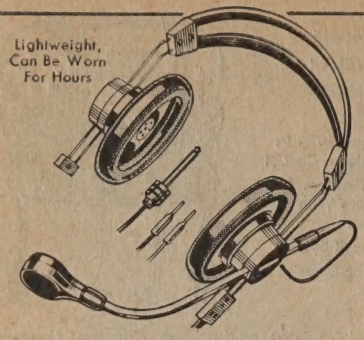
959-2216. Shpg. wt., 8 oz.....14.50
959-2220. Model HM-500. Above, but 500 ohms. Wt., 8 oz...14.50

B LOW-PRICED DUAL HEADSET

Provides faithful sound reproduction. Lightweight, adjusts to fit anyone. Removable earcushions. 5-ft. cord, ¼" phone plug.

959-2233. Model 610-2. 2000 ohms. Shpg. wt., 1 lb.....6.95
959-2232. Model 610-1. 600 ohms. Shpg. wt., 1 lb.....6.95

Allied Headphones . . Quality at Low Prices

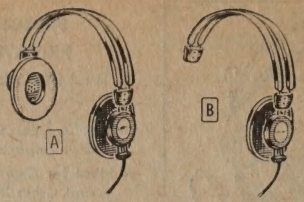


HEADSET WITH BOOM MIKE

- Earcushions Reduce Outside Sounds
- Sensitive Ceramic Boom Mike

Lightweight dual headset with boom mike is perfect for Hams, CB'ers, language labs, many other uses. Earpieces have extra-heavy-duty magnets for clear voice reproduction. Vinyl-covered headband. Comfortable ear-encompassing cushions are removable and washable. Earpieces adjust for perfect fit. Sensitive mike has ceramic element. Heavy-duty cord has phone plug for both mike and headset. Headset, 2000 ohms; mike, high impedance. Gray. Wt. 1½ lbs.

706-9006. Type 33-5006 ..... 22.00



A DELUXE DUAL HEADPHONES

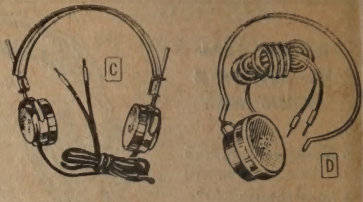
Excellent-quality headset for Amateur and CB use. Lightweight, with vinyl-covered double headband. Adjustable earpieces have removable ear-encompassing cushions that block out distracting noise from the surrounding area. Heavy magnets for clear sound. Supplied with heavy-duty 5-ft. cord, standard ¼" phone plug. Gray. Shpg. wt., 1 lb.

705-9000. Type 33-5004. 2000 ohms . 7.95
706-9001. Type 33-5008. 8 ohms 7.95

B DELUXE SINGLE HEADPHONE

Deluxe headphone for receiver monitoring and other uses. Perfect for mobile CB, since some States permit only a single phone for mobile operations. Vinyl-covered headband. Comfortable earcushion is removable. 1000 ohms. Five-ft. cord with ¼" phone plug. Shpg. wt., 1 lb.

706-9002. Type 33-5001 ..... 5.95



C LOW-COST DUAL HEADPHONES

General-purpose headphones suitable for Amateur use and shortwave listening. Vinyl-covered double headband with easily adjustable yokes for comfort. Powerful Hyflux Alnico magnets. 1⅞" diaphragm. 4½-ft. high-quality plastic cord with phone tips. Terminals are inside the earphone. Shpg. wt., 1 lb.

706-9003. Type 33-5002. 2000 ohms . 3.95
706-9004. Type 33-5005. 11 ohms. Same as above, but with phone plug 4.49

D LOW-COST SINGLE HEADPHONE

Dependable headphone, suitable for hard-of-hearing installations, receiver and crystal set monitoring, other applications. 1⅞" diaphragm. 4½-ft. high-quality plastic cord with phone tips. Spring-metal headband permanently attached. 1000 ohms impedance. Shpg. wt., 8 oz.

706-9005. Type 33-5003 ..... 1.95

TWO-WAY TELEPHONE AMPLIFIER

REALISTIC MODEL 43-230. Conduct "hands-free" telephone conversations. Just place receiver in cradle and talk. Solid-state circuit. No installation required. Operates from one 9-volt battery. Earphone for privacy. Speaker, 3½x2"; cradle, 10¼x 4½x3¼".

910-0046. Shpg. wt. 4 lbs. ... Each 14.95

SNAP-ON TELEPHONE AMPLIFIER

REALISTIC MODEL 277-077. Designed to eliminate noisy distractions and for the hard-of-hearing. Powerful 4-transistor amplifier boosts voice up to 5 times normal sound. Fits any standard receiver. 2⅝" around by 1". Complete with battery. Shpg. wt.1 lb.

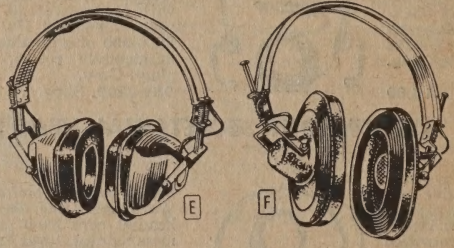
910-0047 ..... Each 7.95

TELEPHONE SHOULDER REST

REALISTIC MODEL 279-606. Leave your hands free to work while you converse on the phone. Folds neatly out of sight when not in use. Attaches easily to any phone. Shpg. wt. 1 lb.

910-0100 ..... Each 1.49

SUPEREX HEADPHONES



E HEADSET FOR LANGUAGE LAB USE

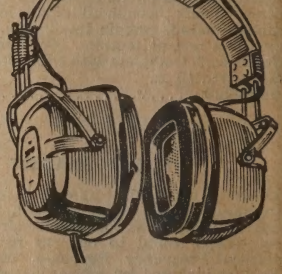
MODEL AP-S. Deluxe lightweight headset for prolonged use in language labs and for communications. Designed for comfort as well as for fine performance. So comfortable, lets you listen for hours without tiring. Soft, vinyl-covered foam earcushions provide easy listening; are washable. Has an excellent frequency response of 80-12,000 Hz. Factory connected for high-impedance 600-ohm output. Leads may be changed to 4-16 ohms. Comes complete with 7-ft. 4-conductor cord and attached standard ¼" phone plug.

889-8700. Shpg. wt. 3 lbs. 24.99

F "COMMUNICATOR" HEADSET

MODEL COM-S. Extremely-sensitive headset for all communications applications. Has excellent frequency response of 100-10,000 Hz. Provides highly intelligible voice reception. Soft, vinyl-covered, foam-filled washable earcushions block out external noise, and are so comfortable you can listen for hours without tiring. Lightweight, fully adjustable headband is designed for comfort and easy listening. Phones have dynamic elements for crisp reproduction of the audio range at all communications frequencies. Impedance, 4-16 ohms. Comes complete with 7-ft. two-conductor cord and ¼" phone plug.

889-8710. Shpg. wt. 1 lb. 13.99



AVIATION/MARINE HEADSET

- High Intelligibility in Noisy Areas
- Lightweight and Comfortable
- 10' Retractable Cord with Plug

MODEL AV-NS-7. Features special noise-shield for maximum intelligibility of reception despite elevated noise level in high noise areas. External noise is attenuated up to 50 dB.

Lightweight and comfortable, designed for uninterrupted listening for long periods. Can be worn comfortably with glasses. Lets you listen for hours without strain. Contoured foam earcushions are so soft and easily worn that pressure is no problem even during long sessions at the radio receiver. Spring-steel headband is adjustable and padded for easy listening.

Excellent frequency response of 40-15,000 Hz. Impedance, 600 ohms. 10-ft. retractable cord, phone plug.

889-8702. Shpg. wt. 3 lbs. .. 45.00
889-8726. Model SX-NS-7. Above, 4-16 ohms; 7-ft. straight cord 40.00

FOR INDUSTRIAL-TYPE HEADPHONES, SEE THE DAVID CLARK AND PACIFIC PLANTRONIC LISTINGS ON PAGE 588 OF THIS CATALOG

Realistic® Portable Tape Recorders

"MINISETTE" MINIATURE CASSETTE RECORDER FITS IN YOUR POCKET

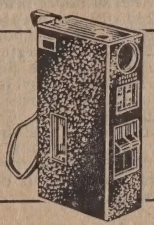
- Battery Operated For Complete Portability
- Level Meter; Full Complement of Controls
- Easy Cassette Operation Saves Valuable Time

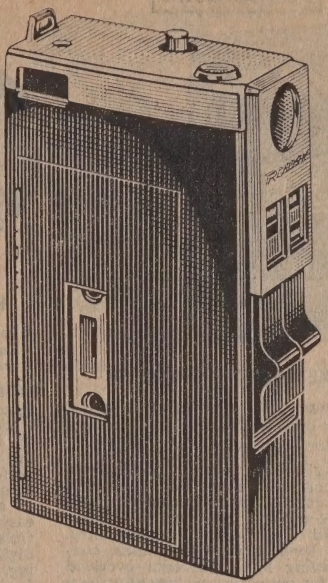
69.95

A miniature cassette tape recorder ideally suited to serve as a portable office for the student or businessman on the move. Records and plays up to 2 hours on a single cassette to let you dictate letters, take notes, record lectures, or study pre-recorded tapes. Features positive action slide function controls, combination record level meter/battery meter, external mike and earphone jacks, built-in mike and AC adapter jack. Includes 4 penlite batteries that are easily replaced in a slide-out case. Size, 6⅜x3¾x1⅞".
910-0048. Type 14-864. Shpg. wt. 4 lbs. 69.95
910-0049. Type 14-854. AC Adapter. Shpg. wt. 8 oz. 5.95

Deluxe Carrying Case Gives Full Protection Wherever You Go

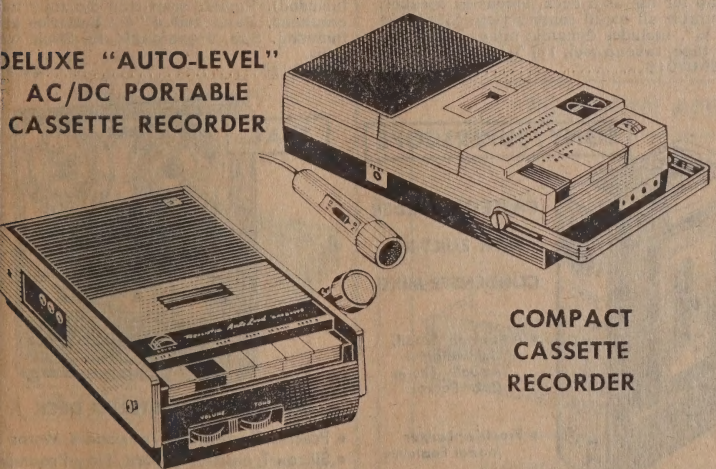
Built-In Microphone Makes It Easier To Record





REALISTIC® PUSHBUTTON CASSETTE RECORDERS

DELUXE "AUTO-LEVEL" AC/DC PORTABLE CASSETTE RECORDER



- Remote Control Mike
- Safety Record Interlock

59.95

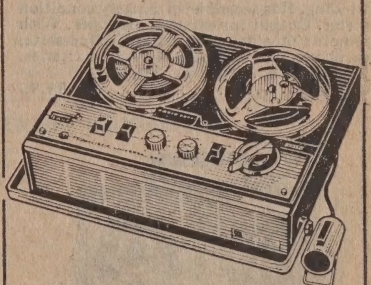
This cassette recorder gives first-class service with all the features of more expensive machines. Includes a full complement of controls: fast forward and rewind, play and record—all with piano-type pushbutton keys. Automatic record interlock prevents accidental erasure of valuable cassettes and a combination record level/battery condition indicator assures perfect recordings every time. Complete with remote pause control microphone, earphone for private listening, auxiliary source patchcord, and a genuine leather carrying case to protect against damage on the go. Overall size, 2⅜x5½x9¾". Powered by AC or 6 "C" batteries. (Not incl.) Shpg. wt. 5 lbs.
910-0050. Type 14-852 ..... 59.95

COMPACT CASSETTE RECORDER

- Record Level Indicator
- Remote Control Mike

29.95

Now you can have the convenience of pop-in cassette action with a high performance recorder at a price substantially lower than you'd expect to pay. The 14-857 cassette recorder gives you the features and performance of a machine costing much more. Features solid-state circuitry for instant-on operation, safety record interlock to prevent accidental erasures, combination record level/battery condition indicator, complete controls including fast forward and rewind, auxiliary source input jack, and a remote pause control microphone. Complete earphone, microphone case and batteries. Overall size, 9¼x4¾x2½". Shpg. wt. 4 lbs.
910-0051. Type 14-857 ..... 29.95
910-0049. Type 14-854. AC Adapter for Above Recorder. Shpg. wt. 8 oz. 5.95



PORTABLE AC/DC 5" REEL-TO-REEL TAPE RECORDER

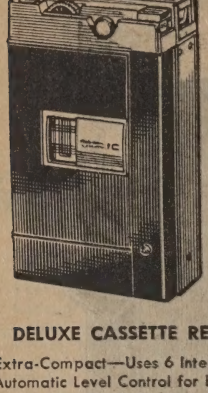
59.95

- Remote Control Dynamic Mike
- Digital Tape Index For Fast Editing
- Plays and Records at 1⅞ or 3¾ ips

Get perfect recordings every time with maximum operating ease and simplicity. Features include a remote control dynamic mike, full-range tone control, recording level meter, digital tape index, safety record interlock, fast forward and rewind, monitor switch, plus earphone and aux. input jacks. Delivers full, rich sound from a quality 3"x6" speaker. Response, 100-8,000 Hz at 3¾ ips. 3 hours recording time with 900' tape at 1⅞ ips. Powered by AC or 6 "D" batteries. (Not incl.) Wt. 8 lbs.
910-0052. Type 14-882 ..... 59.95

Tape Recorders for Business, Home or School

PANASONIC



DELUXE CASSETTE RECORDER

- Extra-Compact—Uses 6 Integrated Circuits
- Automatic Level Control for Even Recording
- Easy-to-Use Single Touch-Lever Operation

MODEL RQ-210S. This ultra-compact lightweight recorder features six integrated circuits for exceptional performance, smaller size. Records and plays up to 2 hours on standard Philips-type tape cassettes. Automatic level control maintains constant recording level, prevents overload distortion, for perfect recordings effortlessly. Delivers crisp, clear sound on playback through quality speaker.

Convenient touch-lever control allows fast, easy operation. Quick pop-up cassette loading and removal—no tape threading or rewinding. Has record level/battery condition meter. Output for external amplifier. With remote stop-start mike, stand, C-60 cassette, earphone, carrying case, 4 "AA" batteries. 1⅞x3¾x6⅞". Shpg. wt. 2½ lbs.

889S0521.....99.95

WOLLENSAK

HIGH FIDELITY TAPE RECORDER

- Powerful 10-Watt Push-Pull Amplifier
- Convenient Keyboard-Type Pushbuttons
- Provision for Public Address System Use

MODEL 1500SS. Performance-proven 7-inch recorder is packed with features for convenience and versatility. Ideal for home, school or business. Boasts a powerful 10-watt push-pull amplifier for true high-fidelity performance. Solid-state design for dependable, long-life operation. Provision for use as a public address system. Convenient, easy-to-use keyboard-type push-button controls. Record level indicator. Accurate digital counter for easy indexing and editing. Tape lifters protect heads during fast forward and rewind.

Automatic head demagnetization. Records and plays 2-track mono at 7½ and 3¾ ips. Response, 40-15,000 Hz at 7½ ips. Signal-to-Noise ratio, better than 48 dB. Inputs for mike and radio or phono. Outputs: preamp for use as a deck, extension speaker. Durable all metal construction. 6½x10¼x11¾". Includes dynamic mike. 7-inch reel of tape, takeup reel. 117 VAC. Wt. 20 lbs.

989U7015.....184.95

CROWN

BATTERY/AC CASSETTE RECORDER

- Features Easy-to-Operate Sliding Controls
- Operate Anywhere on Batteries or AC
- Includes Remote Stop-Start Microphone

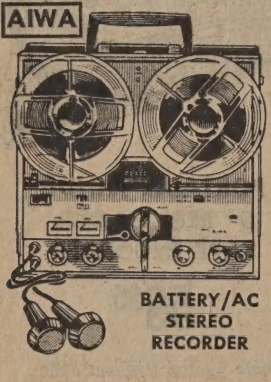
MODEL CTR-320W. Precision-crafted ultra modern cassette recorder is ideal for business men and students. Great for dictating taking notes or recording lectures. Record and plays up to two full hours of two-trac mono on instant-loading tape cassettes Operates from 4 "C" batteries or standar AC.

Features extra convenient slide controls fo fast forward, play, stop and eject. Specia "lock" switch lets you stop the tape at an point during record or play. Unusually slim and compact styling for easy portabilit and storage. Has volume control and record ing level meter.

Inputs for mike and auxiliary. Earphon jack allows private listening (earphone no included). Remote start-stop dynamic mi crophone, stand and 4 "C" batteries ar included. Size, 9½x6¾x2⅛-in. Shpg. wt 4 lbs.

759X8120.....49.9

AIWA



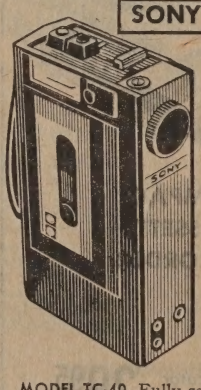
BATTERY/AC STEREO RECORDER

MODEL TP-1012. Plays 4-track stereo or mono anywhere. Operates on 8 "D" batteries, 12 VDC car cord or 117 VAC. Boasts many big recorder features. Includes a full 7-inch reel capacity, record level meters for each channel, single-knob function control, record interlock, automatic shut-off, digital counter and pause control. Has AC bias erase, two built-in 6x4-in. speakers, compartment for 2 mikes, AC line cord. Records/plays at 7½, 3¾ or 1⅞ ips speeds. Offers frequency response of 50-60,000 Hz at 7½ ips. 5-watt output.

Inputs for 2 mikes, 2 auxiliaries. Outputs for stereo headphones, external speakers. With 2 mikes, 5" reel of tape, 7" takeup reel, batteries and 117 VAC cord. Size, 13½x12¾x7¼".

729U0612. Shpg. wt. 17 lbs.....149.95

SONY/SUPERSCOPE



CASSETTE-CORDER WITH BUILT-IN CONDENSER MIKE

- Amazingly Small, Lightweight—Actually Fits in Coat Pocket
- Provides Larger Model Features

MODEL TC-40. Fully self-contained cassette recorder that is really small and lightweight, yet provides performance comparable to larger models. An ideal choice for meetings, lectures—anywhere quality voice recordings are desired. Counter-balance flywheel mechanism allows you to carry and record in any position.

Built-in electret condenser mike eliminates need for external or remote microphones. Also features a built-in speaker for good sound reproduction. Combination record level/battery condition meter provides recording volume control; shows you when batteries are weak. Automatic recording control assures distortion-free recordings. With 4 "AA" batteries, C-30 cassette, vinyl carry case, shoulder strap.

949X7040. Shpg. wt. 3 lbs.....99.95

TEAC

AUTO-REVERSE STEREO DECK

- Precise Hysteresis-Synchronous Motor
- Silicon Transistor Record/Play Preamp

MODEL A-6010. Professional-quality automatic-reversing stereo tape deck records 4 track stereo or mono in one direction plays in both directions. Tape reverses automatically at end of play—no reel turn over or rethreading. Reverse is activated by either sensing foil or phase sensing system signal recorded on tape.

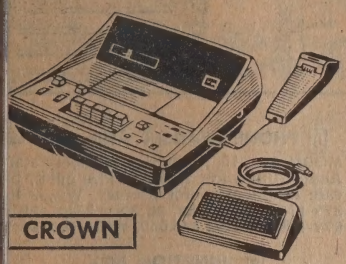
Precision hysteresis-synchronous motor assure exact 7½ and 3¾ ips speeds. Features separate silicon-transistor record and playback preamps; separate record, erase play heads; reverse play head. Two large VU meters; tape tension switch; automatic shutoff; 4-digit counter; tape and source monitoring; built-in stereo headphone amplifier; mixing facilities.

Response: 30-20,000 Hz; wow/flutter, 0.08% at 7½ ips. S/N: 55 dB. Walnut case. 21 17½x8¼". 117 VAC. From Japan.

959Z1210. Shpg. wt. 52 lbs.....664.5

Solid-State Tape Decks and Telephone Devices

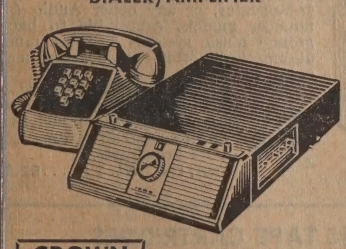
FULL FEATURE SECRETARIAL CASSETTE RECORDER



- For Dictating and Transcribing
- Machine Includes Footswitch With Start, Stop and Backspace
- Accepts All Standard Tape Cassettes

MODEL CDM-10. Combines the best features of a cassette tape recorder and a professional dictating machine. Plays back dictated tape through earphone or speaker for transcribing on typewriter. Foot pedal starts and stops tape, also reverses to repeat the last 7 seconds of dictation. Accepts dictation using any standard cassette—records and plays up to 2 hours. Excellent sound quality. Has capstan drive, tape counter. 3⅛x 4¾" speaker, pop-up cassette ejector, pushbutton recording controls, record level indicator, tone control. 5⅝x11¼x 12⅜". With remote-control mike, steno earphone, foot pedal. AC/battery.
759X8107. Shpg. wt. 12 lbs.....**199.95**

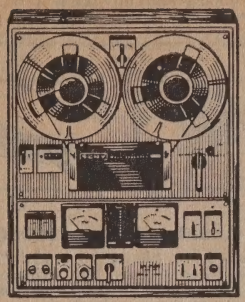
FULLY AUTOMATIC TELEPHONE DIALER/AMPLIFIER



- Memorizes Up To 26 Telephone Numbers
- Built-In Telephone Amplifier Allows Others to Monitor Calls

MODEL CAD-8. Just press a button and your telephone will dial automatically. Memorizes up to 26 different numbers. Built-in voice amplifier has switch to boost sound enabling others to hear conversation. Simply dial a number once and it becomes magnetically recorded for future automatic dialing. Manual switch for regular dialing. Recorded numbers can be renewed whenever desired. Name panel with selector knob accommodates 26 names. Call button activates automatic dialing. Uses standard telephone socket. 2¾x9⅛x 7⅛". AC.
759X8104. Shpg. wt. 8 lbs.....**119.95**

SONY/SUPERSCOPE



DELUXE 3-HEAD STEREO DECK

- Three Heads Permit Special Effects
- Non-Magnetizing Record Head Cuts Hiss

MODEL 630-D. Professional-quality tape deck records superb 4-track stereo or mono; plays through your system or console. Three heads and built-in switching for sound-on-sound, echo and direct monitoring. Non-magnetizing record head and scrape flutter filter reduce tape modulation and hiss.

Large, easy-to-read professional VU meters' slide-type recording level controls for accurate level adjustment. 4-digit tape counter and pause control with lock for easy editing. Tape/source monitor. Retractomatic pinch roller allows you to thread tape quickly and easily. Automatic tape lifters protect heads during fast forward and rewind. Automatic shutoff.

7½, 3¾, 1⅞ ips. Response, 20-22,000 Hz; flutter/wow, 0.09% at 7½ ips. Walnut case. 7¼x16x19". Dust cover, 7" takeup reel, patch cords. 117 VAC. Japan.
949U7063. Shpg. wt. 26 lbs.....**299.50**

VALUE-PRICED STEREO DECK

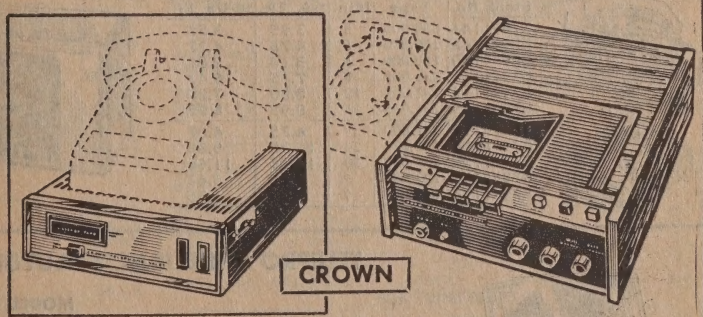
- Has Sound-with-Sound Capability
- Front Stereo Headphone Monitor Jack

MODEL 252-D. Two-speed stereo tape deck has quality and features usually found only in higher-priced equipment. Record 4-track stereo or mono at 7½ and 3¾ ips; play through your home music system or console with true-to-life fidelity. Boasts clean, uncluttered styling for smart appearance.

Offers sound-with-sound capability; stereo headphone monitor jack; retractomatic pinch roller for easy tape threading; vibration-free motor; special scrape flutter filter to prevent tape modulation distortion; non-magnetizing record head eliminates hiss; easy-to-read dual-comparison record level meters; pause control and push-to-reset digital counter for editing and indexing.

Automatic tape lifter protects head. Automatic shutoff. Response: 30-18,000 Hz; flutter/wow, 0.12% at 7½ ips. S/N: 52 dB.
949U7052. Japan. Wt. 18 lbs.....**119.50**

TELEPHONE ANSWERING EQUIPMENT



AUTOMATIC VALET

- Highly Dependable Solid-State Circuit
- Answers Phone and Delivers Message
- Records Message with Separate Recorder

MODEL CTA-4100. Automatic answering and message-taking service at a budget price. Voice induction device automatically answers phone, delivers your pre-recorded message on endless-loop tape cartridge. Message can be erased for re-recording as you desire.

Records caller's message, using any standard tape recorder with remote-control facilities. Accepts about thirty calls with 3" reel tape recorder, more calls with larger size reel. Wood-grain steel cabinet, 3⅜x8½x10⅞". With microphone. For 117 V, 60 Hz AC. From Japan. Shpg. wt., 7 lbs.
759U8110.....89.95

ANSWERER/RECORDER

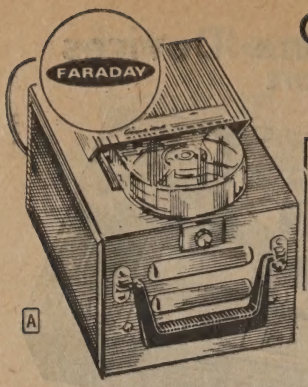
- Has Built-in Cassette Tape Recorder
- Answers Phone and Delivers Message
- Records Caller's Message for Playback

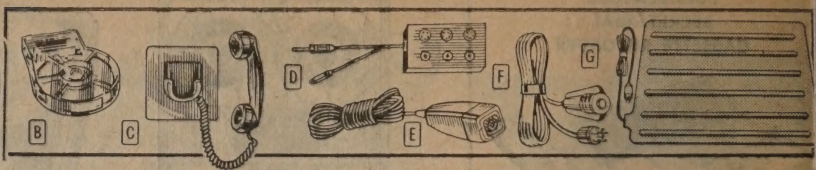
MODEL CTA-4400. Answers automatically. Gives up to 30-second message pre-recorded on endless-loop tape, also records caller's message on built-in cassette recorder for playback later. Voice-activated recorder may be used separately. Uses standard cassettes.

Pushbutton controls for record/rewind/playback/fast forward/stop. Separate tone, volume controls. Function selector switch (message record/message confirm/valet/cassette). Installs in minutes, no re-wiring. Walnut cabinet, 3⅝x10⅛x12⅛". With tape, cassette, built-in mike. 117 VAC. Japan. 9 lbs.
759U8114.....199.95

Orrtronics Automatic Tape Equipment

Automatic tape equipment offers unlimited possibilities for instruction and sales promotion. Operates continuously, periodically, or when cued. Available in playback units alone, or with recording facilities. Tape cartridges (below) thread automatically.





A AUDIO ANNOUNCER

84.95 *Solid-State . . . Plays Continuously or On Cue . . . Two Speeds*

MODEL 773.200. Solid-state cartridge-loading playback unit operates on cue, or continuously. Automatic shutoff. Countless uses for sales promotion or instructional purposes. Operates at 3¾ and 1⅞ ips. 4-pole motor. Requires power amplifier or headset. Size, 6x6x9". 117 VAC. Wt. 14 lbs.
879S1160. Ea. 99.95 2-Up. . . . . Ea. 84.95

A AUDIO REPEATER

MODEL 773.280. Has same fine features as Model 773.200 listed above, but with built-in 4-watt audio amplifier; 4-inch speaker; external jack for remote speaker. Size, 6x6x9". Shpg. wt., 15 lbs.
879S1162. Ea. 106.21 2-Up. . . . Ea. 106.21

SYNCHRO REPEATER

MODEL 773.283. Plays message, plus triptone signal which may be recorded on Synchro Recorder. Shpg. wt. 9 lbs.
879S1162. Ea. 199.95 2-Up. . . . Ea. 169.95

A AUDIO REPEATER-RECORDER

MODEL 773.310. Similar to Model 773.280, but also records tapes. Foil strips on tape provide automatic "end of cycle" shutoff. Shpg. wt., 16 lbs.
879S1163. Ea. 169.95 2-Up. . . . Ea. 144.45

A SYNCHRO REPEATER-RECORDER

MODEL 773.410. Similar to Model 773.310, but also has facility for tone-triggering remote units on playback. Wt., 17 lbs.
879S1164. Ea. 229.95 2-Up. . . . Ea. 195.45

B ECHO-MATIC TAPE CARTRIDGES

For all Orrtronics units listed here. Running time given in minutes, at 3¼ ips, except *seconds. †Empty cartridge. 1 lb.

Stock No.	Mfr's Type	Minutes	EACH 1-11	12-144	145-Up
879-1129	141.070	70*	3.00	2.70	2.40
879-1121	141.003	3	3.25	2.92	2.60
879-1123	141.006	6	3.75	3.37	3.00
879-1124	141.008	8	4.00	3.60	3.20
879-1125	141.010	10	4.25	3.82	3.40
879-1126	141.012	12	4.60	4.14	3.68
879-1127	141.015	15	4.95	4.45	3.96
879-1120	141.000	15†	2.00	1.80	1.60
879-1136	143.030	30	5.95	5.35	4.76
879-1134	143.000	40†	3.00	2.70	2.40

C PHONE HEADSET AND CRADLE

MODEL 846.010. Activating accessory star Audio Announcer and provides quiet, p vate commentary for listener. Wt., 2 lb
879-1190. Black. . Ea. 25.00 2-Up. . 22.5
879-1191. Model 846.040. White. 38.5

D JUNCTION BOX

MODEL 846.030. 3-phone input junction bo
879-1192. 1 lb. . Ea. 17.00 2-Up. Ea. 15.7

E LOW-IMPEDANCE MICROPHONE

MODEL 843.120. Recommended as an acce sory for Models 773.310 and 773.410.
879S1177. Shpg. wt. 1 lb. 17.9

F PUSHBUTTON REMOTE SWITCH

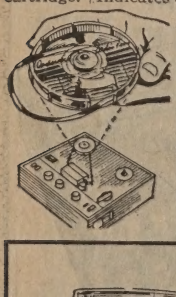
MODEL 845.410. Starts tape equipment fro remote location by pressing button. Wi 6-foot cord and plug. Shpg. wt., 1 lb.
879-1183. . . . . . 4.5

G FOOTMAT START SWITCH

MODEL 845.470. Vinyl footmat will activa any Audio Announcer when stepped o Commonly used for point-of-purchase a plications such as supermarkets, etc. Siz 17x23". Shpg. wt., 1 lb.
879-1184. . . . . . 17.5

CONTINUOUS-PLAY AUDIO VENDORS

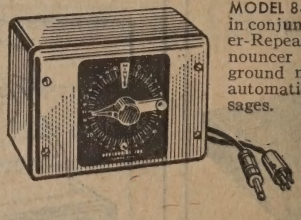
Wide choice of continuous-play vendors for unlimited applications in all fields. Run counter-clockwise at 3¾ ips. *Indicates empty cartridge. †Indicates ready-mount spindle. Wt. 12 oz.



Stock No.	Type	Min.	1-9, EA.	10-Up, EA.
879-1141	150.003	3	3.95	3.55
879-1142	150.005	5	4.75	4.27
879-1140	150.000	*	3.18	2.86
879-1113	131.008	8	7.15	6.43
879-1114	131.012	12	8.00	7.20
879-1115	131.015	15	8.95	8.05
879-1110	131.000	*	4.75	4.27
879-1106	121.024	24	10.95	9.86
879-1130	121.030	30	12.95	11.66
879-1105	121.000	*	6.30	5.67
879-1174	831.088	†	1.50	1.35

TIMER MUTER CONTROL

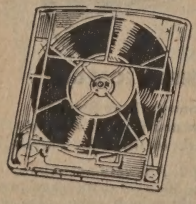
Mutes Recorded Programs and Broadcasts Your Sales Message Automatically at Timed Intervals



MODEL 845.130. An accessory to be use in conjunction with the 773.310 Recor er-Repeater, or any other Audio A nouncer models. Adaptable to bac ground music systems to mute mus automatically while broadcasting me sages.

Built-in timer may be set increments of one to thir minutes between broadcast Turns on and off automatica ly for broadcasts.
879-1180. Wt. 1 lb. . . . 82.5

TELEPRO "FIDELIPAC"® AUTOMATIC TAPE CARTRIDGES



- Match All Major-Brand Cartridge Equipment
- Continuous Record/Play
- Endless-Loop Principle
- Self-Enclosed for Protection from Dust, Marring, Tearing

Continuous, self-contained automatic tape cartridges—the standard of the broadcast industry. They are compatible with all major-brand cartridge equipment available on the market today. Designed for both recording and playback—utilizing the endless-loop principle of tape operation. Fidelipac cartridges offer unlimited applications in all fields. The entire cartridge is constructed of plastic, and its specially lubricated tape is self-enclosed (with transparent cover) affording complete protection from dust, tearing, marring. Offers the utmost handling ease. Three model sizes, NAB-3A, 6B and 12CX, for program flexibility. See table at right. *Empty cartridge.

MODEL NAB-3A TAPE CARTRIDGES

Stock No.	Length	Time at 7½ ips	Size	Wt., Oz.	EACH 1-9	50-99	100-499	500-Up
795-1001	25′	40 sec.	4x5⅞2x⅞"	4	2.70	2.16	1.91	1.68
795-1002	44′	70 sec.	4x5⅞2x⅞"	4	2.85	2.28	2.02	1.78
795-1003	63′	100 sec.	4x5⅞2x⅞"	4	3.00	2.40	2.12	1.86
795-1004	132′	3½ min.	4x5⅞2x⅞"	4	3.43	2.74	2.42	2.14
795-1005	207′	5½ min.	4x5⅞2x⅞"	5	3.93	3.14	2.78	2.44
795-1006	394′	10½ min.	4x5⅞2x⅞"	8	5.15	4.12	3.64	3.20
795-1007	. . . .	*	4x5⅞2x⅞"	3	2.13	1.70	1.50	1.34

MODEL 6B TAPE CARTRIDGES

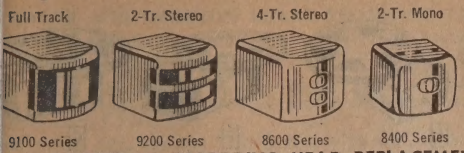
Stock No.	Length	Time at 7½ ips	Size	Wt., Oz.	EACH 1-9	10-99	100-499	500-Up
795-1008	600′	16 min.	6x6⅜1⅞2x⅞"	9	8.45	6.76	5.96	5.26
795-1009	. . . . .	*	6x6⅜1⅞2x⅞"	5	3.53	2.82	2.50	2.20

MODEL 12CX TAPE CARTRIDGES

795-1110	1163′	31 min.	7⅝x8⅜2x⅞"	16	14.87	11.90	10.70	8.95
795-1111	. . . . .	*	7⅝x8⅜2x⅞"	10	5.30	4.24	3.74	3.30

Tape Head Replacements, Accessories

Nortronics



2800 REPLACEMENTS
Allied Electronics provides Nortronics replacements for over 2800 recorders. Give model, head number, track configuration.

PROFESSIONAL RECORDING HEAD REPLACEMENTS

FOR AMPEX

Stock No.	Mfr's Type	Function†	†† QK	Models	EACH
869-6253	9203	R 2-tr. St.	87	PR-10	45.25
869-6252	9202	P 2-tr. St.	87		45.05
869-6266	9226	E 2-tr. St.	87		45.05
869-6200	8600	P 4-tr. St.	87		31.40
869-6223	9103	R Full-Tr.	76	300, 350, 351, 354	47.95
869-6222	9102	P Full-Tr.	76		47.75
869-6253	9203	R 2-tr. St.	76		45.25
869-6252	9202	P 2-tr. St.	76		45.05
869-6181	8401	R 2-tr. Mono	76		18.10
869-6180	8400	P 2-tr. Mono	76		20.40
869-6203	8604	R 4-tr. St.	76		27.50
869-6200	8600	P 4-tr. St.	76		31.40
869-6216	8701	E 4-tr. St.	76		19.15
869-6240	9128	E Full-Tr.	76	300	47.75
869-6171	8304	E 2-tr. St.	76		22.75
869-6194	8504	E 2-tr. Mono	76		16.00
869-6238	9125	E Full-Tr.	76	350, 351, 354	47.75
869-6197	8509	E 2-tr. Mono	76		16.00
869-6176	8309	E 2-tr. St.	76	350, 354	22.75
869-6266	9226	E 2-tr. St.	76	351	45.05
869-6224	9104	R Full-Tr.	76	AG350/355	47.95
869-6222	9102	P Full-Tr.	76	On units equipped	47.75
869-6254	9204	R 2-tr. St.	76	witu 4 heads, use	45.25
869-6252	9202	P 2-tr. St.	76	QK-87 instead of	45.05
869-6262	9222	E 2-tr. St.	76	QK-76	45.05
869-6188	8414	R 2-tr. Mono	76		18.10
869-6180	8400	P 2-tr. Mono	76		20.40
869-6210	8614	R 4-tr. St.	76		27.50
869-6200	8600	P 4-tr. St.	76		31.40
869-6235	9115#	R Full-Tr.	76	3200 Series	95.70
869-6226	9106	P Full-Tr.	76	3300 Playback only	47.75
869-6168	8215#	R 2-tr. St.	76		90.30
869-6258	9215#	P 2-tr. St.	76		90.10
869-6188	8414	R 2-tr. Mono	76		18.10
869-6182	8402	P 2-tr. Mono	76		20.40
869-6210	8614	R 4-tr. St.	76		27.50
869-6207	8610	P 4-tr. St.	76		31.40

FOR MAGNECORD

869-6232	9112	R Full-Tr.	*	1021	47.95
869-6185	8408	P 2-tr. Mono (optional)	*		17.90
869-6160	8102	E Full-Tr.	*		23.15
869-6231	9111	P Full-Tr.	*		47.75
869-6161	8203	R 2-tr. St.	*	1022	33.20
869-6160	8202	P 2-tr. St.	*		45.05
869-6170	8302	E 2-tr. St.	*		22.75

FOR RCA

869-6227	9107	R Full-Tr.	*	RT21	64.25
869-6228	9108	P Full-Tr.	*		64.05
869-6163	8110	E Full-Tr.	*		39.45
869-6166	8206	R 2-tr. St.	*		49.50
869-6165	8205	P 2-tr. St.	*		61.35
869-6174	8307	E 2-tr. St.	*		39.05

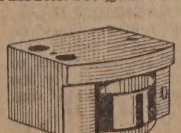
FOR SCULLY

869-6220	9100	P Full-Tr.	**	270	72.75
869-6250	9200	P 2-tr. St.	**	270-2	70.05
869-6213	8620	P 4-tr. St.	**	270-4	56.40
869-6220	9100	P Full-Tr.	**	275	72.75
869-6250	9200	P 2-tr. St.	**	275-2	70.05
869-6221	9101	R Full-Tr.	**	280	72.95
869-6220	9100	P Full-Tr.	**		72.75
869-6243	9130	E Full-Tr.	**		72.75
869-6251	9201	R 2-tr. St.	**	280-2	70.25
869-6250	9200	P 2-tr. St.	**		70.05
869-6261	9221	E 2-tr. St.	**		70.05

† In function column R means Record, P-Play, E-Erase
†† Indicates mounting kit required for Ampex models. See Quik-Kit table below for prices.
# Alfenol Cores. *No Quik-Kit needed.

QUIK-KIT MOUNTINGS

Stock No.	Type No.	EACH
869-6005	QK-66	1.25
869-6006	QK-76	12.00
869-6007	QK-86	4.00
869-6008	QK-87	4.00



BROADCAST CARTRIDGE HEAD REPLACEMENTS

FOR ATC

Stock No.	Mfrs. Type	Function†	†† QK	Models	Notes	EACH
869-6063	2053	R.Pr.C.		CP11, CP12, CP13		37.10
869-6067	2057	P.Pr.C		Mono	4	37.10
869-6113	5753	R.Pr.C.		CP21, CP22, CP23,		99.00
869-6117	5757	P. Pr.C.		CPR23 Stereo	4	99.00
869-6085	3205	R.Pr.		P150, P190, PB150,		17.90
869-6050	2000	P.Pr.R/P.C.	117	PB190, PC150, PC190	1	33.10

FOR COLLINS

869-6085	3205	R.Pr.		P150, P190, PB150,		17.90
869-6050	2000	P.Pr.R/P.C.	117	PB190		33.10

FOR GATES

869-6081	3201	R/P.Pr.		M5944		17.90
869-6080	3200	R/P.C.	115			17.90
869-6052	2002	P.Pr.C.	114	M6211 Series	2	33.10
869-6052	2002	P.Pr.C.	*	(Play only)		33.10
869-6101	5701	P.Pr.C.	114	M6212 Series (3-Channel) P only		94.50
869-6052	2002	R.Pr.C.		M6213C		33.10
869-6052	2002	P.Pr.C.	114			33.10
869-6103	5703	R.Pr.C.		M6214C		94.50
869-6101	5701	P.Pr.C.	114	(3 Channel)	3	94.50
869-6063	2053	R.Pr.C.		Criterion		37.10
869-6067	2057	P.Pr.C.			4	37.10

FOR MACARTA

869-6091	3251	P.Pr.		105, 108 Playback		20.50
869-6091	3251	P.C.		2405, 2408 Carousels	4	20.50
869-6050	2000	P.Pr.C.		248 Carousel (trans.)		33.10
869-6050	2000	P.Pr.C.	114	500 Playback (trans.)		33.10
869-6055	2005	R.Pr.C.		560 Recorder		33.10
869-6050	2000	P.Pr.C.	114			33.10
869-6053	2003	R.Pr.C.		570, 590 Rec. Playback		33.10
869-6050	2000	P.Pr.C.	114	(trans.)		33.10

FOR RCA

869-6082	3202	R/P.Pr.		RT7B, RT7C		17.90
869-6081	3201	R/P.C.	115	Cue head is on left. Program head is next to capstan.		17.90
869-6062	2052	R.Pr.C.		RT7 Mono		37.10
869-6062	2052	P.Pr.C.			4	37.10
869-6112	5752	R.Pr.C.		RT37 Stereo (3-Ch.)		99.00
869-6112	5752	P.Pr.C.			4	99.00

FOR SPARTA

869-6051	2001	P.Pr.C.		PB211 (Play Only)		33.10
869-6081	3201	R/P.Pr.		200P, 200RP, 300P		17.90
869-6080	3200	R/P.C.	115			17.90
869-6053	2003	R.Pr.C.		300B, 400RP, 800RP		33.10
869-6051	2001	P.Pr.C.	114			33.10
869-6051	2001	P.Pr.C.	114	400, 800P		33.10
869-6101	5701	R.Pr.C.		600P, 600RP		94.50
869-6101	5701	P.Pr.C.	114			94.50

FOR TAPECASTER

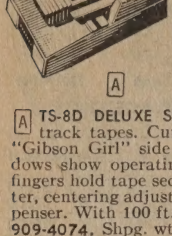
869-6091	3251	R/P.Pr.		600P, 600RP		20.50
869-6090	3250	R.P.C.		600CP, 600CRP	4	20.50
869-6061	2051	R.Pr.C.		700P, 700RP		37.10
869-6061	2051	P.Pr.C.			4	37.10
869-6111	5751	R/P.Pr.C.		Stereo 700P, 700RP	4	99.00
869-6150	6150	R/E.Pr.C.		Delay 700RPD		35.20
869-6061	2051	P.Pr.C.			4	37.10

† In function column: R-Record; P-Play, PR-Program; C-Cue.
†† Mounting kit required for no-mount heads. See brkt. assemblies below.
** For rear-mount, add 50 to Type No. and $4.00 to cost of 2000 Series, $4.50 for 5700 Series, $5.50 for 6100 Series, $2.60 for 3200 Series (no mtg. kit required). For Stock No., use prefix 869- followed by Type No.
1. Converts program channel only to monitor.
2. Used with QK-114 to replace Gates Rear-Mount 730-0343, 730-0423 heads. Quik-Kit not req. for Gates No-Mount 730-0729 heads.
3. No-Mount must be used if original head was cylindrical or was Notronics No-Mount head.
4. Rear-Mount heads. Quik-Kit conversion to No-Mount heads is not recommended.

BRACKET ASSEMBLIES FOR CARTRIDGE MACHINES

Furnished with cartridge hold-down spring and cartridge guide rail. QK-114 installs two no-mount dual channel heads for mono, or two no-mount 3-ch. heads for stereo. Left head for record, right for playback. Requires heads similar to 2000 Series.
869-6001, QK-114. Shpg. wt. 6 oz. 13.00
869-6002, QK-115. Installs two no-mount 2-track mono heads. Requires heads similar to 3200 Series. 13.00

ROBINS Tape Recording Accessories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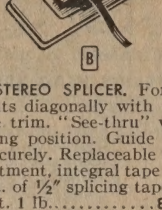
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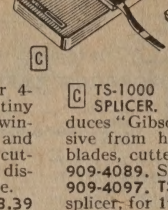
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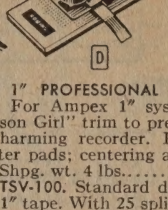
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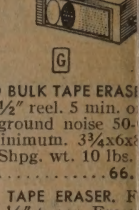
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A TS-8D DELUXE STEREO SPLICER. For 4-track tapes. Cuts diagonally with tiny "Gibson Girl" side trim. "See-thru" windows show operating position. Guide and fingers hold tape securely. Replaceable cutter, centering adjustment, integral tape dispenser. With 100 ft. of ½" splicing tape.
909-4074. Shpg. wt. 1 lb. **8.39**

B TS-7J JUNIOR STEREO SPLICER. Precision splicer cuts diagonally, with "Gibson Girl" trim. "See-thru" windows on knob shows cut or trim positions. Guide and fingers gently secure tape; centering adjustment for accuracy. Replaceable cutter. Uses ⅜" splicing tape. Shpg. wt., 8 oz.
909-4072 ..... **5.25**

C TS-1000 1" PROFESSIONAL VIDEOTAPE SPLICER. For Ampex 1" systems. Produces "Gibson Girl" trim to prevent adhesive from harming recorder. Replaceable blades, cutter pads; centering adjustment.
909-4089. Shpg. wt. 4 lbs. **57.66**
909-4097. TSV-100. Standard diagonal cut splicer, for 1" tape. With 25 splicing patches. Shpg. wt., 1¾ lbs. **13.62**

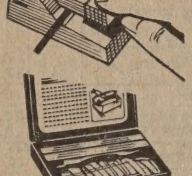
D TS-500 ½" PROFESSIONAL VIDEOTAPE SPLICER. For studio work. "Gibson Girl" trimming; replaceable blades; cutter pads; precision centering adjustment.
909-4080. Shpg. wt. 4 lbs. **57.66**
909-4092. TSV-50. Diagonal cut ½" splicer. With 25 patches. Wt., 1¾ lbs. **13.62**

E TM-100 AUDIO-VIDEO BULK TAPE ERASE For tape to 1" on 10½" reel. 5 min. o off cycle. Reduces background noise 50 dB below saturation minimum. 3¾x6x U.L. Listed. 115 VAC. Shpg. wt. 10 lbs.
909-4069 ..... **66.**

F TM-77 DELUXE BULK TAPE ERASER. F tape reels to 7" dia.; ¼" tapes. Erasu 2 to 4 dB below erase-head level. 2⅜x3⅝ 6¼". U.L. Listed. For 110-120 V, 50-60 H
909-4062. Shpg. wt. 5 lbs. ..... **17.**

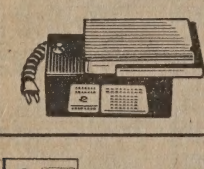
G TM-44 BULK TAPE ERASER. For ¼" tap reels to 7". Size, 5¼x2⅛x3⅛". Du cycle: 1 minute on, 5 minutes off. For 1 V, 50-60 Hz AC. U.L. Listed.
909-4055. Shpg. wt. 2¾ lbs. ..... **11.**

CASSETTE, CARTRIDGE ACCESSORIES

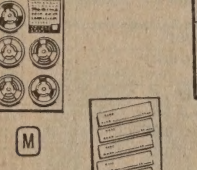


TS-115 CASSETTE TAPE SPLICER. Robins famous "Cut-N-Splice" economy model. Makes perfect cuts and splices at 45° angle. Includes 25 self-sticking splicing patches. Wt. 5 oz.
909-4078. Ea. 3.75 12-Up 2.99

TS-215 CASSETTE SPLICING BLOCK. Strips in sound effects and passages the professional way. Cuts at 45° or 90° angle. Plastic case, cutting blade and twenty-five splicing patches are included.
909-4001. Wt. 5 oz. **6.29**



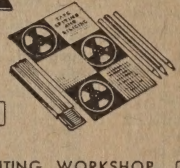
TMC-1 CASSETTE ERASER. Automatically erases bulk tape faster and better than manual erasers. Provides "like new" condition to cassettes in a matter of seconds. For AC. Wt. 3 lbs.
909-4053 ..... **12.59**



TMC-2 CARTRIDGE ERASER. Indispensable for home or professional use. Restores your 8-track cartridges to original condition in just seconds. For AC. Wt. 5½ lbs.
909-4054 ..... **18.89**

TAPE EDITING AND ACCESSORY KITS

H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H TK-9 TAPE EDITING WORKSHOP. For easy and accurate splicing and editing. Handles reels to 7". Consists of two tape winders and deluxe Stereo Tape Splicer, mounted on sturdy walnut-grain, warp-proof base. 7x14x5½". Accurately calibrated timing/editing scale on base. With splicing tape, editing and cuing pencil, handy guide book for professional-quality editing and splicing. Wt., 2 lbs.
909-4022 ..... **15.75**

J TK-19 TAPE EDITING KIT. Low-cost kit includes: TS-5 "Cut-N-Splice" metal tape splicing block; 25 self-stick splicing patches; 3 editing and cuing pencils; editing and splicing guidebook. Shpg. wt., 5 oz.
909-4030 ..... **2.98**

K TK-8DLX DELUXE TAPE ACCESSOR KIT. Everything needed for editi and recorder care. Contains: TS-8 Deluxe Stereo Tape Splicer; roll ½" Splicing Tape; Tape Threader; Tape Clips; 2-oz. Head Cleaner; 2-o Head and Guide Lubricant; Tap Jockey Cloth; pair of Reel Holder 30 Reel Title Labels; Editing an Splicing Guide Book. Wt., 1½ lbs.
909-4021 ..... **12.9**

L TK-6 CLEANER AND LUBE KIT. Fo cleaning and lubricating tape r corder heads and guides. Insur smooth performance and minimu wear. Includes 2-oz. bottle of Hea Cleaner, 2-oz. bottle of Lubrican Both have applicator caps. Wt., 6 o
909-4019. Ea. 1.69 12-Up **1.3**

M

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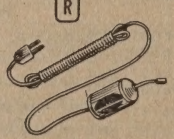
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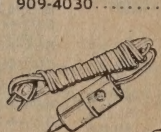
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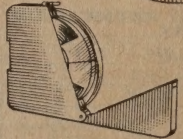
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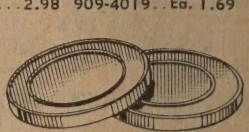
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M TT-16 COLOR-CODING LEADER TAPES. Reinforce and color-code tape ends. Set of five 2½" reels in 5 colors. Tear-proof 1½-mil Mylar base.
909-4098. Wt. 14 oz. **Ea. 3.56 12-Up 2.98**

N TL-240 COLOR-CODING TITLE LABELS. Package of 240 self-stick 2x½" labels; asstd. colors. Keeps track of your reels. Sheets of 10. Wt. 2 oz.
909-4045 ..... **Pkg. of 240 for 1.43**

P TL-180 REEL TITLE LABELS. Pkg. 180 white pressure-sensitive 2x½" labels. Write or type on them for identification of your recording titles.
909-4039. Wt. 5 oz. ..... **Pkg. of 180 for 1.20**

R TD-3 TAPE HEAD DEMAGNETIZER. Removes residual magnetism from recorder heads which can distort your tape recordings. Soft plastic shield for safe head contact; angled for easy reaching of head gaps. 3½x1¼" dia. For 110 VAC.
909-4012. Shpg. wt. 8 oz. **4.20**

S TD-6 DELUXE HEAD DEMAGNETIZER. Heavy-duty demagnetizer removes residua magnetism from tape heads for better performance. Also "cleans" recorder parts to minimize tape drop-out. A "must" for the serious recording enthusiast. 4⅝x1¼" dia. U.L. Listed. 110-120 V, 50-60 Hz AC.
909-4015. Shpg. wt. 1 lb. **7.65**

T TCP-12 TAPE SAFES. Set of 12, to stor and protect 7" tapes. Molded plasti with hinge cover and dovetail groove. In cludes wall mtg. bracket. Less reels. Wt. 8 lb
909-4011. 1.5. Ea. 15.75 6-Up **12.6**

W TC7-2 TAPE STORAGE CANS. Pair of 7 dia. metal cans. Ribbed for stacking.
909-4009. Wt. 1 lb. ..... **Pair 1.2**
TC5-2. Same, for 5" reels.
909-4008. Wt. 14 oz. ..... **Pair .8**

X TW-1 TAPE STROBE. Precision meta strobe checks speed accuracy, flutte and wow of 7½ and 3¾ ips recorders. Pre cision machined, with needle bearings. Wit instructions. Shpg. wt., 1 lb.
909-4099 ..... **7.3**

Realistic® Recording Tapes

MYLAR AND TENSILIZED MYLAR RECORDING TAPE

NSILIZED MYLAR BASE: pre-stretched for uniformity after repeated ayings. Recommended for professional and critical recordings if in 1.0 and 0.5 mil tapes are used.
YLAR BASE: extra strength DuPont "Mylar" film base. Thin tapes eld 50% (1.0 mil) or 100% (0.5 mil) greater record/play time than th standard 1.5 mil tapes.
ipg. wt.: 7" Reel, 1½ lbs.; 5" Reel, ¾ lb.; 3¼ & 3", ¼ lb.

Stock No.	Type No.	Reel Size	Feet	Mil	Base	EACH 1-5	6-9	10-49	50-Up
0-0070	44-734	3"	225	1.0	Mylar	.59	.49	.45	.39
0-0071	44-760	3¼"	600	0.5	T. Mylar	1.49	1.35	1.25	.99
0-0072	44-735	5"	600	1.5	Mylar	1.19	1.09	.99	.89
0-0073	44-753	5"	900	1.0	Mylar	1.79	1.69	1.59	1.49
0-0074	44-736	5"	1200	1.5	Mylar	1.79	1.69	1.59	1.49
0-0075	44-754	7"	1800	1.0	Mylar	2.69	2.49	2.35	2.20
0-0076	44-759	7"	2400	0.5	T. Mylar	3.99	3.69	3.39	2.99
0-0077	44-766	7"	3600	0.5	T. Mylar	6.99	6.35	5.99	5.25

SUPERTAPE™ PREMIUM QUALITY TAPE

Realistic's finest quality. Fine-grain formula that reduces hiss, print-thru and recorder head wear to the barest minimum. Priced lower than other premium recording tapes, yet provides unsurpassed sound reproduction.

STANDARD SUPERTAPE ON 1.5 MIL ACETATE

ormulated to meet the most exacting requirements of the profes-onal, educational or home recordist at lowest cost.

Stock No.	Type No.	Reel Size	Feet	Mil	Base	EACH 1-9	10-Up
910-0078	44-1870	5"	600	1.5	Acetate	1.69	1.55
910-0079	44-1871	7"	1200	1.5	Acetate	2.59	2.35

50% MORE RECORDING TIME ON 1 MIL MYLAR

ltra-stable Mylar, extra durable base to assure trouble-free opera-on even in extreme heat or humidity. Retains original strength ter repeated playings. Uniform sensitivity throughout. Provides tended listening time with superior quality.

910-0080	44-1872	5"	900	1.0	Mylar	2.49	2.16
910-0081	44-1873	7"	1800	1.0	Mylar	4.29	3.72

100% MORE TIME ON .5 MIL TEMPERED MYLAR

lays twice as long and is twice as strong as other double length pes. Amazingly resilient and strong. Will not get dry or brittle ith age. Excellent for all general recording purposes.

910-0082	44-1874	5"	1200	0.5	T. Mylar	3.79	3.27
910-0083	44-1875	7"	2400	0.5	T. Mylar	6.49	5.70

OW NOISE AND HISS-REDUCING TAPE FOR PROFESSIONALS

rovides the high signal-to-noise ratio and drastically lowered hiss vel required for professional recording without sacrificing other roperties needed for top quality reproduction.

910-0084	44-1876	7"	1200	1.5	Acetate	2.99	2.58
910-0085	44-1877	7"	1800	1.0	Mylar	4.99	4.41

CONCERTAPE™ ECONOMY RECORDING TAPE

DURABLE 1.5 MIL MYLAR

Perfect for school and language lab use. Careful testing plus rugged DuPont Mylar guarantees top quality. ¼ lb.

Stock No.	Type No.	Reel Size	Feet	EACH 1-2	3-9	10-49	50-Up
910-0086	44-755	7"	1200	1.29	1.15	1.05	.89
910-0087	44-1085	5"	600	.89	.85	.79	.69

EXTRA-LENGTH 1800-FT. 1 MIL POLYESTER

Bought in quantity from America's No. 1 manufacturer. Pre-tested, first-line tape free of defects. 1.0 mil thickness for 50% more recording time. Shpg. wt. ½ lb.

910-0088	44-1018	7"	1800	1.95	1.79	1.59	1.39

DOUBLE AND TRIPLE PLAY 0.5 MIL POLYESTER

Tensilized, stretch-free tape at lowest prices. Wt. 1 lb.

910-0089	44-1086	2⅜"	300	.69	.64	.59	.49
910-0090	44-1073	3"	300	.69	.64	.59	.49
910-0091	44-1087	3¼"	600	.99	.84	.84	.74
910-0092	44-1059	5"	1200	1.99	1.79	1.59	1.29
910-0093	44-1060	7"	2400	2.99	2.69	2.39	1.99
910-0094	44-1061	7"	3600	4.99	4.49	3.99	3.49

- Uniform Output
- Produced to Strict Specifications by One of America's Foremost Manufacturers
- Splice-Free

FINEST QUALITY AT ANY PRICE

- Superior Fidelity
- Prices Lower Than Competition
- Endorsed by Pros

REALISTIC CASSETTE CARTRIDGES

WIDE-RANGE C-60 CASSETTE FOR MONO/STEREO

A superior oxide coating with magnetic particles ⅓ the usual size reduces "dead spots." Provide longer tape head life due to less oxide coating. Formulated for wide-range frequency response—recommended for stereo recording. Low noise, low dropout, no flaking. Enclosed window prevents accumulation of dust and dirt in cartridge. Double transparent box for easy identification. Av. wt. 4 oz.

Stock No.	Type No.	Time	EACH 1-11	12-23	24-47	48-Up
910-0095	44-605	60 minutes*	2.95	2.65	2.39	2.19

CASSETTE STORAGE ALBUM

Stores up to 12 cassettes. Keeps cassettes filed safely away from dust and grime. Provides easy accessibility.
910-0096. Type 44-612. Shpg. wt. 2 lbs..... Each 1.98

SET OF 3 CASSETTE "MAILERS"

Type 44-608. Sturdy plastic boxes for mailing or storage of cassettes. Complete with mailing labels. Wt. 4 oz.
910-0113. 1-11.....Ea. Set 39¢ 12-Up.....Ea. Set 29¢

ECONOMICAL CASSETTE CARTRIDGES

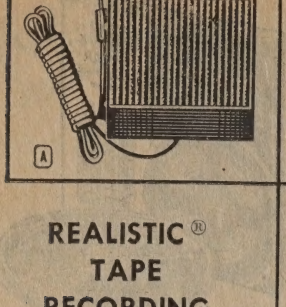
Finest quality at lowest prices. Excellent tensilized polyester recording tape for outstanding strength and long life. All cassettes have red and green polyester leaders for easy track identification. Polyester wafer pads with anti-static lubrication for long life. Each cassette packed in a rugged, heavy-duty case for safe storage. Buy in quantity for greatest savings.

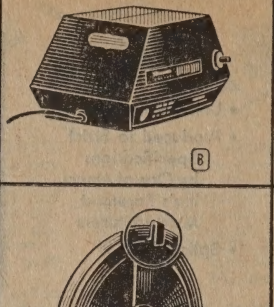
Stock No.	Type No.	Time, Min.	Wt., Oz.	EACH 1-11	12-23	24-47	48-Up
910-0097	44-602	60*	8	1.49	1.35	1.19	1.09
910-0098	44-603	90†	12	1.99	1.79	1.59	1.49
910-0099	44-604	120††	16	2.49	2.19	1.99	1.79

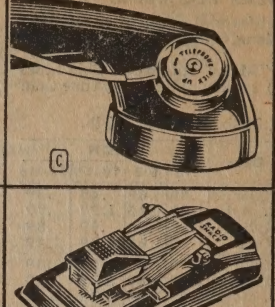
* 30 Minutes Each Side
†45 Minutes Each Side
††60 Minutes Each Side

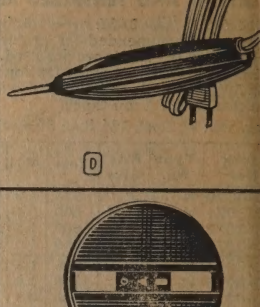
NOTE: Ask Your Nearest Allied Electronics Facility for Quotes on Larger Quantities

Recording Tape and Accessories

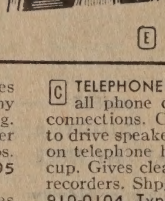


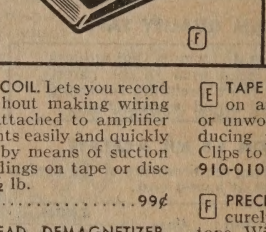


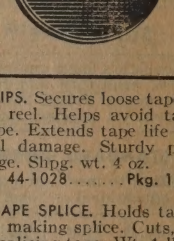




REALISTIC® TAPE RECORDING ACCESSORIES







A REMOTE FOOT SWITCH. Eliminates fumbling with controls. Connects to any recorder equipped with remote control plug. Allows unobtrusive control of recorder operation without use of hands. 1½ lbs.
910-0101. Type 44-610.....2.95

B THREE-WAY BULK TAPE ERASER. Erases full reel of tape easily and quickly in seconds. Takes any standard size reel. Reduces background noise. Eliminates chance of incomplete erasure from mis-aligned recorder head. Faster, more efficient than is possible with machine-run-through erasing. For AC operation. U.L. Listed. 5¼x2½x2¾". Shpg. wt. 10 lbs.
910-0102. Type 44-745.....9.95

C TELEPHONE PICKUP COIL. Lets you record all phone calls without making wiring connections. Can be attached to amplifier to drive speaker. Mounts easily and quickly on telephone handset by means of suction cup. Gives clear recordings on tape or disc recorders. Shpg. wt. ½ lb.
910-0104. Type 44-533.....99¢

D REALISTIC TAPE HEAD DEMAGNETIZER. Easily and simply demagnetizes recording, playback and erase heads to restore highs, improve signal-to-noise ratio. Use periodically to maintain top recorder performance in any recorder. For AC operation only. Shpg. wt. 1 lb.
910-0105. Type 44-772.....2.95

E TAPE END CLIPS. Secures loose tape en on any size reel. Helps avoid tangl or unwound tape. Extends tape life by ducing physical damage. Sturdy plast Clips to reel edge. Shpg. wt. 4 oz.
910-0106. Type 44-1028.....Pkg. 18/3

F PRECISION TAPE SPLICE. Holds tape curely while making splice. Cuts, tri tape. With ⅜" splicing tape. Wt. 1 lb.
910-0107. Type 44-770.....2.

G AUTOTHREAD TAPE REEL. Tape re thread themselves. Just drop tape reel. Shpg. wt. 6 oz.
910-0108. 5" Reel. Type 44-1135.....7
910-0109. 7" Reel. Type 44-1137.....9

SCOTCH® TAPES AND RECORDING ACCESSORIES

BLANK CASSETTES AND 8-TRACK CARTRIDGES

3M "DYNARANGE" LOW-NOISE CASSETTES. Use with any standard cassette recorder. High strength, wide frequency response and high signal-to-noise ratio. †Total recording time in both directions. In plastic display album box. Shpg. wt. 3 oz.

Stock No.	Type	Feet	†Minutes	1-11, EA.	12-Up, EA.
949-0405	S-C-60A	300	60	2.51	1.81
949-0407	S-C-90A	450	90	3.80	2.73
949-0409	S-C-120A	600	120	5.08	3.67

3M 8-TRACK TAPE CARTRIDGES. Specially lubricated 3M tape—a favorite of professional users. Offers excellent fidelity and dependability. Available in 40 to 80 minute recording lengths. 12 oz.

Stock No.	Type	Total Minutes	1-10, EA.	11-Up, EA.
949-0411	S-8TR-40	40	2.17	1.97
949-0413	S-8TR-80	80	2.53	2.27

TYPE 24 LEADER AND TIMING TAPE. 100' length. In self-dispensing container for added convenience. Shpg. wt., 3 oz.
949-0415. White 1-11.....Each .75 12-Up.....Each .54
949-0417. Yellow 1-11.....Each .75 12-Up.....Each .54

TYPE 21-10 LEADER TAPE. Special anti-static coating. White plastic tape. 1000' on 7" plastic reel. Sturdy storage box. 10 oz.
949-0425. 1-11.....Each 3.00 12-Up.....Each 2.70

TYPE 41-½-S SPLICING TAPE. Coated on one side with non-run adhesive. ½x150". Handy dispenser package. Shpg. wt., 3 oz.
949-0427. 1-11.....Each .48 12-Up.....Each .35

TYPE 51-7/32S ALUMINIZED SENSING TAPE. For recorders with automatic "stop" and "reverse." Adhesive on one side, foil on the other. 7/32x150". Dispenser package. Shpg. wt., 3 oz.
949-0429. 1-11.....Each 1.89 12-Up.....Each 1.32

TYPE 201, 202, 203, 206, 207 "DYNARANGE"

Professional quality. Provides 15% longer life, low-noise level a low-rub-off. Dynarange tapes offer the same high-frequency p formance one normally expects only from high-resolution tap Superior signal-to-noise ratio makes it well-suited for transcribi tape-to-tape or disc-to-tape. All polyester, except *acetate. 1 lb.

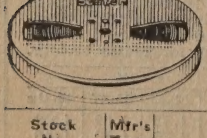
Stock No.	Mfr's Type	Base	Reel	Feet	EACH 1-11	EACH 12-U
949-0456	201-6	1½ mil*	5"	600	2.05	1.84
949-0458	201-12	1½ mil*	7"	1200	3.08	2.97
949-0460	202-6	1½ mil	5"	600	2.09	1.88
949-0462	202-12	1½ mil	7"	1200	3.50	3.15
949-0464	203-9	1 mil	5"	900	2.99	2.68
949-0466	203-18	1 mil	7"	1800	5.05	4.54
949-0470	206	1½ mil	10½"	2500	9.36	8.42
949-0472	207	1 mil	10½"	3600	13.15	11.83

EMPTY PLASTIC TAKEUP REELS

Each with convenient index box. Buy in larger quantities—Sav

Stock No.	Reel Size	Shpg. Wt.	EACH 1-11	EACH 12-Up
949-0419	3"	4 oz.	.28	.21
949-0421	5"	4 oz.	.55	.39
949-0423	7"	4 oz.	.71	.51

PRST-7 EMPTY SELF-THREADING REEL. Perfect for business us where time and efficiency are such important factors. 7" cle plastic reel takes the time and tedium out of tape threading. Ju place the end of the tape on the hub of the self-threading reel your recorder does the rest. Shpg. wt., 8 oz.
949-0403. 1-11.....Each 1.00 12-Up.....Each .5



VIDEO TAPE FOR HELICAL SCAN RECORDERS

1-mil polyester tape especially designed for helical scan video recorders. Low-noise oxide coating provides superior signal-to-noise ratio for high-resolution pictures. Impregnated with silicon lubricant; reduces head wear, increases tape life. Controlled-wind back-side treatment eliminates static charge build-up t reduce wound-in contaminants—thus eliminati drop-out. Provides highest professional-quality r cordings free from flaw. R97B and R41SB hav phenolic hub reel with aluminum flanges in box.

Stock No.	Mfr's Type	Equipment Used In	Feet	Min. Play	Tape Width	Reel Dia.	Reel Type	Wt., Lbs.	EACH 1-9	EACH 10-24	EACH 25-49	EACH 50-U
949-0474	361	IBC, B&H, RCA, GPL, Chester, Riker,	1075	31	1"	8"	R41SB	2½	34.55	32.82	31.79	31.1
949-0476	361	Apeco 1000, Craig, Norelco, Shibaden	2150	62	1"	8"	R41SB	5	45.30	43.04	41.68	40.7
949-0478	360	Ampex VR5000, 7000	1500	31	1"	9"	R97B	1	44.95	42.70	41.35	40.4
949-0480	360	Ampex VR6000, 7000	3000	62	1"	9"	R97B	1½	59.95	56.95	55.15	53.9

Realistic® Citizens Band Walkie-Talkies

A 21-133 THREE-WATT, THREE-CHANNEL

Three watt power provides long range for effective communications. Up to three switchable channels for versatility. Adjustable squelch quiets receiver during standby. Sensitive RF amplifier stage. Advanced silicon solid-state circuit includes noise limiter, automatic gain control and push-pull audio output. Battery/RF indicator. Power/volume control. Telescoping antenna. Negative ground chassis allows powering by car cigarette lighter jack without fear of burnout if the antenna touches metal. Customized die-cast case. 9x2⅞x2⅞". Complete with carrying case, 10 "AA" batteries, and plug-in Channel 11 crystals.
910-0062. Shpg. wt. 5½ lbs. 49.95

B 21-134 FIVE-WATT, SIX-CHANNEL

Powerful 5-watt output, maximum allowable, for extra range. Up to 6 switchable channels. FET front-end for added sensitivity. Integrated circuit IF and 455 kHz mechanical filter for greater selectivity. Separate speaker and ceramic microphone. Adjustable squelch, noise limiter, automatic gain control, push-pull audio output. Battery/RF indicator. Center-loaded telescoping antenna. Can be powered by car cigarette lighter jack—negative ground gives complete safety. Die-cast case, 9x2⅞x2⅞". Complete with carrying case, 10 "AA" batteries, and plug-in Channel 11 crystals. Use alkaline or NiCad batteries for longer life.
910-0063. Shpg. wt. 5½ lbs. 79.95

C 21-116 VOICE-ACTUATED ONE-WATT, THREE-CHANNEL

Porta VOX® is designed for hands-free operation. Includes custom dynamic headset with attached dynamic boom mike for noise-cancelling long-range conversations. Your voice actuates transmit mode for maximum convenience—also operates manually if desired. Circuit has FETs and integrated circuits. Adjustable squelch for quiet standby. 455 kHz mechanical filter for high selectivity. Built-in automatic noise limiter. Battery/RF indicator. Center-loaded telescoping antenna. External jacks for speaker, mike, antenna, and power options. Diecast front. With set of Channel 11 crystals, batteries, carrying case with straps. Size, 9x2⅞x2⅞".
910-0064. Shpg. wt. 6 lbs. 95.00

D 21-112 ONE-WATT ONE-CHANNEL WALKIE-TALKIE

Long-range power at a rock-bottom low price. The "Rover" has all solid-state circuit with extra-sensitive RF amplifier stage to really pull in signals. Volume control and push-to-talk switch. Slim design with rugged die-cast front. Perfect for sportsmen, yachtsmen, farmers or anyone who needs long range capability. Has 59" chromed telescoping antenna. Complete with 8 "AA" penlight cells, plug-in Channel 11 crystals and instructions, and $4.95 value carrying case. Size, 7½x3¼x1½".
910-0067. Shpg. wt. 5½ lbs. 29.95

For "AA" NiCad Battery, See page 419
For "AA" Alkaline Battery, See page 419

E 21-111 TWO-CHANNEL, 100 MW WALKIE-TALKIE

This versatile superhet model has all you need for go-anywhere communications. Features compact, slim-line design, push-pull audio, 2-channel operation, option of plug-in crystals for other CB channels, plus a separate speaker and microphone for maximum modulation and reception. "Beep" tone signal, battery condition indicator, 43" telescopic antenna, set of crystals for channel 11. Solid-state circuitry for dependable operation. Channel 1 or 2, call On/Off switches, volume control. Comes complete with 9-volt battery, convenient carrying strap and complete instructions. Extra battery on page 419. Size: 8⅛x2¼x1⅞".
910-0066. Shpg. wt. 4½ lbs. 19.95

F 21-102 100 MW SUPERHET WALKIE-TALKIE

Provides user with more RF output, more audio and greater sensitivity than any comparable unlicensed walkie-talkie. Solid-state circuit. Extra-clear push-pull audio output. Offers performance far in excess of its modest price. Perfect for scouts, outdoorsmen, boaters, vacationers. No license required, no age requirement. Handsome die-cast front panel. Volume control with on-off switch. 45-inch telescoping 7-section antenna. Hand strap. Size, 6x2½x1½". With Channel 11 crystals, 9-V battery.
910-0065. Shpg. wt. 2 lbs. 13.95

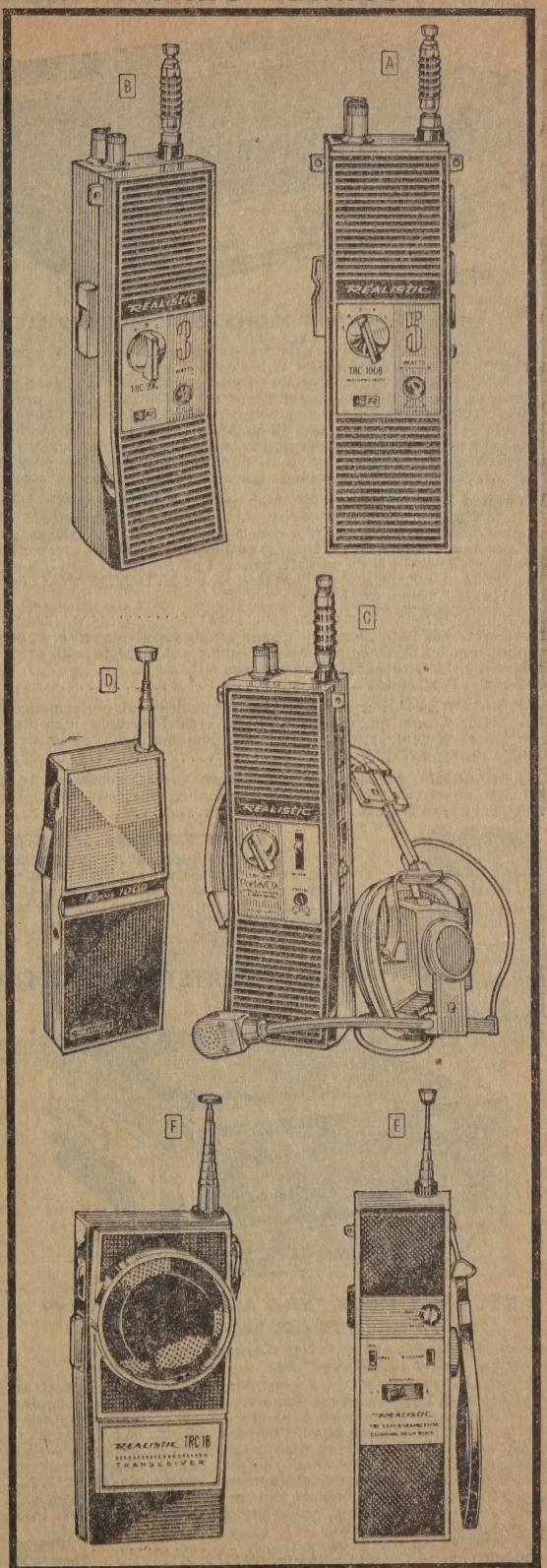
For Extra 9-V Battery, See page 419

117V WALKIE-TALKIE AC SUPPLY/CHARGER

21-115. Ideal companion for above communications systems. Allows you to operate walkie-talkies on standard 117 VAC. Also charges 9-12 volt battery packs and NiCad cells. Rate: 40 ma/hr.
910-0068. Shpg. wt. 6 lbs. 21.95

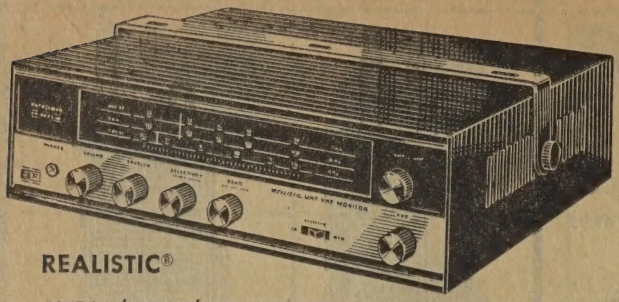
12 VDC PORTABLE BATTERY POWER PACK

20-1501. Have the power you need for heavy industrial, traffic and business applications. Provides extra DC power for Realistic 1W to 5W walkie-talkies. Includes eight batteries, connecting cable, carrying case and plugs. Size: 10¼x3⅛x3".
910-0069. Shpg. wt. 4 lbs. 7.95



Units of Over 100 mW Require FCC License . . No Exam

VHF FM Monitor Receivers for Industrial Use



REALISTIC®

VHF-LO/VHF-HI/UHF PROFESSIONAL MONITOR RECEIVER

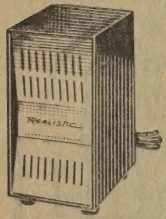
Receives both low and high VHF bands—plus UHF, now in wide metropolitan area use. Field tested in major U.S. cities, it gives you all the professional advantages in monitoring emergency coverage. This custom aligned receiver comes to you precision-tuned by factory experts. Boasts all solid-state circuitry with highest quality components. Features independent front-end tuning sections for 152-174 MHz (VHF Hi-band), 30-50 MHz (VHF Lo-Band) and 450-470 MHz (UHF Band). Includes provisions for two antenna inputs so you can tune two frequencies at the flip of a switch. Sophisticated 8-section crystal filter gives clean, distinct reception; eliminates adjacent channel interference.

Integrated IF circuitry provides high gain; tuned RF stage for increased range; AF filter for improved audio clarity. Built-in monitor speaker plus 8-ohm external speaker/headphone jack. Color-coded slide-rule dial. Automatic noise limiter reduces unwanted static. OTL audio output for crystal-clear response. Sensitivity: ½ μV for 10 dB S+N/N on VHF bands; 1 μV for 10 dB S+N/N on UHF band. 2 watts audio output at 4-16 ohm load. For 12 VDC/115 V AC operation. Size, 14x3¾x11½". Shpg. wt. 16 lbs.
910-0060. Type 20-450.....198.50

12 VDC POWER PACK. Protable power supply for above receiver, or any 12 VDC application. 8 "D" cells and 8 spare holders. Complete with cord for cigarette lighter use. Size, 10¼x3⅛x3". Shpg. wt. 4 lbs.
910-0061. Type 20-1501.....7.95

VHF/UHF ANTENNA. For above receiver. Provides peak performance between 152-450 MHz. Ground-plate type design. Vertical element, chrome-plated brass. Horizontal elements, stainless steel. With cutting chart. Shpg. wt. 3 lbs.
910-0109. Type 20-176.....9.95

8-OHM HEADSET. For above receiver. Lightweight, cushioned. Adjustable headband. Complete with standard ¼" phone plug. Shpg. wt. 1 lb.
910-0110. Type 279-200.....5.95



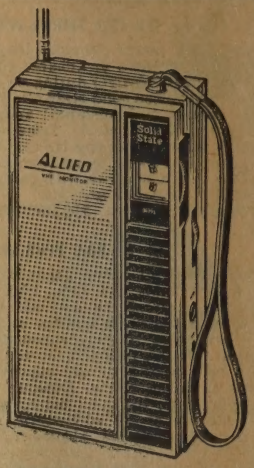
8-OHM EXTERNAL SPEAKER

For above receiver. Rated at 5 watts maximum power. Voice selective response for high intelligence. Comes complete with cord and standard ¼" phone plug. Handsome futuristic design complements many modern receivers. 8 ohms. Size, 5⅛x7x3½". Shpg. wt. 4 lbs.
910-0111. Type 20-1500.....7.95

ALLIED®

HAND-HELD VHF FM MONITORS

- Solid-State Superhet
- Pocket Size—Carry it Anywhere
- With Batteries and Earphone
- Provision for AC Adapter



MODEL A-2587 for 146-175 MHz. Hand-held superhet VHF-FM monitor receiver, at amazingly low cost. Pocket-size and battery-powered—use it to monitor U.S. Weather Bureau forecasts (162.55 MHz in many urban areas), railroads, taxicabs, police, utilities, business, and more. Solid-state for instant operation. Superhet circuit provides excellent performance.

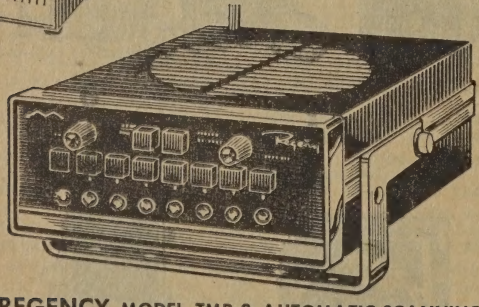
Self-contained 2⅜" speaker, plus earphone for private listening. Built-in swivel telescoping antenna and provision for external antenna. Provision for 117 VAC adapter. Size, 6x3½x1⅛". With four "AA" penlight batteries, carrying strap. From Japan. Shpg. wt., 1 lb.
706-0001.....19.95

MODEL A-2586 for 27-50 MHz. Similar to above, but for 27-50 MHz. Monitors local police, fire, civil defense, utilities, radiotelephone, radio-dispatched repair vehicles, others. Japan.
706-0002. Shpg. wt. 1 lb.....19.95

706-0003. Model 20-5083. 117 VAC Adapter. For A-2586 and A-2587. Shpg. wt. 2 lbs.....4.95

See Battery Pages for Extra Listings of Size "AA" Penlight Batteries.

CRYSTAL CONTROLLED VHF MONITORS



REGENCY MODEL TMR-8 AUTOMATIC-SCANNING 150-174 MHz BUSINESS BAND MONITORADIO

- Automatic Scanning of up to Eight Crystal-Controlled Channels
- For 117 VAC or 12 VDC Operation
- Built-in Speaker

Automatically scans up to 8 crystal-controlled channels over an 8 MHz range. Locks in on the first active channel, resumes scanning when that channel becomes inactive. Ideal for continuous monitoring of 150-174 MHz business band. Channels can also be selected manually, if desired. For base or mobile use. Solid-state design with 5 integrated circuits, 2.5 watt audio output, built-in 4" speaker. Telescoping antenna, jack for external speaker. With cables for 117 VAC and 12 VDC, mounting bracket and one crystal—specify frequency. For additional frequencies, order Crystal Certificates below. Size, 2¼x8½x5½".
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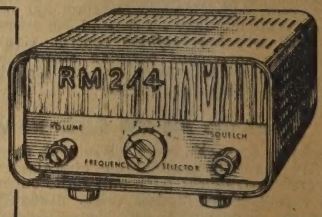
909-3001. Extra Crystal Certificate.....Each 5.00

Deluxe Monitor for Base or Mobile Operation

Uses Accurate, Convenient Plug-In Frequency Cards

Compact Size for Easy Mounting



PETERSEN MODEL RM2-4 BASE/MOBILE FM/AM MONITOR RECEIVER COVERS 2 TO 200 MHZ

- Frequency Plug-In Cards
- Four-channel Capability
- Adjustable Squelch
- Built-in Speaker

Base/mobile monitor can operate on 2-200 MHz, AM or FM. Four-channel capability. Comes with certificate for 1 plug-in frequency card, to be filled out and sent to factory. Built-in speaker, adjustable squelch control. Size, 3⅜x5¾x7½". For 117 VAC/12 VDC. Order 12-volt cord below.
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Sonar FM Hand-Held 2-Way Radios and Monitors

MODEL 2301 VHF

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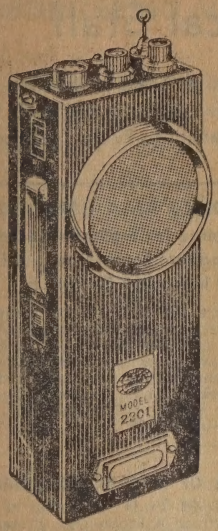
- Adjustable Squelch
- PTT Function Provision
- Glass Epoxy PC Board
- Electronic T/R Switch
- Rugged Steel Case
- Modular Design



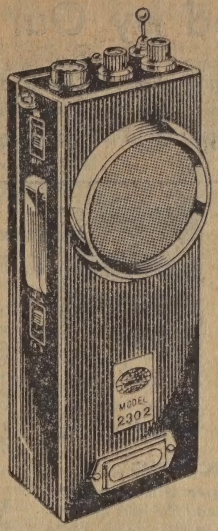
Professional-quality VHF-FM hand-held 2-way radio for 132-174 MHz business band. Delivers 1.6-watt RF power output. Receiver and transmitter sections can be operated on separate frequencies. Ceramic and crystal filters eliminate adjacent-channel interference. Electronic antenna switching; output overload sensor. 29 transistors, 17 diodes. Jacks for external antenna, earphone, battery charger. 7¾x3x1⅝". With crystals for one channel, batteries. **Specify frequency.** Allow 30 days. Shpg. wt. 1 lb.

949-6818.....375.00

949-6820. 2301A. As above, but 2-channel capability. Has tone squelch provision. Shpg. wt. 1 lb.....475.00

MODEL 2302 UHF

- 450-470 MHz Coverage
- Adjustable Squelch
- PTT Function Provision
- Glass Epoxy PC Board
- Electronic T/R Switch
- Rugged Steel Case
- Modular Design

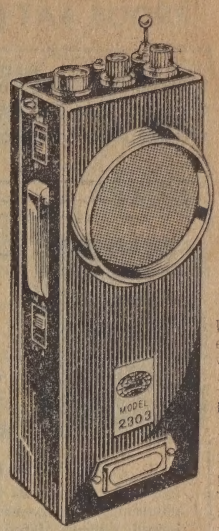


Provides immediate voice contact with base stations, mobile units and other hand-held 2-way radios. Compatible with all 2-way narrow band radio communications systems on 450-470 MHz. Receiver and transmitter sections may be operated on independent frequencies. Advanced ceramic and crystal filters reject adjacent channel interference. Overload sensor circuit protects against final transistor blow-out due to antenna mismatch. Modular design for easy servicing. Comes with one pair of crystals and one set of batteries. Tone squelch provision. One-channel capability. **Specify frequency.** Allow 30 days. Shpg. wt. 1 lb.

949-6822.....595.00

MODEL 2303A VHF

- 25-50 MHz Coverage
- Adjustable Squelch
- PTT Function Provision
- Glass Epoxy PC Board
- Electronic T/R Switch
- Rugged Steel Case
- Modular Design



VHF-low band hand-held 2-channel FM 2-way radio provides immediate voice contact to similar units. Compatible with all 2-way narrow band radio communications systems of the same frequency. Independently operated transmitter and receiver. Ceramic and crystal filters for high selectivity. PTT provision. Modular design. Overload sensor. Easily accessible battery compartment. Adjustable squelch. Comes with crystals for one channel, batteries. **Specify frequency,** allow 30 days. Wt. 1 lb.

949-6825.....475.00

949-6826. Model 2303A With Tone Squelch. As above, but with selective call-tone. Shpg. wt. 1 lb.....575.00

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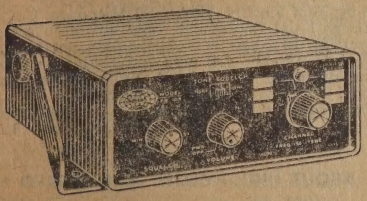


SOLID-STATE MOBILE/BASE FM MONITOR RECEIVER

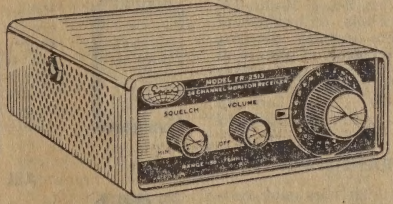
MODEL FR-104. Quality-engineered 25-50 MHz FM monitor operates in any 12-volt vehicle or from 117 VAC, 50-60 Hz. All solid-state for years of dependable service. Extremely compact design. Dual built-in power supply. Quadruple-tuned RF stage for greater image rejection and sensitivity. Temperature compensated, noise-free squelch. 6 crystal-controlled channels; plug-in crystals for easy frequency changes. Military-quality glass epoxy PC board assures long life, even under the most rugged mobile conditions. Heavy-duty speaker features moisture-resistant cone for long, heavy-duty use. Audio output is a hearty 1½ watts; provision for external speaker. Narrow band operation, ±5 kHz. Complete with AC and DC power cables, mobile mounting bracket. Less crystals. **Order crystals below. For 12 VDC/117VAC. Wt. 5 lbs.**

949-6810.....140.00

949-6812. Model FR-105. As above, but for 150-175 MHz band. Wt. 5 lbs.....140.00

910-0112. Type 20-002 Crystal Certificate Card.

1-5.....Each 6.95 6-Up.....Each 5.95



24-CHANNEL MOBILE/BASE FM MONITOR RECEIVER

MODEL FR-2513. Top performing 150-175 MHz FM monitor operates in any 12-volt vehicle or from 117 VAC, 50-60 Hz. All solid-state for dependable service. Extremely compact, with dual-purpose built-in power supply. Quadruple-tuned RF stage for excellent image rejection and sensitivity. Temperature compensated, noise-free squelch. 24 crystal-controlled channels; plug-in crystals for easy frequency change. Dual limiter, Foster Seeley discriminator.

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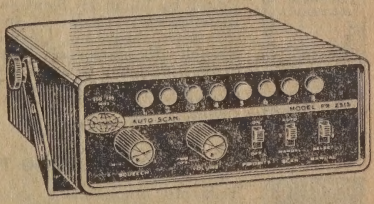
949-6833.....169.95

949-6831. Model FR-2512. As above, but for 25-50 MHz. Shpg. wt. 5 lbs.....169.95



AUTOMATIC SCANNING MOBILE/BASE FM MONITOR RECEIVER

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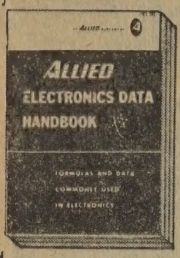

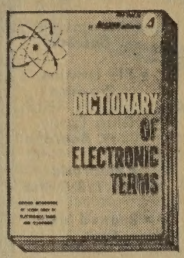

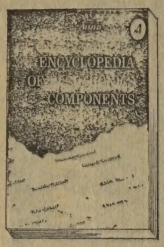

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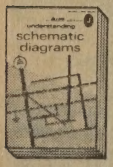

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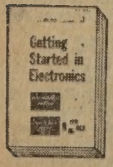

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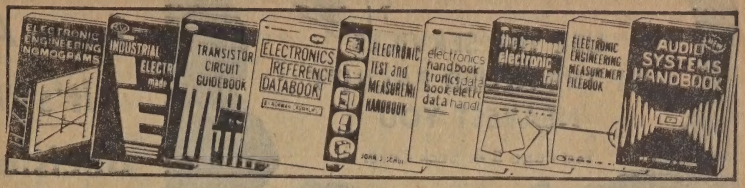

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Branch Offices . . .

Allied has fifteen Sales Facilities strategically located throughout the United States to give you the fastest personalized service possible. You can expect reliable service when you order from your nearest Allied Electronics facility.

If you should have any questions about your order, ask your Allied Electronics representative. He will give you the information you need.

Order by mail . . .

When you send your order to us by mail, it will be shipped to you as quickly and safely as possible.

Order by Telex . . .

We can handle any order via Telex. For Chicago, call 25-3492, or 25-3749.

Or place your order by telephone . . .

If a "rush" order must be shipped immediately, call the Allied facility nearest you.

OPEN ACCOUNTS

We extend credit to Government Agencies and well-rated Industrial and Institutional accounts. Firms without a published rating may apply to Allied for a line of credit by submitting a financial statement with bank and trade references to our Industrial Credit Dept. Terms of payment are net, 10 days, E.O.M. and 1% carrying charge over 60 days.

MINIMUM OPEN ACCOUNT BILLING

Catalog Items—$10.00 Net, or $1 handling charge added to cost of items purchased

APO AND FPO ORDERS

APO and FPO shipments will be routed Parcel Post, maximum size 70 lbs. and 100 inches (length plus girth). For faster delivery, specify air. To estimate shipping charges, see chart on facing page.

PRICES AND SHIPMENTS

Catalog prices are net, F.O.B. Chicago, and are subject to change without notice. Orders are filled at prices in effect at time of shipment. If prices are reduced, you receive the benefit and pay the lower price.

We reserve the right to add any Federal, state or local taxes. Prices and terms in this catalog apply only to the United States, Puerto Rico and Canada.

Stock Nos. ending with the letter "F" indicate direct factory shipment; merchandise is shipped F.O.B. factory direct to you.

QUOTATIONS AND BIDS

If you need bids or quotations to place an order, or if you want larger quantities than are listed in our Catalog, be sure to contact us. Prices and delivery information will be provided for you immediately.

DAMAGED MERCHANDISE

If you receive damaged merchandise, please file claim with the carrier making delivery, except in the case of Parcel Post shipments, in which case you should write to us for instructions on handling the claim.

SERVICE AND REPLACEMENT GUARANTEE

All merchandise is guaranteed to be free of defects in material and workmanship for the period of time specified in the listing of the product. Where no time is specified, the guarantee is for 90 days. Wherever so indicated in our listing of the product, we will replace it. Wherever our listing does not specify, we will either replace it or repair it at our option. Item must be returned prepaid for our inspection.

MERCHANDISE RETURN

Allied's prior written authorization must be issued before merchandise is returned. Detailed instructions for returning merchandise will accompany the return authorization. A restocking charge may be deducted from your return. Non-catalog items may not be cancelled or returned.

EXPORT ORDERS

Minimum export order is $25 in U.S. currency. Our export terms are net receipt of invoice, F.O.B. Chicago. Write Allied Electronics Corporation, 2400 W. Washington Blvd., Chicago, Ill. 60612 for a complete quotation, including documentation, handling, and shipping charges.

Cash orders in U.S. dollars will be accepted for immediate processing. Please include an extra 20% (10% on orders over $500) to cover handling, documentation, and shipping charges. We will promptly refund any excess of payment over actual charges. Export orders must be accompanied by cash for the full amount of the order, or by an irrevocable letter of credit.

IF YOU WRITE TO US

Please include your purchase order number and our invoice number when writing to us on Open Account orders. If a cash order is concerned, include your original order papers (these are returned to you after your order is shipped) with Stock Nos. and descriptions of items.

GOVERNMENT PACKAGING IS AVAILABLE AT ALLIED

Complete Shipping Information

CASH ORDERS

Be sure to include all transportation and insurance charges. Allied will ship your order the best way possible. (See charts for Parcel Post charges, consult your local carrier for truck or express charges.) Minimum order $10.00, or $1.00 handling charge is added to cost of items purchased.

FREIGHT AND EXPRESS

Items in this catalog with letter "U", "W" or "Z" in Stock No. designate unmailable items. These items are shipped truck or express.

TRUCK SHIPMENTS

Truck is the most economical way to ship items weighing approximately 70 lbs. or more. Contact your local carrier for rates.

EXPRESS SHIPMENTS

Fastest way to ship unmailable items. For items weighing about 40 to 70 lbs., it's also economical. See your Express agent for rates.

AIR EXPRESS AND AIR FREIGHT SHIPMENTS

We will ship your order Air Freight or Air Express on your instructions. Consult your local Express office for Air Express charges and local airport for Air Freight charges.

C.O.D. ORDERS

The minimum C.O.D. order is $50.00. An advance deposit of 20% of the total value is required with your order. No back orders will be made for C.O.D. items.

INSURANCE

To protect you, we insure shipments (except freight and express, which are insured by the carriers). Allow for charges as follows:

$2.00 to $100.00.....40¢
$100.01 to $150.00.....50¢
$150.01 to $200.00.....60¢
Over $200.00 add 40¢ per $100.00

HOW TO ESTIMATE PARCEL POST CHARGES

We limit Parcel Post Shipments to 40 lbs. and 72 inches length plus girth (maximum measurement around widest point of package). Estimate charges from table below.

Up to 16 oz., all zones, allow 6¢ for first 2 oz., 2¢ for each additional oz.

The post office charges a fraction of a pound as a full pound. For example, if the total weight is 4 pounds and 1 ounce to Zone 4, postage would be for 5 pounds ($1.05).

WEIGHT 1 Lb. & Not Exceeding	Local	1st & 2nd Zone up to 150 mi.	3rd Zone 150 to 300 mi.	4th Zone 300 to 600 mi.	5th Zone 600 to 1000 mi.	6th Zone 1000 to 1400 mi.	7th Zone 1400 to 1800 mi.	8th Zone Over 1800 mi.
2	$0.60	$0.65	$0.70	$0.75	$0.80	$0.90	$1.00	$1.05
3	.60	.75	.80	.85	.95	1.10	1.20	1.35
4	.65	.80	.85	.95	1.10	1.30	1.40	1.60
5	.70	.85	.90	1.05	1.20	1.45	1.65	1.90
6	.70	.85	1.00	1.15	1.35	1.60	1.85	2.10
7	.75	1.05	1.10	1.25	1.50	1.75	2.10	2.35
8	.75	1.10	1.15	1.35	1.60	1.90	2.30	2.60
9	.80	1.15	1.20	1.45	1.75	2.05	2.45	2.85
10	.80	1.20	1.30	1.55	1.90	2.20	2.65	3.10
11	.80	1.25	1.35	1.60	2.00	2.30	2.85	3.35
12	.85	1.30	1.45	1.70	2.10	2.45	3.05	3.55
13	.85	1.35	1.55	1.80	2.20	2.60	3.25	3.80
14	.90	1.40	1.60	1.90	2.35	2.75	3.45	4.00
15	.90	1.45	1.65	2.00	2.45	2.85	3.60	4.20
16	.95	1.55	1.75	2.05	2.55	2.95	3.80	4.40
17	1.00	1.60	1.80	2.15	2.65	3.10	3.95	4.60
18	1.00	1.65	1.90	2.20	2.75	3.20	4.15	4.80
19	1.05	1.70	2.00	2.30	2.85	3.35	4.30	5.00
20	1.05	1.75	2.05	2.40	2.95	3.50	4.50	5.20
21	1.10	1.85	2.10	2.45	3.05	3.65	4.65	5.40
22	1.15	1.90	2.15	2.55	3.15	3.75	4.85	5.60
23	1.15	1.95	2.20	2.60	3.25	3.90	5.00	5.80
24	1.20	2.00	2.25	2.65	3.35	4.05	5.15	6.00
25	1.20	2.05	2.30	2.75	3.45	4.15	5.35	6.20
26	1.20	2.10	2.35	2.85	3.55	4.30	5.50	6.40
27	1.25	2.15	2.40	2.90	3.70	4.45	5.65	6.60
28	1.25	2.20	2.45	2.95	3.80	4.60	5.80	6.80
29	1.30	2.25	2.50	3.05	3.90	4.70	5.95	7.00
30	1.30	2.30	2.55	3.10	4.00	4.85	6.10	7.20
31	1.35	2.35	2.65	3.20	4.10	5.00	6.25	7.40
32	1.40	2.40	2.70	3.30	4.20	5.15	6.45	7.60
33	1.40	2.45	2.75	3.35	4.30	5.25	6.60	7.80
34	1.45	2.50	2.80	3.40	4.40	5.40	6.75	8.00
35	1.45	2.55	2.85	3.45	4.50	5.55	6.90	8.20
36	1.45	2.60	2.90	3.55	4.00	5.65	7.10	8.40
37	1.50	2.65	3.00	3.65	4.70	5.75	7.25	8.60
38	1.50	2.70	3.05	3.70	4.80	5.90	7.45	8.80
39	1.55	2.75	3.10	3.80	4.90	6.05	7.60	9.00
40	1.55	2.80	3.15	3.85	5.00	6.15	7.75	9.20

Over 40 lbs. shipped truck or express. See information at left.

HOW TO ESTIMATE AIR PARCEL POST CHARGES

We will ship your order by Air Parcel Post on your instructions. Size and weight limitations are 70 pounds and 100 inches (length plus girth).

Wt. Lbs.	Zones 1, 2, 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	APO's and FPO's
To 1	$0.80	$0.80	$0.80	$0.80	$0.80	$0.80	
1-1½	.98	1.02	1.07	1.14	1.18	1.24	APO & FPO San Francisco, 80¢ per lb., plus 8¢.
1½-2	1.16	1.23	1.34	1.47	1.55	1.68	
2-2½	1.40	1.48	1.62	1.79	1.91	2.08	
2½-3	1.64	1.73	1.90	2.11	2.27	2.48	
3-3½	1.88	1.98	2.18	2.43	2.63	2.88	
3½-4	2.12	2.23	2.46	2.75	2.99	3.28	APO & FPO New York, 56¢ per lb., plus 22¢.
4-4½	2.36	2.48	2.74	3.07	3.35	3.68	
4½-5	2.60	2.73	3.02	3.39	3.71	4.08	
For Each Extra Lb.	Add 48¢	Add 50¢	Add 56¢	Add 64¢	Add 72¢	Add 80¢	

OPPORTUNITY KNOCKS . . .
. . . OWN your own franchised ALLIED RADIO SHACK store!

You can join the growing numbers of successful Allied Radio Shack store owners who participate in a profitable association with the world's largest consumer electronics chain.

Our professional staff, with fifty years' buying and merchandising experience, will assist you in all phases of management. We help you find a location, plan your store and select merchandise. There is a retail advertising co-op program, and you benefit from our catalog, flyer and national advertising program. We have six regional warehouses. Our nationally-known brands will contribute to fast turnover of twice the industry average and high gross profit margins. There is a one-time franchise fee.

There are no long-term financial commitments, no royalty fees, no hidden management fees. A moderate investment will cover your starting inventory, store fixtures, opening expenses and initial operating funds.

Call collect or write to A.A. Bernabei, Allied Radio Shack, 2617 W. 7th St., Ft. Worth, Texas 76107.

Don't delay! Get on the road to personal profits now!

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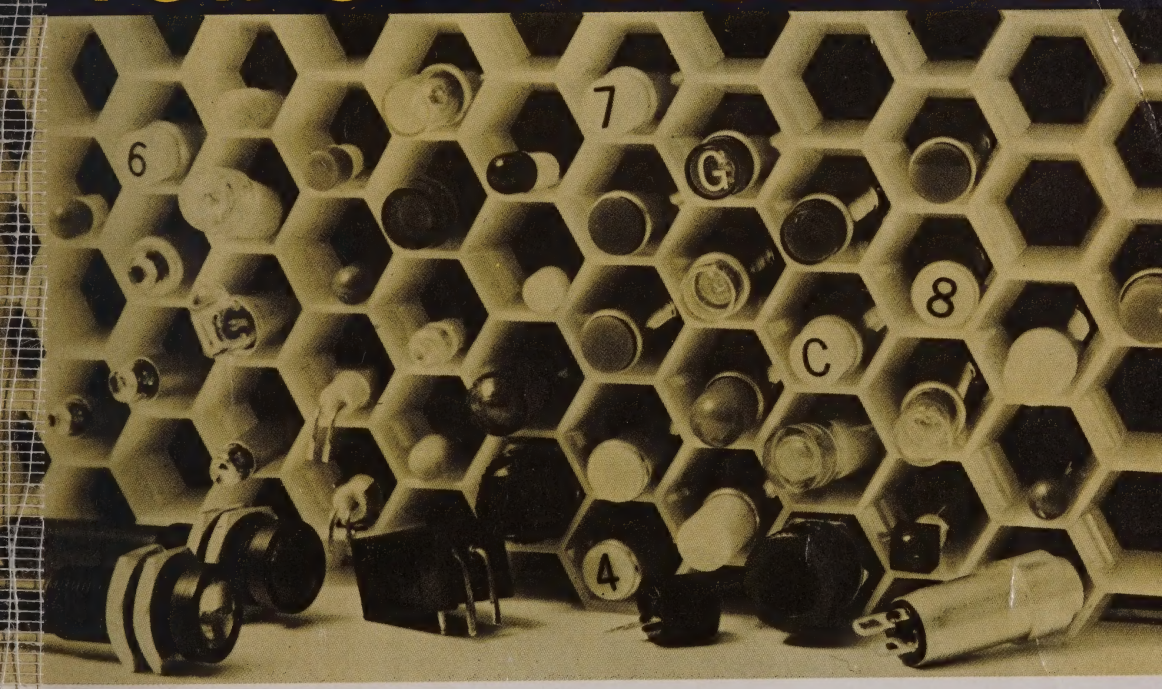

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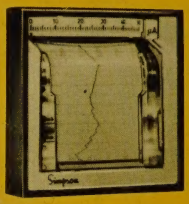

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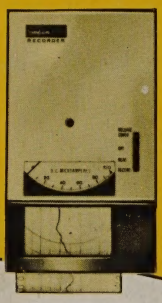

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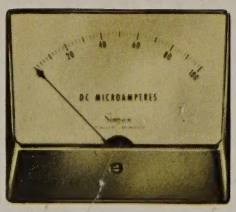

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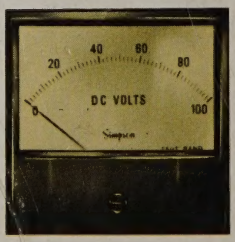

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